

## Harmon College of Business and Professional Studies

School of Accountancy and Computer Information Systems

AACSB Accredited

# ACCOUNTANCY

## BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION DEGREE

Accounting is one of the world's fastest growing professions. The School of Accountancy and Computer Information Systems at UCM prepares students for rewarding careers in national and international organizations. Instant communication technology, rapid international travel and expanding world trade have enlarged the scope and importance of accounting services.

The BSBA degree prepares students for an array of challenging and financially rewarding careers. Graduates have the background necessary to evaluate the present and projected economic activities of organizations. Public accountants provide financial services and guidance to individuals, business entities, not-for-profit organizations and all levels of government. Other professional accountants apply their skills in auditing, taxation, management policy, information systems, computer operations and many other areas. Central Missouri's accounting programs qualify graduates to sit for professional accounting examinations such as CPA and CMA. An Accounting degree also provides excellent preparation for graduate study in business or law school.

UCM offers seamless graduate programs in accounting. The Master of Business Administration with an emphasis in Accounting or the Master of Arts in Accountancy can be completed within a year. Students may also choose an integrated BSBA/MA 150-hour degree completion option.

### Program Requirements

Students must earn a minimum grade of C in the following courses if they are to be applied toward the

fulfillment of a major in accounting: Principles of Financial Accounting, Principles of Managerial Accounting, Intermediate Financial Accounting I, II, and III, Cost and Managerial Accounting, Introduction to Income Tax, and Accounting Information Systems.

### About the Faculty

UCM's accounting classes are taught by dynamic and experienced faculty members who believe in personalized attention for their students. In addition to outstanding academic accomplishments, faculty members bring a wide background of training and experience to the department. Their practical experience and demonstrated competence in many areas contribute to students' professional growth. Faculty members are actively involved in research projects and professional organizations that keep them current with their areas of expertise.

### Student Involvement

Students are encouraged to supplement their academic programs through participation in campus service organizations which match areas of academic interest. The Accounting Students Association (ASA) helps students become familiar with opportunities available to them in the accounting field. Freshmen and sophomores with accounting as a major are encouraged to join ASA. Upperclassmen and graduation students are encouraged to join Beta Alpha Psi (BAP). BAP is a national honorary organization with local campus chapters for accounting, finance, and information professionals. Both associations meet regularly, host speakers and sponsor networking opportunities with accounting professionals.

ASA and BAP also enable members to interact on a personal and informal basis with fellow accounting students and faculty members.

### Special Facilities

The school's offices are located in the Dockery Building, one of the landmark structures on Central Missouri's campus. Outstanding classroom, research and computer facilities are available for accounting students in the Ward Edwards Building, and at numerous other easily accessible locations. University computer labs are equipped with state-of-the-art hardware and software, and are supervised by experienced technicians who are available for assistance. Computer literacy is stressed throughout the accounting program.

### Placement

UCM's Office of Career Services assists students seeking employment while serving representatives of business, government, industry and education who are looking for prospective employees. Employment interviews are conducted on campus throughout the year. Accounting is in the top three undergraduate majors targeted in the Midwest for college recruiting according to statistics from the National Association of Colleges and Employers (NACE) Job Outlook 2013.

### To Learn More

For more information, contact the School of Accountancy and Computer Information Systems, 660-543-463, or visit [ucmo.edu/acis](http://ucmo.edu/acis).

For admission information, call toll free 877-SAY-UCMO (877-729-8266). UCM's home page is [ucmo.edu](http://ucmo.edu).

**Accountancy Major, B.S.B.A. Degree (46-259)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CIS 1600 Business Information Management*	3	COMM 1000 Public Speaking	3
ENGL 1020 Composition I	3	ECON 1010 Principles of Macroeconomics*	3
MATH 1111 College Algebra*	3	ENGL 1030 Composition II	3
PSY 1100 General Psychology or SOC 1800 Gen. Sociology	3	General Education	6
General Education	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		
AE 1400 or BADM 1400 Freshman Seminar**	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ACCT 2101 Principles of Financial Accounting*#	3	ACCT 2102 Principles of Managerial Accounting*#	3
ECON 1011 Principles of Microeconomics*	3	ACCT 3110 Intermediate Financial Accounting I***#	3
FIN 2801 Business Statistics I*	3	BLAW 2720 Legal Environment of Business*	3
General Education	7	General Education	6
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>15</b>
<b>Note: Complete all B.S.B.A. admission requirements and apply for admission*</b>			
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
ACCT 3111 Intermediate Financial Accounting II#	3	ACCT 3112 Intermediate Financial Accounting III#	3
ACCT 3120 Cost & Managerial Accounting#	3	ACCT 3130 Introduction to Income Tax#	3
FIN 3801 Business Statistics II	3	FIN 3850 Principles of Finance	3
MGT 3315 Management of Organizations	3	MGT 3325 Business Communications	3
MKT 3405 Marketing Policy	3	3000/4000 Level Non-Accounting Business Elective##	3
<b>Semester Total</b>	<b>15</b>	Free Choice Elective (may not be an ACCT prefix)##	1
		<b>Semester Total</b>	<b>16</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
ACCT 3160 Accounting Information Systems#	3	ACCT 4105 Auditing	3
ACCT 4100 Advanced Accounting I	3	ACCT 4130 Advanced Income Tax	3
MGT 3360 Production/Operations Management	3	BLAW 3721 Law of Business Transactions	3
3000/4000 Level Non-Accounting Business Elective##	3	ICAP 4357 Organizational Policy and Strategy	3
General Education	3	Free Choice Electives (may not be an ACCT prefix)##	4
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>16</b>

**Accountancy Major, B.S.B.A. Degree - 123 Hours**

- \*Accountancy majors must complete eight preadmission courses with a grade of C or higher and obtain a 2.65 cumulative GPA and a 2.65 in these specific courses for admission to the degree program. These courses are recommended for completion during the freshman and sophomore years.
- \*\*AE 1400 or BADM 1400 (1 hr.) is highly recommended for academic success. AE 1400 or BADM 1400 counts as a free choice elective.
- \*\*\*Apply for integrated 150-hour BSBA/MA program, if interested, while enrolled in ACCT 3110 .
- #Grade of "C" or higher required for sophomore and junior level Accounting courses.
- ##To satisfy accreditation standards students must earn 90 of the required 123 hours in courses with non-ACCT prefixes. This requires that all business and free electives be earned in courses with prefixes other than ACCT. Accounting students that wish to use internship credit to fulfill elective hours may do so by enrolling in a MGT or FIN internship course.
- Some courses in this major require a certain cumulative gpa and/or a minimum grade of C in all prerequisite courses, see the most current Undergraduate Catalog for details.
- A 2.65 cumulative GPA is required for graduation in this major.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

Department of Mathematics and Computer Science

# ACTUARIAL SCIENCE AND STATISTICS

## BACHELOR OF SCIENCE DEGREE - OPTION 1 ACTUARIAL SCIENCE

Actuarial Science is concerned with the random events that affect human life or property and the financial impact that occurrence of one of these events may have. Using statistical, financial and economic techniques to evaluate the risks and business implications of future events, actuaries design financial security programs which focus on life, health, property, casualty, retirement, demographic, economic and investment possibilities.

The Actuarial Science program in the Department of Mathematics and Computer Science at University of Central Missouri is one of several dozen advanced actuarial science programs in the USA and the only one in Missouri public institutions. It offers a curriculum that prepares students for a series of actuarial exams sponsored by S.O.A. and C.A.S. The program's major required courses in Applied Statistics, Economics, and Finance are SOA/CAS approved VEE-credit courses.

### Computer Facilities

The actuarial science and statistics program is supported by two labs. Computers in the labs are installed with several commonly used statistical and actuarial packages such as SPSS, SAS, Prophet, and TAS for instructional purposes. A variety of other software is also available to the students.

### About the Faculty

All actuarial science and statistics classes are taught by experienced and caring faculty members who believe in individualized attention for their students. In addition to a wide range of academic and professional experience, more than 80 percent of faculty members in this program have earned doctorates. The remaining faculty members have master's degrees. The actuarial coordinator in the program is a certified actuary who also has had practical experiences in insurance industry. Faculty members in the program are actively engaged in research in their respective areas. Academic participation keeps faculty members current with their expanding fields.

The student-faculty ratio at UCM is about 17 to 1, which allows for personalized attention for each student.

### Student Involvement

The Department of Mathematics and Computer Science sponsors several student organizations that meet regularly to discuss topics ranging from new discoveries to career opportunities.

The student Actuarial Organization in the department is very active, sponsoring a series of activities that include annual actuary career fair, actuarial guest speakers from Kansas City area, field trips to local insurance companies, and annual resume workshops.

### Career Opportunities

Careercast.com reported in the Wall Street Journal actuaries have the second best job in 2012. Also, according to online salary database PayScale.com, actuary is one of the top six jobs that are not only well-paying in 2012, but they also have unemployment levels lower than the current national average. Plus, they are expected to grow in demand in the coming years.

### Actuaries work for a variety of employers, including:

- Insurance companies
- Consulting firms
- Government insurance departments
- Colleges and universities
- Banks and investment firms
- Large corporations and public accounting firms

### To Learn More

For more information, contact the Department of Mathematics and Computer Science, W.C. Morris 222, University of Central Missouri, Warrensburg, MO 64093; call 660-543-4930; or visit the department's webpage at [ucmo.edu/math-cs](http://ucmo.edu/math-cs).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Actuarial Science and Statistics Major - Option 1 Actuarial Science, B.S. Degree (43-01576)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>		<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>		<b>Hrs.</b>
CS 1100 Computer Programming I		3	CS 2800 Interactive System Design		3
ECON 1010 Principles of Macroeconomics		3	MATH 1152 Calculus & Analytic Geometry II		5
MATH 1300 Basic Statistics		3	MATH 2410 Discrete Mathematics		3
MATH 1151 Calculus & Analytic Geometry I		5	Free Choice Electives# (ECON 1011 Microeconomics ^)		3
<b>Semester Total</b>		<b>14</b>	<b>Semester Total</b>		<b>14</b>
AE 1400 Freshman Seminar*		1			

<b>Sophomore Year - Fall Semester</b>		<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>		<b>Hrs.</b>
ENGL 1020 Composition I		3	ENGL 1030 Composition II		3
MATH 2153 Calculus & Analytic Geometry III		3	MATH 4312 Probability Models**		1
MATH 3311 Introduction to Math Statistics**		3	MATH 4501 Actuarial Exam Review Problem Set I**		3
General Education		6	MATH 4510 Mathematics of Finance***		6
<b>Semester Total</b>		<b>15</b>	General Education		3
			<b>Semester Totals</b>		<b>16</b>

<b>Junior Year - Fall Semester</b>		<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>		<b>Hrs.</b>
ECON 3010 Intermediate Macroeconomics**		3	FIN 3861 Financial Management I		3
FIN 4817 Managing Financial Derivatives**		3	FIN 4803 Principles of Insurance		3
MATH 3321 Applied Statistics I**		3	MATH 4322 Applied Statistics II**		3
MATH 4511 Actuarial Exam Review Problem Set II**		1	Major Elective## (ECON 3030 Intermediate Microeconomics ^)		3
General Education		6	General Education		3
<b>Semester Total</b>		<b>16</b>	<b>Semester Total</b>		<b>15</b>

<b>Senior Year - Fall Semester</b>		<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>		<b>Hrs.</b>
MATH 4520 Life Contingencies**		3	ICAP 4245 Actuarial Science Capstone Experience**		3
Major Elective##		3	MATH 4530 Statistical Modeling**		3
General Education		9	Major Elective##		3
<b>Semester Total</b>		<b>15</b>	General Education		3
			Free Choice Electives#		3
			<b>Semester Total</b>		<b>15</b>

**Actuarial Science and Statistics Major - Option 1 Actuarial Science, B.S. Degree - 120 hours**

- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*This course is only offered during the semester indicated.
- #The number of free choice electives required will depend on selections made in the major and general education.
- ##This major Option requires 9 hours of major electives. See the Undergraduate Catalog for a list of appropriate choices.
- ^ To qualify for actuarial certification, the department recommends taking ECON 1011 for 3 hours of free choice electives and ECON 3030 for 3 hours of major electives.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

Department of Mathematics and Computer Science

# ACTUARIAL SCIENCE AND STATISTICS

BACHELOR OF SCIENCE DEGREE - OPTION 2 STATISTICS

Statistics is an applied science discipline. It uses mathematics knowledge and computer technology to help people make decisions and predictions based on the collection, interpretation, analysis, and presentation of data. Statistics plays a vital role in various social and natural sciences such as political science, sociology, business, economics, finance, insurance, biology, chemistry, engineering as well as medical industry.

The use of statistics is growing rapidly in both private industry and government. There is always a demand for skilled statisticians. Technological advances are expected to spur demand for statisticians even further; ever-faster computer processing allows statisticians to analyze greater amounts of data much more efficiently.

UCM's Department of Mathematics and Computer Science is meeting the expanding need of the program that includes in-depth training in statistics as well as other disciplines. The department offers a diverse curriculum, including courses in mathematics, statistics, actuarial science, computer science, and mathematics education. Students may begin the study of statistics and mathematics at a level equal to their background. Students with strong mathematics backgrounds may choose to begin with calculus. Others may choose to start with college algebra, trigonometry, and basic statistics.

### Computer Facilities

The actuarial science and statistics program is supported by two labs. Computers in the labs are installed with several commonly used statistics and mathematics software packages such as Microsoft Office, MATLAB, SPSS, Maple and SAS for class teaching and students practices. A variety of other software is also available to students.

### About the Faculty

All actuarial science and statistics classes are taught by experienced and caring faculty members who believe in individualized attention for their students. In addition to a wide range of academic and professional experience, more than 80 percent of faculty members in this program have earned doctorates. The remaining faculty members have master's degrees. Faculty members actively engage in research: publishing research articles in professional journals, presenting papers at international and national conferences, reviewing books or papers for professional journals, and organizing workshops and seminars.

Academic participation keeps faculty members current with their expanding fields.

The student-faculty ratio at UCM is about 17 to 1, which allows for personalized attention for each student.

### Student Involvement

The Department of Mathematics and Computer Science sponsors several student organizations that meet regularly to discuss topics ranging from new discoveries to career opportunities.

Included are Kappa Mu Epsilon, a national honor society for mathematics students; the Association for Computing Machinery, which keeps students informed of changes in the department's and university's computer facilities; a student chapter of the Mathematical Association of America, for students interested in recent developments in the mathematical community; the Actuarial Organization, which provides students with career information about the actuarial profession; and the Central Missouri Math Educators, which provides opportunities for prospective middle school and high school teachers to discuss methods and trends in teacher education with UCM faculty members and area public school teachers.

### Career Opportunities

The statistics program at UCM is equipping students with quantitative skills that they can employ and build on in flexible ways. Some students will continue their study for graduate work in statistics or other fields; while majority of students seek employment with their undergraduate degree.

Since our statistics graduates contribute to scientific inquiry by applying their mathematical and statistical knowledge to the design of surveys and experiments; the collection, processing, and analysis of data; and the interpretation of the results, they find themselves in a variety of environments in academic, research, industry, government agencies, private and business organizations. With the strong training of quantitative reasoning in statistics, mathematics, and computer programming at UCM, statistics graduates are frequently employed in many professions as demographers, actuaries, financial planners, survey researchers, data management analysts, financial analysts, biostatisticians, operations research analysts, business analysts, as well as marketing research analysts with high starting salaries.

### To Learn More

For more information, contact the Department of Mathematics and Computer Science, W.C. Morris 222, University of Central Missouri, Warrensburg, MO 64093; call 660-543-4930; or visit the department's webpage at [ucmo.edu/math-cs](http://ucmo.edu/math-cs).

For admission information, call toll free 877-SAY-UCMO (877-729-8266). UCM's home page is [ucmo.edu](http://ucmo.edu).

**Actuarial Science and Statistics Major - Option 2 Statistics, B.S. Degree (43-02576)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
CS 1100 Computer Programming I	3	CS 2800 Interactive System Design	3
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
MATH 1151 Calculus & Analytic Geometry I	5	MATH 1152 Calculus & Analytic Geometry II	5
MATH 1300 Basic Statistics	3	MATH 2410 Discrete Mathematics	3
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>14</b>
AE 1400 Freshman Seminar*	1		
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
MATH 2153 Calculus & Analytic Geometry III	3	CS 4420 Systems Simulation and Modeling**	3
MATH 3311 Introduction to Math Statistics**	3	MATH 3151 Differential Equations**	3
MATH 3710 Linear Algebra	3	MATH 4312 Probability Models**	3
General Education	6	General Education	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Totals</b>	<b>15</b>
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
MATH 3321 Applied Statistics I**	3	MATH 4322 Applied Statistics II**	3
Major Electives#	4	General Education	12
General Education	9	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>16</b>		
<b>Junior Year</b> - Summer Semester	<b>Hrs.</b>		
CS 4100 SAS Programming**	3		
<b>Semester Total</b>	<b>3</b>		
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs.</b>
MATH 4323 Statistical Aspects of Experimental Design**	3	MATH 4530 Statistical Modeling**	3
Major Electives#	6	Major Elective#	4-5
General Education	6	Free Choice Electives##	5-6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>13</b>

**Actuarial Science and Statistics Major - Option 2 Statistics, B.S. Degree - 120 hours**

- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*This course is only offered during the semester indicated.
- # This major Option requires 14-15 hours of major electives. See the Undergraduate Catalog for a list of appropriate choices.
- ##The number of free choice electives required will depend on selections made in the major and general education.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Health, Science, and Technology

Department of Biology and Earth Science

# AGRICULTURE-BUSINESS

## AREA 1: AGRIBUSINESS MANAGEMENT, BACHELOR OF SCIENCE DEGREE

The major in Agriculture-Business includes specializations in Agricultural Management, Animal Science, Crop and Soil Science, and Horticultural Science. The interdisciplinary curriculum provides students with a background in all phases of agriculture and specialized courses allow students to expand their knowledge in their area of interest.

Agriculture students at UCM can expect more than just four years of class work. The program believes students should obtain the hands-on experience that employers expect and that high-tech agriculture careers demand.

Students learn by doing through such opportunities as assisting in agronomic field test plot research, helping with variety testing trials, raising plants for a Horticulture Club sale, working with HeatWatch cattle estrus and ultra-sound pregnancy monitoring systems, welding or repairing tractors, and plotting cattle futures.

### Employment Opportunities

The agriculture-business program prepares students for a wide variety of job opportunities in the day-to-day operation of Missouri's agriculture industry, the second largest sector of the state's economy. The Office of Career Services assists students and graduates in obtaining employment in their fields. In addition, the program plays a role in the placement of its graduates by maintaining contact with representatives of agri-business industries, the U.S. Department of Agriculture, Missouri agencies and other agriculture-oriented businesses.

### Faculty and Facilities

Dedicated faculty and well-equipped facilities offer students a quality learning experience. All department faculty members have earned doctorates in their field of specialization and, with a university student-faculty ratio of about 17 to 1, are able to provide personalized attention and instruction. Small classes allow for informal class sessions and increased access to the department's computers and laboratory facilities. The 260-acre Prussing Farm, under development as a teaching unit, includes a new Agriculture and Conservation Classroom Building, and a Trap and Skeet Range.

### Student Involvement

UCM's agriculture students participate in a number of departmentally sponsored organizations. The Agriculture Club is a social organization in the program that fosters an inclusive atmosphere for all students on campus that have an agriculture interest. Horticulture Club members visit horticulture-related businesses and sites and participate in regular plant sales that benefit members by raising funds for scholarships. Central Missouri's Collegiate Farm Bureau provides an opportunity to interact with local farmers and to participate in agriculture activities at the state level. The Delta Tau Alpha national agriculture honor society strives to promote leadership and academic excellence for its members and the department through a multitude of activities such as traveling to the

group's nation convention. Students participating in the Agriculture Ambassadors program volunteer to represent the department at functions on campus and at area high schools.

### Scholarships

In addition to more than \$4 million in merit-based scholarships and awards annually presented to Central Missouri students by the university, the agriculture program offers over \$20,000 in awards specifically for agriculture majors. These include the Ag Partner's, E.F. Low, Earle and Clara Low, Edward and Trudy Denham, Farm Bureau, Lawrence E. and Eva L. Flanders, Missouri Department of Agriculture, Clarence Pearce Agriculture Education, William Forrest Sterling, W.J. and Lela Budwine Foundation/ Charles Simmons Scholarship and Theiss Family Scholarships.

### For More Information

To learn more contact the Department of Biology and Earth Science, WCM 306, UCM, Warrensburg, MO 64093; visit the program's web site at [ucmo.edu/agriculture](http://ucmo.edu/agriculture) or call 660-543-4933.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Agriculture-Business Major - Area 1: Agribusiness Management, B.S. Degree (43-277)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
AGRI 1100 Introduction to Agriculture	1	AGRI 1600 Introductory Horticulture Science (Lab)	3
AGRI 1300 Introductory Plant Science	1	AGRI 2425 Livestock Evaluation (Lab)	3
AGRI 1420 Animal Husbandry	3	CHEM 1104 Introduction to the Sciences: Chemistry (Lab)	4
COMM 1000 Public Speaking	3	ENGL 1030 Composition II	3
ECON 1010 Principles of Macroeconomics	3	MATH 1111 College Algebra	3
ENGL 1020 Composition I	3	<b>Semester Total</b>	<b>16</b>
<b>Semester Total</b>	<b>14</b>		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
AGRI 2330 Introduction to Soil Science (Lab)	3	ACCT 2101 Principles of Financial Accounting or	
LIS 1600 University Library and Research Skills	2	ACCT 2100 Survey of Accounting	3
General Education	9	AGRI 2130 Global Agriculture	3
<b>Semester Total</b>	<b>14</b>	AGRI 1310 Agronomy I: Row Crops (fall only) or	
		AGRI 2315 Agronomy II: Forages (spring only)	2
		ECON 1011 Principles of Microeconomics	3
		General Education	6
		<b>Semester Total</b>	<b>17</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
AGRI 3110 Agri-Business Management	3	AGRI 4110 Agricultural Futures Trading	3
AGRI 3140 Agricultural Analysis and Statistics	3	AGRI 4140 Agricultural Policy	3
AGRI 3410 Animal Breeding or		AGRI 4300 Soil Fertility & Fertilizers	3
AGRI 4310 Plant Breeding & Genetics	3	General Education	6
ECON 3030 Intermediate Microeconomics	3	<b>Semester Total</b>	<b>15</b>
MKT 3430 Professional Sales	3		
<b>Semester Total</b>	<b>15</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
AGRI 3120 Distrib. and Marketing of Agriculture Products	3	AGRI 4120 International Agriculture	3
AGRI 3610 Agriculture Pest Management	3	AGRI 4150 Natural Resources Economics	3
AGRI 3810 Internship in Agriculture	3	ICAP 4101 Agricultural Capstone Experience	3
BLAW 2720 Legal Environment of Business	3	Free Choice Electives	5
Free Choice Electives	3	<b>Semester Total</b>	<b>14</b>
<b>Semester Total</b>	<b>15</b>		

**Agriculture-Business Major, Area 1: Agribusiness Management B.S. Degree - 120 hours**

- Your four-year guide will vary depending on the year (odd or even) and semester that you begin coursework. See your department chair for current curriculum information.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Health, Science, and Technology

Department of Biology and Earth Science

# AGRICULTURE-BUSINESS

## AREA 2: ANIMAL SCIENCES, BACHELOR OF SCIENCE DEGREE

The major in Agriculture-Business includes specializations in Agricultural Management, Animal Science, Crop and Soil Science, and Horticultural Science. The interdisciplinary curriculum provides students with a background in all phases of agriculture and specialized courses allow students to expand their knowledge in their area of interest.

Agriculture students at UCM can expect more than just four years of class work. The program believes students should obtain the hands-on experience that employers expect and that high-tech agriculture careers demand.

Students learn by doing through such opportunities as assisting in agronomic field test plot research, helping with variety testing trials, raising plants for a Horticulture Club sale, performing artificial insemination with cattle, swine and goats and determining diet formulations in order to mix feed rations for the UCM livestock, welding or repairing tractors, and plotting cattle futures.

### Employment Opportunities

The agriculture-business program prepares students for a wide variety of job opportunities in the day-to-day operation of Missouri's agriculture industry, the second largest sector of the state's economy. The Office of Career Services assists students and graduates in obtaining employment in their fields. In addition, the program plays a role in the placement of its graduates by maintaining contact with representatives of agri-business industries, the U.S. Department of Agriculture, Missouri agencies and other agriculture-oriented businesses.

### Faculty and Facilities

Dedicated faculty and well-equipped facilities offer students a quality learning experience. All department faculty members have earned doctorates in their field of specialization and, with a university student-faculty ratio of about 17 to 1, are able to provide personalized attention and instruction. Small classes allow for informal class sessions and increased access to the department's computers and laboratory facilities. The 260-acre Prussing Farm, under development as a teaching unit, includes a new Agriculture and Conservation Classroom Building, and a Trap and Skeet Range. It is also the home of the UCM purebred Simmental and Angus cattle herds which provide many hands-on opportunities to learn about beef cattle production ranging from artificial insemination to genomically enhanced expected progeny differences (EPDs) to proper diet formulation to rotational grazing systems.

### Student Involvement

UCM's agriculture students participate in a number of departmentally sponsored organizations. The Agriculture Club is a social organization in the program that fosters an inclusive atmosphere for all students on campus that have an agriculture interest. Horticulture Club members visit horticulture-related businesses and sites and participate in regular plant sales that benefit members by raising funds for scholarships. Central Missouri's Collegiate Farm Bureau provides an opportunity to interact with local farmers and to participate

in agriculture activities at the state level. The Delta Tau Alpha national agriculture honor society strives to promote leadership and academic excellence for its members and the department through a multitude of activities such as traveling to the group's nation convention. Students participating in the Agriculture Ambassadors program volunteer to represent the department at functions on campus and at area high schools.

### Scholarships

In addition to more than \$4 million in merit-based scholarships and awards annually presented to Central Missouri students by the university, the agriculture program offers over \$20,000 in awards specifically for agriculture majors. These include the Ag Partner's, E.F Low, Earle and Clara Low, Edward and Trudy Denham, Farm Bureau, Lawrence E. and Eva L. Flanders, Missouri Department of Agriculture, Clarence Pearce Agriculture Education, William Forrest Sterling, W.J. and Lela Budwine Foundation/ Charles Simmons Scholarship and Theiss Family Scholarships.

### For More Information

To learn more contact the Department of Biology and Earth Science, WCM 306, UCM, Warrensburg, MO 64093; visit the program's web site at [ucmo.edu/agriculture](http://ucmo.edu/agriculture) or call 660-543-4933.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Agriculture-Business Major - Area 2: Animal Sciences, B.S. Degree (43-277)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
AGRI 1100 Introduction to Agriculture	1	AGRI 1600 Introductory Horticulture Science (Lab)	3
AGRI 1300 Introductory Plant Science	1	AGRI 2425 Livestock Evaluation (Lab)	3
AGRI 1420 Animal Husbandry	3	CHEM 1104 Introduction to the Sciences: Chemistry (Lab)	4
COMM 1000 Public Speaking	3	ENGL 1030 Composition II	3
ECON 1010 Principles of Macroeconomics	3	MATH 1111 College Algebra	3
ENGL 1020 Composition I	3	<b>Semester Total</b>	<b>16</b>
<b>Semester Total</b>	<b>14</b>		
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
AGRI 2130 Global Agriculture	3	AGRI 1310 Agronomy I: Row Crops (fall only) or	
AGRI 2330 Introduction to Soil Science (Lab)	3	AGRI 2315 Agronomy II: Forages (spring only)	2
AGRI 3420 Animal Nutrition	3	LIS 1600 University Library and Research Skills	2
ECON 1011 Principles of Microeconomics	3	General Education	12
General Education	3	<b>Semester Total</b>	<b>16</b>
<b>Semester Total</b>	<b>15</b>		
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
AGRI 3110 Agri-Business Management	3	AGRI 4110 Agricultural Futures Trading	3
AGRI 3120 Distribution and Marketing of Agriculture Products	3	AGRI 4300 Soil Fertility & Fertilizers	3
AGRI 3415 Meat Science	3	AGRI 4435 Animal Science: Pork	3
AGRI 4415 Reproduction of Farm Animals	3	General Education	3
General Education	3	Free Choice Electives	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs.</b>
AGRI 3410 Animal Breeding or		AGRI 4410 General Veterinary Science	3
AGRI 4310 Plant Breeding & Genetics	3	AGRI 4430 Animal Science: Beef	3
AGRI 3610 Agriculture Pest Management	3	ICAP 4101 Agricultural Capstone Experience	3
AGRI 3810 Internship in Agriculture	3	Free Choice Electives	5
Free Choice Electives	6	<b>Semester Total</b>	<b>14</b>
<b>Semester Total</b>	<b>15</b>		

**Agriculture-Business Major - Area 2: Animal Sciences, B.S. Degree - 120 hours**

- Your four-year guide will vary depending on the year (odd or even) and semester that you begin coursework. See your department chair for current curriculum information.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

Department of Biology and Earth Science

# AGRICULTURE-BUSINESS

## AREA 3: CROP AND SOIL SCIENCE, BACHELOR OF SCIENCE DEGREE

The major in Agriculture-Business includes specializations in Agricultural Management, Animal Science, Crop and Soil Science, and Horticultural Science. The interdisciplinary curriculum provides students with a background in all phases of agriculture and specialized courses allow students to expand their knowledge in their area of interest.

Agriculture students at UCM can expect more than just four years of class work. The program believes students should obtain the hands-on experience that employers expect and that high-tech agriculture careers demand.

Students learn by doing through such opportunities as assisting in agronomic field test plot research, helping with variety testing trials, raising plants for a Horticulture Club sale, working with HeatWatch cattle estrus and ultra-sound pregnancy monitoring systems, welding or repairing tractors, and plotting cattle futures.

### Employment Opportunities

The agriculture-business program prepares students for a wide variety of job opportunities in the day-to-day operation of Missouri's agriculture industry, the second largest sector of the state's economy. The Office of Career Services assists students and graduates in obtaining employment in their fields. In addition, the program plays a role in the placement of its graduates by maintaining contact with representatives of agri-business industries, the U.S. Department of Agriculture, Missouri agencies and other agriculture-oriented businesses.

### Faculty and Facilities

Dedicated faculty and well-equipped facilities offer students a quality learning experience. All department faculty members have earned doctorates in their field of specialization and, with a university student-faculty ratio of about 17 to 1, are able to provide personalized attention and instruction. Small classes allow for informal class sessions and increased access to the department's computers and laboratory facilities. The 260-acre Prussing Farm, under development as a teaching unit, includes a new Agriculture and Conservation Classroom Building, and a Trap and Skeet Range.

### Student Involvement

UCM's agriculture students participate in a number of departmentally sponsored organizations. The Agriculture Club is a social organization in the program that fosters an inclusive atmosphere for all students on campus that have an agriculture interest. Horticulture Club members visit horticulture-related businesses and sites and participate in regular plant sales that benefit members by raising funds for scholarships. Central Missouri's Collegiate Farm Bureau provides an opportunity to interact with local farmers and to participate in agriculture activities at the state level. The Delta Tau Alpha national agriculture honor society strives to promote leadership and academic excellence for its members and the department through a multitude of activities such as traveling to the group's nation

convention. Students participating in the Agriculture Ambassadors program volunteer to represent the department at functions on campus and at area high schools.

### Scholarships

In addition to more than \$4 million in merit-based scholarships and awards annually presented to Central Missouri students by the university, the agriculture program offers over \$20,000 in awards specifically for agriculture majors. These include the Ag Partner's, E.F. Low, Earle and Clara Low, Edward and Trudy Denham, Farm Bureau, Lawrence E. and Eva L. Flanders, Missouri Department of Agriculture, Clarence Pearce Agriculture Education, William Forrest Sterling, W.J. and Lela Budwine Foundation/ Charles Simmons Scholarship and Theiss Family Scholarships.

### For More Information

To learn more contact the Department of Biology and Earth Science, WCM 306, UCM, Warrensburg, MO 64093; visit the program's web site at [ucmo.edu/agriculture](http://ucmo.edu/agriculture) or call 660-543-4933.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Agriculture-Business Major - Area 3: Crop and Soil Science, B.S. Degree (43-277)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
AGRI 1100 Introduction to Agriculture	1	AGRI 1600 Introductory Horticulture Science (Lab)	3
AGRI 1300 Introductory Plant Science	1	ECON 1010 Principles of Macroeconomics	3
AGRI 1420 Animal Husbandry	3	ENGL 1030 Composition II	3
CHEM 1104 Introduction to the Sciences: Chemistry (Lab)	4	MATH 1111 College Algebra	3
COMM 1000 Public Speaking	3	General Education	3
ENGL 1020 Composition I	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
AGRI 1310 Agronomy I: Row Crops (fall only) or AGRI 2315 Agronomy II: Forages (spring only)	2	AGRI 2130 Global Agriculture	3
AGRI 2330 Introduction to Soil Science (Lab)	3	AGRI 2425 Livestock Evaluation (Lab)	3
ECON 1011 Principles of Microeconomics	3	LIS 1600 University Library and Research Skills	2
General Education	6	General Education	6
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>14</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
AGRI 3110 Agri-Business Management	3	AGRI 2331 Soils	3
AGRI 3140 Agricultural Analysis and Statistics	3	AGRI 3210 Soil & Water Management	3
AGRI 3610 Agriculture Pest Management (Lab)	3	AGRI 4110 Agricultural Futures Trading	3
General Education	6	AGRI 4300 Soil Fertility & Fertilizers	3
<b>Semester Total</b>	<b>15</b>	Free Choice Electives	4
		<b>Semester Total</b>	<b>16</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
AGRI 3120 Distribution and Marketing of Agriculture Products	3	AGRI 3320 Field Crop Management	3
AGRI 3410 Animal Breeding or AGRI 4310 Plant Breeding & Genetics	3	AGRI 4120 International Agriculture	3
AGRI 3810 Internship in Agriculture	3	ICAP 4101 Agricultural Capstone Experience	3
AGRI 4340 Agricultural Sprays and Chemicals (Lab)	3	Free Choice Electives	6
Free Choice Electives	4	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>16</b>		

**Agriculture-Business Major - Area 3: Crop and Soil Science, B.S. Degree - 120 hours**

- Your four-year guide will vary depending on the year (odd or even) and semester that you begin coursework. See your department chair for current curriculum information.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

Department of Biology and Earth Science

# AGRICULTURE-BUSINESS

## AREA 4: HORTICULTURAL SCIENCE, BACHELOR OF SCIENCE DEGREE

The major in Agriculture-Business includes specializations in Agricultural Management, Animal Science, Crop and Soil Science, and Horticultural Science. The interdisciplinary curriculum provides students with a background in all phases of agriculture and specialized courses allow students to expand their knowledge in their area of interest.

Agriculture students at UCM can expect more than just four years of class work. The program believes students should obtain the hands-on experience that employers expect and that high-tech agriculture careers demand.

Students learn by doing through such opportunities as assisting in agronomic field test plot research, helping with variety testing trials, raising plants for a Horticulture Club sale, working with HeatWatch cattle estrus and ultra-sound pregnancy monitoring systems, welding or repairing tractors, and plotting cattle futures.

### Employment Opportunities

The agriculture-business program prepares students for a wide variety of job opportunities in the day-to-day operation of Missouri's agriculture industry, the second largest sector of the state's economy. The Office of Career Services assists students and graduates in obtaining employment in their fields. In addition, the program plays a role in the placement of its graduates by maintaining contact with representatives of agri-business industries, the U.S. Department of Agriculture, Missouri agencies and other agriculture-oriented businesses.

### Faculty and Facilities

Dedicated faculty and well-equipped facilities, such as a computer lab for the exclusive use by Agriculture students plus a soils lab offer students a quality learning experience. All department instructors have earned doctorates in their field of specialization and, with a university student-faculty ratio of about 17 to 1, are able to provide personalized attention and instruction. Small classes allow for informal class sessions and increased access to the Agriculture program computers and laboratory facilities.

In addition to the typical classrooms, the Prussing Farm and the Mitchell Street Farm provide students with hands-on experience in all phases of Agriculture. Two greenhouses, shade houses, propagation mist benches, cold frames and apple orchard provide horticulture students opportunities to learn horticulture as practiced by the horticulture industry.

### Student Involvement

UCM's agriculture students participate in a number of departmentally sponsored organizations. The Agriculture Club is a social organization in the program that fosters an inclusive atmosphere for all students on campus that have an agriculture interest. Horticulture Club members visit horticulture-related businesses and sites and participate in regular plant sales that benefit members by raising funds for scholarships. Central Missouri's Collegiate Farm Bureau provides an opportunity to interact with local farmers and to participate

in agriculture activities at the state level. The Delta Tau Alpha national agriculture honor society strives to promote leadership and academic excellence for its members and the department through a multitude of activities such as traveling to the group's nation convention. Students participating in the Agriculture Ambassadors program volunteer to represent the department at functions on campus and at area high schools.

### Scholarships

In addition to more than \$4 million in merit-based scholarships and awards annually presented to Central Missouri students by the university, the agriculture program offers over \$20,000 in awards specifically for agriculture majors. These include the Ag Partner's, E.F. Low, Earle and Clara Low, Edward and Trudy Denham, Farm Bureau, Lawrence E. and Eva L. Flanders, Missouri Department of Agriculture, Clarence Pearce Agriculture Education, William Forrest Sterling, W.J. and Lela Budwine Foundation/ Charles Simmons Scholarship and Theiss Family Scholarships.

### For More Information

To learn more contact the Department of Biology and Earth Science, WCM 306, UCM, Warrensburg, MO 64093; visit the program's web site at [ucmo.edu/agriculture](http://ucmo.edu/agriculture) or call 660-543-4933.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Agriculture-Business Major - Area 4: Horticultural Science, B.S. Degree (43-277)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
AGRI 1100 Introduction to Agriculture	1	AGRI 1600 Introductory Horticulture Science (Lab)	3
AGRI 1300 Introductory Plant Science	1	COMM 1000 Public Speaking	3
AGRI 1420 Animal Husbandry	3	ECON 1010 Principles of Macroeconomics	3
CHEM 1104 Introduction to the Sciences: Chemistry (Lab)	4	ENGL 1030 Composition II	3
ENGL 1020 Composition I	3	MATH 1111 College Algebra	3
LIS 1600 University Library and Research Skills	2	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>14</b>		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
AGRI 2330 Introduction to Soil Science (Lab)	3	AGRI 1310 Agronomy I: Row Crops (fall only) or	
ECON 1011 Principles of Microeconomics	3	AGRI 2315 Agronomy II: Forages (spring only)	2
General Education	9	AGRI 2130 Global Agriculture	3
<b>Semester Total</b>	<b>15</b>	AGRI 2425 Livestock Evaluation (Lab)	3
		General Education	6
		<b>Semester Total</b>	<b>14</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
AGRI 3110 Agri-Business Management	3	AGRI 3610 Agricultural Pest Management (Lab)	3
AGRI 4600 Horticultural Plants I: Woody (Lab)	3	AGRI 3620 Residential Landscape Design (Lab)	3
AGRI 4610 Turfgrass Science (Lab)	3	AGRI 4300 Soil Fertility & Fertilizers	3
General Education	6	AGRI 4605 Horticultural Plants II: Herbaceous	3
<b>Semester Total</b>	<b>15</b>	Free Choice Electives	3
		<b>Semester Total</b>	<b>15</b>
<b>Between Junior and Senior Year - Summer</b>	<b>Hrs.</b>		
AGRI 3810 Internship in Agriculture	3		
<b>Semester Total</b>	<b>3</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
AGRI 3120 Distribution and Marketing of Agriculture Products	3	AGRI 3640 Horticultural Propagation Materials (Lab)	3
AGRI 3410 Animal Breeding or		AGRI 4000 Special Projects in Agriculture	3
AGRI 4310 Plant Breeding & Genetics	3	ICAP 4101 Agricultural Capstone Experience	3
AGRI 4340 Agricultural Sprays and Chemicals	3	Free Choice Electives	5
Free Choice Electives	6	<b>Semester Total</b>	<b>14</b>
<b>Semester Total</b>	<b>15</b>		

**Agriculture-Business Major - Area 4: Horticultural Science, B.S. Degree - 120 hours**

- Your four-year guide will vary depending on the year (odd or even) and semester that you begin coursework. See your department chair for current curriculum information.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Arts, Humanities, and Social Sciences

Department of Art & Design

# ART

## BACHELOR OF SCIENCE IN EDUCATION DEGREE

The art education program at University of Central Missouri is designed to simultaneously develop the artistic abilities, knowledge and thinking of the student, as well as the skills and understanding required for entry into the profession of teaching. The philosophy of the department is that art teachers should be dedicated to ongoing development of their knowledge of art and ability as artists, in addition to becoming skilled practitioners in the art of teaching. Central Missouri's Department of Art & Design is accredited by the National Association of Schools of Art and Design (NASAD). UCM is the only state supported 4-year institution in Missouri with NASAD accreditation, and has been since 1986. The Teacher Education Program is accredited by the National Council for the Accreditation of Teacher Education (NCATE). Students receive the Bachelor of Science in Education degree (BSE) which provides them with K-12 Missouri teaching certification in art. The courses that prepare the student specifically to be an art teacher are taken within the art department, while classes that deal with general knowledge and skills for teaching are taken within the College of Education.

### About the Faculty

The Department of Art & Design has an outstanding faculty with extensive records of achievement and recognition in research and exhibition who are committed to teaching and developing the artistic potential of every student.

The art education program is directed by two full-time faculty, both with public school teaching experience and strong connections to art education professional

organizations. One of the faculty members is a Bylar award winner, past president of the Missouri Art Education Association, and a former Missouri Art Educator of the Year. Both have been recognized for their research in art education, and both continue to practice and exhibit their work in addition to their teaching and research in art education.

### Studio Art

Art education majors acquire a broad base of experience in studio art. For every student, this foundation includes multiple courses in drawing and design, as well as courses in painting, sculpture, ceramics, fibers, and printmaking. Students choose one area of emphasis in which they take an additional six credit hours. These additional classes serve to further develop the student's potential as an artist through acquisition of more advanced knowledge and skill with one particular medium.

### Art History, Art Criticism and Aesthetics

Equally important in the art education program is the student's knowledge and understanding of the art world: the history of art (both western and non-western, historical and contemporary), knowledge of art criticism strategies, and understanding philosophies of art through the study of aesthetics. While these concepts are integrated throughout classes in the program, a sequence of five classes is devoted specifically to these topics in order to provide a solid foundation in the traditions, ideas and concepts specific to art and culture.

### Art Education Classes

Students learn about the artistic development of children and adolescents. They learn to use a comprehensive approach for teaching art in which Art Production as an activity is connected to Art History, Art Criticism, and Aesthetics. Partnerships have been established with area schools, and students have opportunities to try out their art teaching ideas at these locations.

### Employment Opportunities

K-12 certification enables the graduate in art education to apply for teaching jobs at any grade level, elementary through high school. Historically, Central Missouri's graduates have been in high demand, with a high percentage of students finding teaching jobs after their graduation for the next school year. Alumni are in positions of leadership and responsibility in many of the area's top schools and art programs. In regard to job opportunities out of state, recent graduates have been successful in extremely competitive situations. Acquiring teaching certification in another state has not proven to be difficult.

### For More Information

To learn more write the Department of Art & Design, Art Center 120, UCM, Warrensburg, MO 64093; call 660-543-4481; or visit the department's web site at [ucmo.edu/art](http://ucmo.edu/art).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Art Major, B.S. in Ed. Degree (41-260)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ART 1110 Drawing I	3	ART 1120 Drawing II	3
ART 1315 2-D Design	3	ART 1325 Color and Design	3
ART 1800 Ideas & the Visual Arts	3	<b>ENGL 1030 Composition II</b>	3
<b>ENGL 1020 Composition I</b>	3	<b>HIST 1350 or 1351 History of the United States</b>	3
General Education	3	<b>General Education MATH</b>	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
AE 1400 Freshman Seminar*	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ART 1815 Art History Survey I (fall) or ART 1835 Survey of Non-West. Art History (spring)	3	ART 1825 Art History Survey II	3
ART 2412 Ceramics I	3	ART 2420 Sculpture I	3
EDFL 2100 Foundations of Education	2	ART 2710 Printmaking I	3
FLDX 2150 Introductory Field Experience	1	<b>General Education Science w/lab**</b>	4
EDFL 2240 Educational Psychology	3	General Education	5
<b>POLS 1510 American Government</b>	3	<b>Semester Total</b>	<b>18</b>
General Education	3		
<b>Semester Total</b>	<b>18</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
ART 2511 Painting I	3	ART 3209 Figure Construction	3
ART 3314 Fibers	3	ART 3915 Methods of Teaching Art I: Elementary	3
EDSP 2100 Education of the Exceptional Child	2	ART 4850 20th Century Art & Architecture (fall) or ART 4860 Contemporary Art & Design (spring)	3
General Education	9	EDFL 4210 The Teaching of Reading in the Secondary School	2
<b>Semester Total</b>	<b>17</b>	PSY 4230 Psychology of Adolescence	3
		Upper Level Studio Concentration	3
		<b>Semester Total</b>	<b>17</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester***</b>	<b>Hrs.</b>
ART 3920 Methods of Teaching Art II: Secondary (fall)	3	ART 4920 Methods of Teaching Art III: Seminar for Student Teaching	2
EDFL 3500 Secondary Teaching & Behavior Management	3	ART 4930 K-12 Field Experience in Art	1
FLDX 3550 Practicum in Secondary Instruction	1	FLDX 4495 Student Teaching Elementary I	5
EDFL 4300 Educational Measures & Evaluation	2	ICAP 4468 Student Teaching Secondary II	4
ICAP 4221 Artists in Contemporary Society	3	<b>Semester Total</b>	<b>12</b>
Upper Level Studio Concentration	3		
<b>Semester Total</b>	<b>15</b>		

**Art Major, B.S. in Ed. Degree - 127 hours**

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives.
- \*\*Students pursuing a B.S. in Ed. must take a biology prefix. The second science course chosen must be from a different prefix from the list of choices in the Undergraduate Catalog. At least one course must have a laboratory.
- \*\*\*The courses listed for this semester constitute the professional education (student teaching) block. The student should not take any other courses during this semester.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before enrollment in professional education classes and student teaching. The application for student teaching is due approximately one year in advance.

## College of Health, Science, and Technology

Department of Nutrition and Kinesiology

# ATHLETIC TRAINING

## BACHELOR OF SCIENCE DEGREE

University of Central Missouri students can seek a Bachelor of Science degree in athletic training. In the spring of 2007 UCM received accreditation from the Commission on Accreditation of Athletic Training Education (CAATE). Upon graduation, and after successfully completing their BOC examination, individuals with this degree may work in many different settings, including high schools, universities, rehabilitation clinics, corporate fitness centers, as well as professional and industrial areas.

### Opportunities for Students

Central Missouri athletic training majors have the opportunity to interact with staff athletic trainers, physicians, a wide variety of allied health care providers, and a diverse population of student athletes. These unique clinical rotations assist the student in experiencing the different types of injuries and conditions associated with physical activity and sport participation. Students gain most of their clinical experiences on the UCM main campus by working with staff athletic trainers who oversee the healthcare of various athletic teams. UCM offers many men's and women's athletic teams who compete in NCAA Division II. The Athletic Training Education Program has a close affiliation with several physician groups as well as regional high schools where the students perform their off-campus clinical rotations. Other elective clinical opportunities include working with professional organizations, including the National Basketball Association, Major League Baseball, the National Football League, and the Professional Rodeo Cowboys Association (PRCA).

### About the Faculty

In addition to a wide a range of academic and professional experience, 90 percent of the department's faculty members have earned doctorates in their fields. Active research, workshops and seminars keep faculty members current in their disciplines.

### Student Organizations

Since 2004 the athletic training majors have been involved in a student organization titled the Athletic Training Student Association (ATSA). This organization assists students in their development as future certified athletic trainers.

### About the Department

The Department of Nutrition and Kinesiology's mission is to develop successful professionals in Nutrition and Kinesiology, instilling an appreciation for helping all people lead healthy and physically active lifestyles. The department emphasizes technology in all areas of its curriculum, and students become well versed in the use of multimedia and electronic University Library & Research Skills. Students learn to use specialized software to learn established medical documentation, conduct nutritional analysis, front office operations, and other essential functions. They also develop Internet expertise through a wide variety of classroom and laboratory assignments.

### Facilities

The main facility utilized by the Athletic Training Education Program is housed within the new Dr. Ronald "Doc" Van Dam Athletic Training Facility in the recently renovated Morrow-Garrison complex. The facility boasts 6,000 square feet for classrooms and student learning labs, rehabilitation /reconditioning equipment usage, a physician examination room along with the main Athletic Training Room utilized by UCM staff Athletic Trainers. Additional on campus Athletic Training facilities utilized by the ATEP are located at the Football Stadium, South Recreation, and the Multipurpose Building.

### Scholarships

The Dr. Ronald Van Dam Scholarship is available to students who major in athletic training. The department also offers many other scholarships to students in the Department of Nutrition and Kinesiology.

### To Learn More

For more information about majoring in athletic training, contact the Department of Nutrition and Kinesiology, Morrow 125, UCM, Warrensburg, MO 64093 or call 660-543-4256. You can visit the department's home page at [ucmo.edu/nutrition](http://ucmo.edu/nutrition).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Athletic Training Major, B.S. Degree (43-853)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester (apply to major)</b>	<b>Hrs.</b>
AT 1610 Introduction to Athletic Training	2	AT 1620 Responding to Emergencies for the Profess. Rescuer	3
AT 1611 Introduction to Athletic Training Lab I	1	AT 1630 Foundations of Athletic Training	2
CHEM 1104 Introduction to the Sciences: Chemistry	4	AT 1631 Foundations of Athletic Training Lab II	1
ENGL 1020 Composition I	3	AT 1640 Medical Terminology	1
HED 3180 Basic First Aid/CPR/AED for Health Care Professionals	1	BIOL 3401 Human Anatomy	3
MATH 1111 College Algebra	3	ENGL 1030 Composition II	3
<b>Semester Total</b>	<b>14</b>	PE 1800 Functional Anatomy	3
AE 1400 Freshman Seminar*	1	<b>Semester Total</b>	<b>16</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
AT 2610 Orthopedic Assessment: Lower Extremity	2	AT 2620 Orthopedic Assessment: Upper Extremity	2
AT 2611 Orthopedic Assessment: Lower Extremity Lab III	1	AT 2621 Orthopedic Assessment: Upper Extremity Lab IV	1
AT 2640 Introduction to Therapeutic Exercise	1	AT 2630 Therapeutic Modalities	2
BIOL 3402 Human Physiology	5	AT 2631 Therapeutic Modalities Lab	1
HED 1100 Personal Health	3	HED 4300 Nutrition & Human Performance	2
PE 2850 Foundations of Exercise Physiology	3	PE 2800 Biomechanics	3
<b>Semester Total</b>	<b>15</b>	PSY 1100 General Psychology	3
		<b>Semester Total</b>	<b>14</b>
<b>Summer Semester (during even numbered years only)</b>	<b>Hrs.</b>		
PE 4340 Adapted Physical Education	3		
<b>Semester Total</b>	<b>3</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
AT 3620 Clinical Athletic Training Lab V	2	AT 3640 Clinical Athletic Training Lab VI	2
AT 3630 Therapeutic Rehabilitation	2	AT 4630 Organization & Administration of Athletic Training	3
AT 3631 Therapeutic Rehabilitation Lab	1	PE 4740 Legal Liability in Fit./Well., PE, Rec, & Sport Settings	2
AT 3650 Sport & Exercise Pharmacology	2	General Education	6
COMM 1000 Public Speaking	3	Free Choice Elective	1
HED 4370 Human Diseases	3	<b>Semester Total</b>	<b>14</b>
General Education	2-3		
<b>Semester Total</b>	<b>15-16</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
AT 4610 Clinical Athletic Training Lab VII	2	AT 4620 Clinical Athletic Training Lab VIII	2
PE 4830 Psychological Aspects of Physical Education	2	AT 4640 Senior Seminar in Athletic Training	2
PSY 4520 Statistics for the Behavioral Sciences	3	IGEN 3472 Sport in American Life	3
General Education	9	PE 4850 Assessment & Evaluation of Fitness/Wellness	3
<b>Semester Total</b>	<b>16</b>	General Education	3
		<b>Semester Total</b>	<b>13</b>

**Athletic Training Major, B.S. Degree - 120 hours**

- AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- Admission to the Athletic Training major is a competitive process. Students apply to the program during the spring semester of their freshman year. Visit [ucmo.edu/at](http://ucmo.edu/at) for more details on the admissions process.
- UCM is fully accredited by the Commission on Accreditation of Athletic Training Education (CAATE).
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

**College of Health, Science, and Technology**  
*School of Technology*

# AUTOMOTIVE TECHNOLOGY MANAGEMENT

## AREA 1: AUTOMOTIVE TECHNOLOGY, BACHELOR OF SCIENCE DEGREE

Central Missouri's program in automotive technology management is designed to produce leaders to meet the increasing demand for skilled managers in industry. The School of Technology has some of the finest facilities available to prepare students for positions in automotive technology and the transportation industry. UCM students learn from experienced, highly qualified faculty members who are thoroughly familiar with the conditions and needs of modern industry and business.

The automotive technology management program provides specialized training for students entering the automotive industry in three areas of study: automotive technology, design technology, and management technology. UCM is one of only 20 institutions nationwide offering a full-range bachelor's degree in automotive technology. The Automotive Technology Management program has received dual program accreditation through the Association of Technology, Management and Applied Engineering (ATMAE) and the National Automotive Technicians Educational Foundation (NATEF). The ATM program at UCM is the only B.S. degree in automotive technology across the country to have achieved both accreditations. A certificate in Advanced Vehicle Systems as well as minor in Business Administration can also be completed as part of this degree.

### Internships

All automotive technology management students must complete an internship to utilize classroom and

laboratory principles and theories in actual work situations. Internships are usually scheduled during the last half of an undergraduate program. Students earn from three to nine semester hours of credit upon completion of an internship. Internships are arranged through General Motors, Ford, Chrysler, Honda, Cummins, Smith Electric Vehicles, and other employers.

### Facilities and Equipment

The Gaines Technology Complex provides some of the most advanced classroom and laboratory facilities in the nation. Over one-third of the 66,000-square-foot area is devoted to the automotive technology management program. Special environmentally controlled areas include rooms devoted to fluid power instruction in hydraulics and pneumatics, as well as for alternative fueled and hybrid/electric vehicles. Separate areas are designed for complete engine and transmission diagnosis and overhaul. The facilities are equipped with a dynamometer/computer diagnostic center and two sophisticated out-of-chassis FWD/RWD transmission testers.

### Student Involvement

Several student organizations exist in the department to enhance the development of special interests and talents of students. The Society of Automotive Engineers (student chapter) provides ample opportunity for professional and performance development to students seeking degrees in automotive technology management.

### Career Opportunities

Depending on their areas of specialization, graduates have a variety of job opportunities. Career opportunities for automotive graduates frequently include employment with one of the major automotive manufacturers, as well as OEM and aftermarket suppliers. Automotive-related career paths include customer service representatives, field service engineers, product improvement specialists, engineering technicians, transportation planners, sales representatives for manufacturers and distributors, insurance claims adjusters and automotive instructors.

### Scholarships

UCM offers nearly \$7 million in merit-based scholarships to its students each year.

### To Learn More

For more information, contact the School of Technology, Grinstead 9, UCM, Warrensburg, MO 64093, or call 660-543-4439. The school's web address is [ucmo.edu/technology](http://ucmo.edu/technology) and [facebook.com/UCMSOT](https://www.facebook.com/UCMSOT).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Automotive Technology Management Major (Area 1 - Automotive Tech.), B.S. Degree (43-01838)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ATM 1010 Contemporary Power Systems*	3	ATM 2124 Automotive Braking Systems*	4
ENGL 1020 Composition I	3	CIS 1600 Business Information Management	3
ET 1010 Applied Electricity	4	COMM 1000 Public Speaking	3
MATH 1111 College Algebra	3	ENGL 1030 Composition II	3
<b>Semester Total</b>	<b>13</b>	MATH 1131 Applied Calculus or MATH 1300 Basic Statistics <sup>3</sup>	3
		<b>Semester Total</b>	<b>16</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ATM 2110 Engine Theory & Maintenance*	4	ACCT 2100 Survey of Accounting or	
ATM 2130 Automotive Electrical Systems*	4	ACCT 2101 Principles of Financial Accounting**	3
ATM 2150 Mobile HVAC*	3	ATM 2132 Fuel Systems & Emission Controls*	4
PHYS 1104 Introduction to the Sciences: Physics	4	ATM 3110 Automotive Engine Overhaul	4
<b>Semester Total</b>	<b>15</b>	CHEM 1103 Introduction to the Sciences: Chemistry	3
		PSY 1100 General Psychology	3
		<b>Semester Total</b>	<b>17</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
ATM 3120 Steering and Suspension Systems*	4	ATM 3130 Computerized Engine Diagnostics*	4
ECEL 2110 World Diversity and America	3	ATM 3140 Transmissions & Drivelines*	4
ECON 1010 Principles of Macroeconomics	3	BLAW 2720 Legal Environment of Business	3
INDM 4210 Industrial Management or		CTE 3060 Technical Writing	3
MGT 3315 Management of Organizations**	3	HIST 1350 or 1351 History of the United States	3
<b>Semester Total</b>	<b>13</b>	<b>Semester Total</b>	<b>17</b>
<b>Summer – Between Junior &amp; Senior Year</b>	<b>Hrs.</b>		
SOT 3022 Internship in Technology***	3		
<b>Semester Total</b>	<b>3</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
ATM 3134 Advanced Powerplant Systems*	3	ATM 3150 Diesel Technology*	3
ATM 4032 Hydraulics & Pneumatics	3	ATM 4134 Advanced Vehicle Systems*	2
MKT 3405 Marketing Policy** or		ICAP 4112 Automotive Systems for Contemporary Society*	3
HRM 3920 Human Resource Management	3	General Education	6
General Education	6	<b>Semester Total</b>	<b>14</b>
<b>Semester Total</b>	<b>15</b>		

**Automotive Technology Management Major - Area 1 Automotive Technology, B.S. Degree  
Automotive Technology Option - 123 hrs**

- \*This class is only offered during the semester indicated.
- \*\*By selecting ACCT 2101, MGT 3315, and MKT 3405 in the major students can complete a minor in Business Administration.
- \*\*\*SOT 3022 Internship (3 hours) should be done during the summer between junior/senior year.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



**College of Health, Science, and Technology**  
*School of Technology*

# AUTOMOTIVE TECHNOLOGY MANAGEMENT

## AREA 2: DESIGN TECHNOLOGY, BACHELOR OF SCIENCE DEGREE

Central Missouri's program in automotive technology management is designed to produce leaders to meet the increasing demand for skilled managers in industry. The School of Technology has some of the finest facilities available to prepare students for positions in automotive technology and the transportation industry. UCM students learn from experienced, highly qualified faculty members who are thoroughly familiar with the conditions and needs of modern industry and business.

The automotive technology management program provides specialized training for students entering the automotive industry in three areas of study: automotive technology, design technology, and management technology. UCM is one of only 20 institutions nationwide offering a full-range bachelor's degree in automotive technology. The Automotive Technology Management program has received dual program accreditation through the Association of Technology, Management and Applied Engineering (ATMAE) and the National Automotive Technicians Educational Foundation (NATEF). The ATM program at UCM is the only B.S. degree in automotive technology across the country to have achieved both accreditations. A certificate in Advanced Vehicle Systems as well as minor in Business Administration can also be completed as part of this degree.

### **Internships**

All automotive technology management students must complete an internship to utilize classroom and

laboratory principles and theories in actual work situations. Internships are normally scheduled during the last half of an undergraduate program. Students earn from three to nine semester hours of credit upon completion of an internship. Internships are arranged through General Motors, Ford, Chrysler, Honda, Cummins, Smith Electric Vehicles, and other employers.

### **Facilities and Equipment**

The Gaines Technology Complex provides some of the most advanced classroom and laboratory facilities in the nation. Over one-third of the 66,000-square-foot area is devoted to the automotive technology management program. Special environmentally controlled areas include rooms devoted to fluid power instruction in hydraulics and pneumatics, as well as for alternative fueled and hybrid/electric vehicles. Separate areas are designed for complete engine and transmission diagnosis and overhaul. The facilities are equipped with a dynamometer/computer diagnostic center and two sophisticated out-of-chassis FWD/RWD transmission testers.

### **Student Involvement**

Several student organizations exist in the department to enhance the development of special interests and talents of students. The Society of Automotive Engineers (student chapter) provides ample opportunity for professional and performance development to students seeking degrees in automotive technology management.

### **Career Opportunities**

Depending on their areas of specialization, graduates have a variety of job opportunities. Career opportunities for automotive graduates frequently include employment with one of the major automotive manufacturers, as well as OEM and aftermarket suppliers. Automotive-related career paths include customer service representatives, field service engineers, product improvement specialists, engineering technicians, transportation planners, sales representatives for manufacturers and distributors, insurance claims adjusters and automotive instructors.

### **Scholarships**

UCM offers nearly \$7 million in merit-based scholarships to its students each year.

### **To Learn More**

For more information, contact the School of Technology, Grinstead 9, UCM, Warrensburg, MO 64093, or call 660-543-4439. The school's web address is [ucmo.edu/technology](http://ucmo.edu/technology) and [facebook.com/UCMSOT](http://facebook.com/UCMSOT).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Automotive Technology Management Major (Area 2 - Design Technology), B.S. Degree (43-02838)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ATM 1010 Contemporary Power Systems*	3	ATM 2124 Automotive Braking Systems*	4
CIS 1600 Business Information Management	3	CADD 1105 Basic AutoCAD	1
ENGL 1020 Composition I	3	CADD 1110 Fundamentals of Drafting	2
ET 1010 Applied Electricity	4	COMM 1000 Public Speaking	3
MATH 1111 College Algebra	3	ENGL 1030 Composition II	3
<b>Semester Total</b>	<b>16</b>	MATH 1131 Applied Calculus or MATH 1300 Basic Statistics	3
		<b>Semester Total</b>	<b>16</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ACCT 2100 Survey of Accounting or ACCT 2101 Principles of Financial Accounting**	3	ATM 2132 Fuel Systems & Emission Controls*	4
ATM 2110 Engine Theory & Maintenance*	4	ECEL 2110 World Diversity and America	3
ATM 2130 Automotive Electrical Systems*	4	HIST 1350 or 1351 History of the United States	3
PHYS 1104 Introduction to the Sciences: Physics	4	PSY 1100 General Psychology	3
<b>Semester Total</b>	<b>15</b>	General Education	3
		<b>Semester Total</b>	<b>16</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
ATM 3120 Steering & Suspension Systems*	4	ATM 3130 Computerized Engine Diagnostics*	4
CADD 2170 Introduction to Computer-Aided Drafting	2	ATM 3150 Diesel Technology*	3
ECON 1010 Principles of Macroeconomics	3	BLAW 2720 Legal Environment of Business	3
General Education	6	CHEM 1103 Introduction to the Sciences: Chemistry	3
<b>Semester Total</b>	<b>15</b>	CTE 3060 Technical Writing	3
		<b>Semester Total</b>	<b>16</b>
<b>Summer - Between Junior &amp; Senior Year</b>	<b>Hrs.</b>		
SOT 3022 Internship in Technology***	3		
<b>Semester Total</b>	<b>3</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
INDM 4210 Industrial Management or MGT 3315 Management of Organizations**	3	ATM 4134 Advanced Vehicle Systems*	2
ATM 3134 Advanced Powerplant Systems*	3	HRM 3920 Human Resource Management or MKT 3405 Marketing Policy**	3
ATM 4032 Hydraulics & Pneumatics	3	ICAP 4112 Automotive Systems for Contemporary Society*	3
General Education	3	Major Area 2 Elective#	4-7
<b>Semester Total</b>	<b>12</b>	<b>Semester Total</b>	<b>12-15</b>

**Automotive Technology Management Major - Area 2 Design Technology, B.S. Degree Design Technology Option - 121-124 hours**

- \*This class is offered only during the semester indicated.
- \*\*By selecting ACCT 2101, MGT 3315, and MKT 3405 in the major, students can complete a minor in Business Administration.
- \*\*\*SOT 3022 Internship (3 hours) should be done during the summer between junior/senior year.
- #See the 2013 Undergraduate Catalog for acceptable courses for Major Option Area 2 Electives. Four to six hours are required.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

School of Technology

# AUTOMOTIVE TECHNOLOGY MANAGEMENT

## AREA 3: SERVICE MANAGEMENT, BACHELOR OF SCIENCE DEGREE

Central Missouri's program in automotive technology management is designed to produce leaders to meet the increasing demand for skilled managers in industry. The School of Technology has some of the finest facilities available to prepare students for positions in automotive technology and the transportation industry. UCM students learn from experienced, highly qualified faculty members who are thoroughly familiar with the conditions and needs of modern industry and business.

The automotive technology management program provides specialized training for students entering the automotive industry in three areas of study: automotive technology, design technology, and management technology. UCM is one of only 20 institutions nationwide offering a full-range bachelor's degree in automotive technology. The Automotive Technology Management program has received dual program accreditation through the Association of Technology, Management and Applied Engineering (ATMAE) and the National Automotive Technicians Educational Foundation (NATEF). The ATM program at UCM is the only B.S. degree in automotive technology across the country to have achieved both accreditations. A certificate in Advanced Vehicle Systems as well as minor in Business Administration can also be completed as part of this degree.

### Internships

All automotive technology management students must complete an internship to utilize classroom and

laboratory principles and theories in actual work situations. Internships are normally scheduled during the last half of an undergraduate program. Students earn from three to nine semester hours of credit upon completion of an internship. Internships are arranged through General Motors, Ford, Chrysler, Honda, Cummins, Smith Electric Vehicles, and other employers.

### Facilities and Equipment

The Gaines Technology Complex provides some of the most advanced classroom and laboratory facilities in the nation. Over one-third of the 66,000-square-foot area is devoted to the automotive technology management program. Special environmentally controlled areas include rooms devoted to fluid power instruction in hydraulics and pneumatics, as well as for alternative fueled and hybrid/electric vehicles. Separate areas are designed for complete engine and transmission diagnosis and overhaul. The facilities are equipped with a dynamometer/computer diagnostic center and two sophisticated out-of-chassis FWD/RWD transmission testers.

### Student Involvement

Several student organizations exist in the department to enhance the development of special interests and talents of students. The Society of Automotive Engineers (student chapter) provides ample opportunity for professional and performance development to students seeking degrees in automotive technology management.

### Career Opportunities

Depending on their areas of specialization, graduates have a variety of job opportunities. Career opportunities for automotive graduates frequently include employment with one of the major automotive manufacturers, as well as OEM and aftermarket suppliers. Automotive-related career paths include customer service representatives, field service engineers, product improvement specialists, engineering technicians, transportation planners, sales representatives for mass-merchandisers and distributors, insurance claims adjusters and automotive instructors.

### Scholarships

UCM offers nearly \$7 million in merit-based scholarships to its students each year.

### To Learn More

For more information, contact the School of Technology, Grinstead 9, UCM, Warrensburg, MO 64093, or call 660-543-4439. The department's web address is [ucmo.edu/technology](http://ucmo.edu/technology) and [facebook.com/UCMSOT](https://facebook.com/UCMSOT).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Automotive Technology Management Major (Area 3 Service Management), B.S. Degree (43-03838)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ATM 1010 Contemporary Power Systems*	3	ATM 2124 Automotive Braking Systems*	4
ENGL 1020 Composition I	3	CIS 1600 Business Information Management	3
ET 1010 Applied Electricity	4	COMM 1000 Public Speaking	3
MATH 1111 College Algebra	3	ENGL 1030 Composition II	3
<b>Semester Total</b>	<b>13</b>	MATH 1131 Applied Calculus or MATH 1300 Basic Statistics	3
		<b>Semester Total</b>	<b>16</b>

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ACCT 2100 Survey of Accounting or ACCT 2101 Principles of Financial Accounting**	3	ATM 2132 Fuel Systems & Emission Controls*	4
ATM 2110 Engine Theory*	4	BLAW 2720 Legal Environment of Business	3
ATM 2130 Automotive Electrical Systems*	4	CHEM 1103 Introduction to the Sciences: Chemistry	3
PHYS 1104 Introduction to the Sciences: Physics	4	HIST 1350 or 1351 History of the United States	3
<b>Semester Total</b>	<b>15</b>	PSY 1100 General Psychology	3
		<b>Semester Total</b>	<b>16</b>

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
ATM 3120 Steering & Suspension Systems*	4	ATM 3130 Computerized Engine Diagnostics*	4
ECEL 2110 World Diversity and America	3	ATM 3150 Diesel Technology*	3
ECON 1010 Principles of Macroeconomics	3	CTE 3060 Technical Writing	3
INDM 4210 Industrial Management or MGT 3315 Management of Organizations**	3	General Education	6
<b>Semester Total</b>	<b>13</b>	<b>Semester Total</b>	<b>16</b>

<b>Summer – Between Junior &amp; Senior Year</b>	<b>Hrs.</b>
SOT 3022 Internship in Technology***	3
<b>Semester Total</b>	<b>3</b>

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
ATM 3134 Advanced Powerplant Systems*	3	ATM 4134 Advanced Vehicle Systems*	2
ATM 4032 Hydraulics & Pneumatics	3	ICAP 4112 Automotive Systems for Contemporary Society*	3
MKT 3405 Marketing Policy** or HRM 3920 Human Resource Management	3	Major Option Area 3 Electives#	6
Major Option Area 3 Elective#	3	General Education	3
General Education	3	<b>Semester Total</b>	<b>14</b>
<b>Semester Total</b>	<b>15</b>		

**Automotive Technology Management Major - Area 3 Service Management, B.S. Degree  
Service Management Option - 121 hrs**

- \*This class is only offered the semester indicated.
- \*\*By selecting ACCT 2101, MGT 3315, and MKT 3405 in the major students can complete a minor in Business Administration.
- \*\*\*SOT 3022 Internship (3.0 hrs) should be completed in the summer of the Junior/Senior year.
- #See the 2013 Undergraduate Catalog for a listing of the approved elective courses within Option Area 3 of the major.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## Harmon College of Business and Professional Studies

Department of Aviation

# AVIATION MAINTENANCE MANAGEMENT

2+2 MAJOR, BACHELOR OF SCIENCE DEGREE

The Aviation Maintenance Management option is a 2+2 program for students that have earned an Associate Degree in a related field and have an FAA Airframe and Powerplant rating. This program will allow them to complete their BS degree requirements at the University of Central Missouri in Aviation Maintenance Management. The mission of the Aviation Maintenance Management program is to prepare students for supervisory roles in airline, corporate, and general aviation maintenance departments.

Graduates of the BS in Aviation with an option in Aviation Maintenance Management will be able to:

- Interpret and analyze financial statements and control concepts
- Develop and use accounting and budgetary data to assist management in decision making and control activities
- Understand the design, function, and operation of aircraft systems
- Apply techniques to effectively and efficiently manage a corporate or airline aircraft maintenance department
- Understand the nature and sources of law and legal problems encountered by managers
- Have an understanding of airframe structures, including wood and sheet metal structures.
- Diagnose, troubleshoot, and repair airframe systems and components
- Apply engine theory and maintenance techniques to turbine and reciprocating engine systems
- Have knowledge of aircraft communication systems

- Use safety protocols appropriate to working with hazardous chemicals.
- Apply principles of management and supervision to the aviation maintenance field

### Student Involvement

Several student organizations exist in the department to enhance the development of special interests and talents of students. Alpha Eta Rho, a national aviation fraternity, is dedicated to the professional development of students majoring in aviation. A Chapter of Women in Aviation International (WAI) is a professional organization that promotes training and career awareness.

The National Intercollegiate Flight Team, which promotes excellence in flight performance, has established an enviable record at both regional and national levels.

### Career Opportunities

Depending on interests and areas of specialization, graduates have a variety of job opportunities. Careers for aviation maintenance management graduates include those with airlines or corporate flight departments, general aviation, and military.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide assistance with writing cover letters and resumes and offer a career library, mock interviews, and career counseling. The office also serves representatives of business,

government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students](http://ucmo.edu/career/students).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information about programs in aviation at UCM, contact the Department of Aviation, UCM, Warrensburg, MO 64093, call 660-543-4969, or visit the department's web site at [ucmo.edu/aviation](http://ucmo.edu/aviation).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Aviation Maintenance Management 2+2 Major, B.S. Degree (43-562)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

**The first four semesters (approximately 69 credit hours) are to be completed at a Community College or Technical Institute.**

<b>Junior Year - Fall Semester</b>		<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>		<b>Hrs.</b>
AVIA 4042 Aviation Maintenance Management		3	AVIA 4090 Aviation Law		3
BTE 1210 Essentials of Managing Information or LIS 1600 University Library & Research Skills		2	ECON 1010 Principles of Macroeconomics		3
ENGL 1030 Composition II		3	MATH 1131 Applied Calculus		3
Non-lab, non-Physics Gen Ed science course		3	MGT 3315 Management of Organizations or INDM 4210 Industrial Management		3
General Education*		6	Major Elective		3
<b>Semester Total</b>		<b>17</b>	<b>Semester Total</b>		<b>15</b>

<b>Senior Year – Fall Semester</b>		<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>		<b>Hrs.</b>
AVIA 4500 Aviation Safety		3	AVIA 4430 Corporate Aviations		3
CTE 3060 Technical Writing or MGT 3325 Business Communications		3	COMM 3010 Interpersonal Communications		3
GEOG 3201 Cultural Landscape		3	ICAP 4113 Air Operations Management		3
Major Elective		3	Major Elective		2
General Education*		3	General Education*		3
<b>Semester Total</b>		<b>15</b>	<b>Semester Total</b>		<b>14</b>

**Aviation Maintenance Management 2+2, B.S. Degree – 120 hours (minimum)**

- \*The number of general education hours remaining for the degree will depend on the amount of general education completed as part of the Associates degree earned. UCM requires 48 hours of General Education. This major requires these specific general education classes: BTE 1210 or LIS 1600, COMM 3010, ECON 1010, GEOG 3201, ICAP 4113, MATH 1111, and PHYS 1104. Every student must also take one of the following classes in general education: HIST 1350+, HIST 1351+, or POLS 1510 (+One of the HIST classes is recommend for overlap with another general education requirement.)
- The above suggested plan contains exactly 30 upper-level hours (3000/4000). If some of the courses are transferred from a 2 year institution, they will not count as upper-level hours. Students must earn 30 upper-level hours overall to graduate. Twenty of these hours must be earned at UCM and the major must contain 15 upper-level hours overall (9 of them from UCM).
- A two-year technology related Associate in Aviation Maintenance from an accredited community college or technical institute in this field of study will be accepted for admission into this program.
- The Federal Aviation Administration's Airframe and Powerplant Certificate is required for admission into this program.
- Forty-two hours of the degree transferred should apply toward the major and the remainder towards General Education. The General Education requirements transferred must be equivalent to UCM's requirements.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## Harmon College of Business and Professional Studies

Department of Aviation

# AVIATION MANAGEMENT

## OPTION 1: FLIGHT OPERATIONS MANAGEMENT, BACHELOR OF SCIENCE DEGREE

The Department of Aviation offers a Bachelor of Science degree in Flight Operations Management. The mission of the Flight Operations Management Program is to provide students the education and experience needed to work in the flight operations division of an airline or other aviation related company. This program has been accredited by the Aviation Accreditation Board International (AABI).

### Internships

Aviation students may apply for an internship to utilize classroom and laboratory principles and theories in actual work situations. Internships are normally scheduled during the last half of an undergraduate program or during graduate work. Students earn from one to nine semester hours of credit upon completion of an internship. Internships may be arranged with airlines, manufacturers, airports or government agencies depending on interests and career goals of students.

### Facilities and Equipment

The Department of Aviation has some of the finest facilities available to prepare students for positions in aviation both on campus and at UCM's Max B. Swisher Skyhaven Airport. The university owns 18 flight-ready aircraft including: a fleet of Cessna 172 Skyhawks, multi-engine aircraft, and gliders are available for flight training. In addition, the university has a hot-air balloon, which may be used to earn a rating. The department's flight simulation equipment includes several advanced aviation flight training devices: including a 737 NG AAFD in the

TR Gaines Technology Building. This device exposes students to realistic air carrier training scenarios and environment. There are no flight requirements for Flight Operations.

### Student Involvement

Several student organizations exist in the department to enhance the development of special interests and talents of students. Alpha Eta Rho, a national aviation fraternity, is dedicated to the professional development of students majoring in aviation. A Chapter of Women in Aviation International (WAI) is a professional organization that promotes training and career awareness.

The National Intercollegiate Flight Team, which promotes excellence in flight performance, has established an enviable record at both regional and national levels. Students who are interested in airport management can also join the local chapter of the American Association of Airport Executives to learn about the profession and build networking relationships.

### Special Services

A number of special aviation services are offered at Central Missouri, including an introductory course in aeronautics and a summer aerospace education class for elementary and secondary teachers. Special training programs and classes are also taught by UCM faculty to serve the aviation industry. FAA computerized tests with immediate results are available through the department's LaserGrade testing center.

### Career Opportunities

Depending on their interests and areas of specialization, graduates have a variety of job opportunities. Careers for flight operations management graduates include FAA Safety Operations Inspector, Ground Operations Coordinator, Fleet Service Operations Agent, Operations Duty Officer, Flight Operations Technician, Recruiter Operations Technician, Technical Operations Systems Analyst, Dispatch Operation Coordinator and Ramp Operation Agent.

### Scholarships

In addition to nearly \$7 million in scholarships provided through a variety of merit-based university scholarship programs, the Department of Aviation also offers an Achievement Award for students displaying exceptional talent in aviation areas.

### To Learn More

For more information about programs in aviation at UCM, contact the Department of Aviation, UCM, Warrensburg, MO 64093, call 660-543-4969, or visit the department's web site at [ucmo.edu/aviation](http://ucmo.edu/aviation).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Aviation Management Major (Option 1: Flight Operations Management), B.S. Degree (43-01570)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
AVIA 1020 Aeronautics	2	ACCT 2100 Survey of Financial Accounting*	3
AVIA 1310 FAA Private Requirement	4	AVIA 1321 Private Flight B	1
AVIA 1320 Private Flight A	1	ECON 1010 Principles of Macroeconomics	3
BTE 1210 Essentials of Managing Information or LIS 1600 University Library & Research Skills	2	ENGL 1030 Composition II	3
ENGL 1020 Composition I	3	MATH 1111 College Algebra	3
General Education	3	General Education	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>16</b>
AE 1400 Freshman Seminar**	1		

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
AVIA 3313 Instrument Flight A	1	AVIA 4350 Aviation Weather or EASC 3114 Meteorology	3
AVIA 3314 Instrument Flight B	1	COMM 2620 Introduction to Public Relations	3
AVIA 3325 FAA Instrument Requirement	4	CTE 3060 Technical Writing	3
BLAW 2720 Legal Environment of Business	3	PHYS 1104 Introduction to the Sciences: Physics	4
MATH 1131 Applied Calculus	3	General Education	3
General Education	3	<b>Semester Total</b>	<b>16</b>
<b>Semester Total</b>	<b>15</b>		

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
AVIA 4010 Aerodynamics	3	AVIA 4310 Air Traffic Control	2
AVIA 4500 Aviation Safety	3	FIN 2801 Business Statistics	3
MGT 3315 Management of Organizations or INDM 4210 Industrial Management*	3	HRM 3920 Human Resource Management	3
MKT 3405 Marketing Policy	3	General Education	6
General Education	3	<b>Semester Total</b>	<b>14</b>
<b>Semester Total</b>	<b>15</b>		

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
AVIA 4040 Aviation Management	3	AVIA 4380 Flight Operations Management	3
AVIA 4090 Aviation Law	3	FIN 3850 Principles of Finance	3
AVIA 4420 Air Transportation	3	ICAP 4113 Air Operations Management	3
AVIA 4430 Corporate Aviation Management	3	General Education	3
General Education	3	Free Choice Electives*	2
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>14</b>

**Aviation Management Major (Option 1: Flight Operations Management), B.S. Degree – 120 hours**

- \*Students are encouraged to consider adding a Business Administration minor. If interested in the minor option, students should take ACCT 2101 instead of ACCT 2100 and MGT 3315 instead of INDM 4210. In addition, CIS 1600 would be needed to complete the minor.
- \*\*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## Harmon College of Business and Professional Studies

Department of Aviation

# AVIATION MANAGEMENT

## OPTION 2: AIRPORT MANAGEMENT, BACHELOR OF SCIENCE DEGREE

The mission of the Airport Management program is to provide students the education and experience needed to be a part of the airport management team. This program emphasizes the business, planning, and personnel management background needed to be successful in this career area. This program is accredited by the Aviation Accreditation Board International (AABI).

### Internships

Aviation students are required to participate in an internship to utilize classroom and laboratory principles and theories in actual work situations. Internships are normally scheduled during the last half of an undergraduate program. Students earn from one to nine semester hours of credit upon completion of an internship. Internships may be arranged with airports or government agencies depending on interests and career goals of students.

### Facilities and Equipment

The Department of Aviation has some of the finest facilities available to prepare students for positions in aviation both on campus and at UCM's Max B. Swisher Skyhaven Airport.

### Student Involvement

Several student organizations exist in the department to enhance the development of special interests and talents of students. Students who are interested in airport management can join the local chapter of the American Association of Airport Executives. Alpha Eta Rho, a national aviation fraternity, is dedicated to the professional development of students majoring in aviation. A Chapter of Women in Aviation International (WAI) is a professional organization that promotes training and career awareness.

### Special Services

A number of special aviation services are offered at Central Missouri, including an introductory course in aeronautics. Special training programs and classes are also taught by UCM faculty to serve the aviation industry. FAA computerized tests with immediate results are available through the department's LaserGrade testing center. Pilot flight checks are administered by university personnel.

### Career Opportunities

Depending on their interests airport management graduates have a variety of job opportunities. Careers in airport management include

airport planning and design, airport operations, airport marketing and airport manager just to mention a few. A variety of government positions are also available in the airports division of FAA.

### Scholarships

In addition to nearly \$7 million in scholarships provided through a variety of merit-based university scholarship programs, the Department of Aviation also offers an Achievement Award for students displaying exceptional talent in aviation areas.

### To Learn More

For more information about programs in aviation at UCM, contact the Department of Aviation, UCM, Warrensburg, MO 64093, call 660-543-4969, or visit the department's web site at [ucmo.edu/aviation](http://ucmo.edu/aviation).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Aviation Management Major (Option 2: Airport Management), B.S. Degree (43-02570)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
AVIA 1020 Aeronautics	2	ENGL 1030 Composition II	3
ENGL 1020 Composition I	3	CADD 1105 Basic AutoCAD	1
MATH 1111 College Algebra	3	CADD 1110 Fundamentals of Drafting	2
General Education	6	PHYS 1104 Introduction to the Sciences: Physics	4
<b>Semester Total</b>	<b>14</b>	General Education	6
AE 1400 Freshman Seminar*	1	<b>Semester Total</b>	<b>16</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ACCT 2100 Survey of Accounting**	3	COMM 2620 Public Relations	3
ATM 3010 Transportation Systems	3	CTE 3060 Technical Writing	3
BLAW 2720 Legal Environment of Business	3	FIN 2801 Business Statistics I	3
MATH 1131 Applied Calculus	3	LIS 1600 University Library & Research Skills or	
General Education	3	BTE 1210 Essentials of Managing Information**	2
<b>Semester Total</b>	<b>15</b>	General Education	3
		<b>Semester Total</b>	<b>14</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
AVIA 4040 Aviation Management	3	AVIA 4310 Air Traffic Control	2
ECON 1010 Principles of Macroeconomics	3	FIN 3850 Principles of Finance	3
CADD 2170 Introduction to Computer-Aided Drafting	2	MGT 3315 Management of Organizations or	
MKT 3405 Marketing Policy	3	INDM 4210 Industrial Management**	3
General Education	3	General Education	6
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>14</b>
<b>Summer – Between Junior/Senior Year</b>	<b>Hrs.</b>		
SOT 3022 Internship	3		
<b>Semester Total</b>	<b>3</b>		
<b>Senior Year – Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
AVIA 4010 Aerodynamics	3	AVIA 4045 Airport Management	3
AVIA 4500 Aviation Safety	3	AVIA 4090 Aviation Law	3
HRM 3920 Human Resource Management	3	AVIA 4420 Air Transportation	3
SAFE 3000 Principles of Accident Causation	3	ICAP 4113 Air Operations Management	3
Free Choice Electives	3	Free Choice Electives	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

**Aviation Management Major (Option 2: Airport Management), B.S. Degree – 120 hours**

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however this major does not require any free choice electives.
- \*\*Students are encouraged to consider adding a Business Administration minor. If interested in the minor option, students should take ACCT 2101 instead of ACCT 2100 and MGT 3315 instead of INDM 4210. In addition, CIS 1600 would be needed to complete the minor.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

**College of Health, Science, and Technology**  
*School of Environmental, Physical, and Applied Sciences*

# BIOCHEMISTRY

## BACHELOR OF SCIENCE DEGREE

The future depends greatly on how people solve the world's problems, and problem solving is what chemists and physicists do best. From medicinal chemistry to research in superconductivity, there are abundant opportunities in the sciences. The chemistry programs at the University of Central Missouri prepare students for many rewarding cutting-edge careers.

The biochemistry and chemistry degree programs at UCM provide a balanced curriculum of classroom instruction and practical laboratory experience. Students with a major in biochemistry receive extensive state of the art, hands-on experience with instrumentation, such as UV-Visible, FTIR, and FTNMR spectroscopy; chromatography (GC/MS/MS/HPLC); calorimetry; fluorometry; electrochemical analysis and others.

### About the Faculty

Active research, workshop and seminar participation keep chemistry faculty current in the ever-advancing field of science. In addition to a wide range of academic and professional experience, all faculty members in UCM's chemistry program have earned doctorates in their fields of expertise.

The program's caring and experienced faculty provide individualized attention for their students, and the university's low student-to-faculty ratio allows for such personalized activity. Classroom learning is reinforced through practical laboratory experiences, where the use of instrumentation is emphasized.

### Facilities

The chemistry programs are located in the W. C. Morris Science Building.

The facilities include areas for general instructional use, audio-visual facilities, a library study area and modern laboratories in various areas of specialization. The program also has modern, well-equipped computer laboratories in chemistry, as well as electronic classrooms.

### Career Opportunities

Biochemistry is a common and well-suited major for many of the preprofessional programs (medicine, dentistry, veterinary, pharmacy, optometry) and also qualifies graduates to work as teachers or as chemists in industry and government. Biochemistry students are provided very attractive financial assistance should they choose to continue their studies at the graduate level. Graduate studies in biochemistry, analytical, organic, inorganic, chemical education, petroleum and pharmaceutical chemistry are among the numerous options available.

### Student Involvement

Students are encouraged to supplement their academic programs through participation in campus organizations of special professional, service and academic interest. The American Chemical Society provides opportunities for members to have personal and informal association with the chemistry faculty outside of the classroom. The society meets regularly, sponsor lectures on contemporary science topics, and provide avenues of participation for campus activities. Students who merit academic recognition may be invited to join one or more of the honorary societies in science, such as Sigma Pi Sigma or Beta Beta Beta.

Biochemistry and chemistry students are considered for employment as

laboratory or program assistants after completion of a minimum amount of training and study. This opportunity provides students with valuable teaching, research and technical experience.

The chemistry programs collaborate with the Departments of Criminal Justice and Biology and Earth Science to offer a minor in forensic science. Graduates completing the minor will be able to complete DNA testing and analyze trace evidence as entry level laboratory personnel.

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information contact the School of Environmental, Physical, and Applied Sciences, HUM 225, UCM, Warrensburg, MO 64093, call 660-543-4626, or visit the department's web site at [ucmo.edu/chemphys](http://ucmo.edu/chemphys).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Biochemistry Major, B.S. Degree (43-295)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CHEM 1131 General Chemistry I	5	BIOL 1110 Principles of Biology	3
ENGL 1020 Composition I	3	CHEM 1132 General Chemistry II	5
MATH 1151 Calculus & Analytical Geometry I	5	ENGL 1030 Composition II	3
<b>Semester Total</b>	<b>13</b>	General Education	5
AE 1400 Freshman Seminar*	1	<b>Semester Total</b>	<b>16</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
BIOL 2512 Cell Biology	3	CHEM 3212 Quantitative Analysis	3
CHEM 3341 Organic Chemistry I	4	CHEM 3342 Organic Chemistry II	4
PHYS 1101 or PHYS 2121 or PHYS 2123/1123	4-5	PHYS 1102 or PHYS 2122 or PHYS 2124/1124	4-5
General Education	3	General Education	3
<b>Semester Total</b>	<b>14-15</b>	<b>Semester Total</b>	<b>14-15</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
BIOL 3511 Genetics	4	BIOL 4514 Molecular Biology	3
CHEM 4531 Physical Chemistry: Thermodynamics & Kinetics**	4	BIOL 4515 Molecular Technology Laboratory	2
General Education	6	CHEM 3920 Communication Skills in Chemistry**	2
Free Choice Electives***	2	BIOL/CHEM Major Electives#	2-4
<b>Semester Total</b>	<b>16</b>	General Education	6
		<b>Semester Total</b>	<b>15-17</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
CHEM 3421 Intermediate Biochemistry	3	CHEM 4421 Advanced Biochemistry	3
BIOL/CHEM Major Electives#	2-4	CHEM 4431 Biochemistry Laboratory	2
General Education	9	Free Choice Electives***	9-11
<b>Semester Total</b>	<b>14-16</b>	<b>Semester Total</b>	<b>14-16</b>

**Biochemistry Major, B.S. Degree - 120 hours**

- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*Upper level chemistry courses offered variably check department for actual offerings.
- \*\*\*BIOL 1111/1112 should be taken as free choice electives if students are pre-medical, pre-dental, or pre-pharmacy students.
- #See the 2013 Undergraduate Catalog for a listing of appropriate Major Electives.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Health, Science, and Technology

Department of Biology and Earth Science

# BIOLOGY

## BACHELOR OF SCIENCE DEGREE, AREA 1: GENERAL BIOLOGY

The Department of Biology and Earth Science offers programs leading to a Bachelor of Science or Bachelor of Science in Education degree. Majors complete a core of courses which provide an understanding of biological principles. Upper-division courses provide integration, in-depth study, and an opportunity for specialization within the different degree emphases.

Students in the program gain analytical and laboratory skills that prepare them for entry-level positions in a variety of biologically related areas, including biotechnology, laboratory and/or field research, health science, wildlife biology, ecology, and conservation work. Students may also continue their education in professional schools in medicine, veterinary science, dentistry, or medical technology, or in graduate programs that focus on some aspect of biological science, such as genetics, microbiology, immunology, ecology, environmental health, or cell and molecular biology.

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Classroom learning is reinforced in most courses through practical laboratory experiences that include application of computer, multimedia technology and biotechnology. A new molecular biology research and teaching facility allows use of molecular techniques in courses and new courses in biotechnology.

In addition to a wide range of academic and professional experiences, all tenure-track members of the department's faculty have doctorates in their fields of expertise. Active research programs, many involving undergraduate students, and workshop and seminar participation keep faculty members abreast of developments in their fields.

### Student Involvement

Students may participate in a wide variety of field-based research projects, including research on using GIS and remote sensing to create habitat suitability models for Missouri's threatened and endangered flora and fauna; bat habitat surveys in Missouri; endangered species surveys in Missouri; floral surveys of selected areas in Missouri. In addition, students may participate in organismal, molecular and cellular laboratory-based research projects involving both plants and animals.

Student organizations include Para-Medico for students interested in careers in allied health areas; the Pre-Vet Club for those pursuing careers in animal care; Beta Beta Beta, the department's Biology honor society; National Science Teachers Association Student Chapter; for students interested in science education techniques; the Wildlife

Society, for students interested in ecological concerns and wildlife conservation; American Fisheries Society, for students interested in aquatic sciences; and Geology Club, to provide a greater understanding of the science of geology. Many of the student organizations sponsor a series of speakers and Geology club sponsors a week-long field trip.

### Pertle Springs

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### To Learn More

For more information, contact the Department of Biology and Earth Science, UCM, Warrensburg, MO 64093, or call 660-543-4933.

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**Biology Major (Area 1: General Biology), B.S. Degree (43-01380)**

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<b>Freshman Year</b> - Fall Semester	<b>Hrs</b>	<b>Freshman Year</b> -Spring Semester	<b>Hrs</b>
BIOL 1000 The Discipline of Biology and Earth Science	1	BIOL 1111 Plant Biology	4
BIOL 1110 Principles of Biology	3	ENGL 1020 Composition I	3
General Education	11	General Education	9
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>16</b>

<b>Sophomore Year</b> - Fall Semester	<b>Hrs</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs</b>
BIOL 1112 Animal Biology	4	BIOL 2020 General Ecology	3
CHEM 1131 General Chemistry I	5	CHEM 1132 General Chemistry II	5
ENGL 1030 Composition II	3	General Education	6
General Education	3	<b>Semester Total</b>	<b>14</b>
<b>Semester Total</b>	<b>15</b>		

<b>Junior Year</b> - Fall Semester	<b>Hrs</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs</b>
BIOL 3511 Genetics	4	BIOL 2512 Cell Biology	3
BIOL 3712 Field Natural History	4	BIOL 4013 Introductory Experimental Design & Analysis	3
General Education	3	BIOL 4102 Evolution	3
Free Choice Electives	5	Free Choice Electives	6
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>15</b>

<b>Senior Year</b> - Fall Semester	<b>Hrs</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs</b>
BIOL 3431 Animal Physiology (fall only)*	0-4*	BIOL 3611 Microbiology	4
Free Choice Electives	10-14	BIOL 4411 Plant Physiology (spring only)*	0-4*
<b>Semester Total</b>	<b>14</b>	ICAP 4222 The Biological Perspective	3
		Free Choice Electives	4-8
		<b>Semester Total</b>	<b>15</b>

**Biology Major (Area 1: General Biology), B.S. Degree - 120 hours**

- \*Students are required to take a physiology course, either BIOL 3431 or BIOL 4411. Animal Physiology BIOL 3431 is only offered in the fall semesters and Plant Physiology BIOL 4411 is only offered in the spring semesters. Students should consult with their faculty mentor about which course to take.
- This major does not build in the minimum number (30) of upper-level credit hours required for graduation. Be sure to include upper-level choices (3000/4000) in your general education and/or free choice electives.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

Department of Biology and Earth Science

# BIOLOGY

## BACHELOR OF SCIENCE DEGREE, AREA 2: ECOLOGY AND EVOLUTIONARY BIOLOGY

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### Student Involvement

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**Biology Major (Area 2: Ecology & Evolutionary Biology), B.S. Degree (43-02380)**

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BIOL 1000 The Discipline of Biology and Earth Science	1	BIOL 1111 Plant Biology	4
BIOL 1110 Principles of Biology	3	CHEM 1131 General Chemistry I	5
General Education	9	ENGL 1020 Composition I	3
<b>Semester Total</b>	<b>13</b>	General Education	3
		<b>Semester Total</b>	<b>15</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs</b>
BIOL 1112 Animal Biology	4	BIOL 2020 General Ecology	3
BIOL 3711 Plant Identification	4	BIOL Major Area Electives*	4
ENGL 1030 Composition II	3	CHEM 1132 General Chemistry II	5
General Education	3	General Education	5
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>17</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs</b>
BIOL 4709 Plant Ecology	4	BIOL 4013 Introductory Experimental Design & Analysis	3
General Education	12	BIOL 4711 Animal Ecology	4
<b>Semester Total</b>	<b>16</b>	Free Choice Electives	9
		<b>Semester Total</b>	<b>16</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs</b>
BIOL Major Area Electives*	4	BIOL 4102 Evolution	3
Major Area Electives*	3	ICAP 4222 The Biological Perspective	3
Free Choice Elective	7	Free Choice Electives	9
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>15</b>

**Biology Major (Area 2: Ecology & Evolutionary Biology), B.S. Degree - 120 hours**

- \*See the 2013 Undergraduate Catalog for list of appropriate major area electives.
- This major does not build in the minimum number (30) of upper-level credit hours required for graduation. Be sure to include upper-level choices (3000/4000) in your major electives, general education, and/or free choice electives.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

Department of Biology and Earth Science

# BIOLOGY

## BACHELOR OF SCIENCE DEGREE, AREA 3: WILDLIFE AND NATURAL RESOURCE CONSERVATION

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### Student Involvement

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**Biology Major (Area 3: Wildlife & Natural Resource Conservation), B.S. Degree (43-03380)**

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BIOL 1000 The Discipline of Biology and Earth Science		1	BIOL 1111 Plant Biology		4
BIOL 1110 Principles of Biology		3	BIOL 1112 Animal Biology		4
General Education		12	ENGL 1020 Composition I		3
<b>Semester Total</b>		<b>16</b>	General Education		3
			<b>Semester Total</b>		<b>14</b>

<b>Sophomore Year - Fall Semester</b>		<b>Hrs</b>	<b>Sophomore Year - Spring Semester</b>		<b>Hrs</b>
BIOL 2020 General Ecology		3	Physical Science Major Area Elective*		5
ENGL 1030 Composition II		3	Wildlife Management & Conservation Major Area Elective*		3
Physical Science Major Area Elective*		4	General Education		5
General Education		6	<b>Semester Total</b>		<b>13</b>
<b>Semester Total</b>		<b>16</b>			

<b>Junior Year - Fall Semester</b>		<b>Hrs</b>	<b>Junior Year - Spring Semester</b>		<b>Hrs</b>
BIOL 3711 Plant Identification		4	BIOL 4013 Introductory Experimental Design & Analysis or		
Wildlife Management & Conservation Major Area Elective*		3	MATH 1300 Basic Statistics		3
General Education		6	BIOL 4102 Evolution or BIOL 2510 Basic Genetics**		3
Free Choice Elective		3	Free Choice Electives		9
<b>Semester Total</b>		<b>16</b>	<b>Semester Total</b>		<b>15</b>

<b>Senior Year - Fall Semester</b>		<b>Hrs</b>	<b>Senior Year - Spring Semester</b>		<b>Hrs</b>
Wildlife & Habitat Biology Major Area Elective*		4	ICAP 4222 The Biological Perspective		3
Free Choice Elective		11	Wildlife & Habitat Biology Major Area Elective*		4
<b>Semester Total</b>		<b>15</b>	Free Choice Electives		8
			<b>Semester Total</b>		<b>15</b>

**Biology Major (Area 3: Wildlife & Natural Resource Conservation), B.S. Degree - 120 hours**

- \*See the 2013 Undergraduate Catalog for list of appropriate major area electives.
- \*\*Instead of BIOL 4102 or 2510(3 hour options) students may also opt to take a 9 hour option consisting of BIOL 3511 Genetics (4 hours) with CHEM 1131 (5 hours). If this is chosen CHEM 1131 will fulfill 3 hours of science general education. The number of free choice electives will vary depending on choices made.
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## College of Health, Science, and Technology

Department of Biology and Earth Science

# BIOLOGY

## BACHELOR OF SCIENCE DEGREE, AREA 4: INTEGRATIVE BIOLOGY, PLANT BIOLOGY EMPHASIS

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**Biology Major (Area 4: Integrative Biology, Plant Biology Emphasis), B.S. Degree (43-04380)**

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<b>Freshman Year</b> - Fall Semester	<b>Hrs</b>	<b>Freshman Year</b> -Spring Semester	<b>Hrs</b>
BIOL 1000 The Discipline of Biology and Earth Science	1	BIOL 1111 Plant Biology	4
BIOL 1110 Principles of Biology	3	ENGL 1020 Composition I	3
General Education	11	General Education	9
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>16</b>
<b>Sophomore Year</b> - Fall Semester	<b>Hrs</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs</b>
BIOL 2020 General Ecology	3	BIOL 2512 Cell Biology	3
BIOL 3711 Plant Identification	4	CHEM 1132 General Chemistry II	5
CHEM 1131 General Chemistry I	5	General Education	6
ENGL 1030 Composition II	3	<b>Semester Total</b>	<b>14</b>
<b>Semester Total</b>	<b>15</b>		
<b>Junior Year</b> - Fall Semester	<b>Hrs</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs</b>
BIOL 3511 Genetics	4	BIOL 4102 Evolution	3
PHYS 1101 College Physics I	4	Major Area Electives*	6-7
General Education	6	Free Choice Electives**	6
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>15-16</b>
<b>Senior Year</b> - Fall Semester	<b>Hrs</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs</b>
BIOL 4709 Plant Ecology	4	BIOL 4411 Plant Physiology	4
Free Choice Electives***	11-12	ICAP 4222 The Biological Perspective	3
<b>Semester Total</b>	<b>15-16</b>	Free Choice Electives**	8
		<b>Semester Total</b>	<b>15</b>

**Biology Major (Area 4: Integrative Biology, Plant Biology Emphasis), B.S. Degree - 120 hours**

- \*See the 2013 Undergraduate Catalog for list of appropriate major area electives for the Plant Biology Emphasis.
- \*\*The number of free choice electives required will depend on selections made in the major and general education.
- This major does not build in the minimum number (30) of upper-level credit hours required for graduation. Be sure to include upper-level choices (3000/4000) in your major electives, general education, and/or free choice electives.
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## College of Health, Science, and Technology

Department of Biology and Earth Science

# BIOLOGY

## BACHELOR OF SCIENCE DEGREE, AREA 4: INTEGRATIVE BIOLOGY, ANIMAL BIOLOGY EMPHASIS

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### Pertle Springs

In addition to the extensive laboratory facilities in the W.C. Morris Science Building, UCM owns Pertle Springs, a 300-acre park a mile from the main campus. A unique natural laboratory for research and field experiences, Pertle Springs also serves as a campus recreation area. UCM also maintains a small astronomical observatory at Pertle Springs featuring a computer-controlled telescope with imaging capabilities and specialized auxiliary equipment. Each year The Wildlife Society sponsors BioBlitz, an annual gathering at Pertle Springs that focuses on surveying natural areas, birds, fish, fungi, mammals, insects, reptiles, and amphibians.

### To Learn More

For more information, contact the Department of Biology and Earth Science, UCM, Warrensburg, MO 64093, or call 660-543-4933.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Biology Major (Area 4: Integrative Biology, Animal Biology Emphasis), B.S. Degree (43-04380)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs</b>	<b>Freshman Year</b> -Spring Semester	<b>Hrs</b>
BIOL 1000 The Discipline of Biology and Earth Science	1	BIOL 1112 Animal Biology	4
BIOL 1110 Principles of Biology	3	CHEM 1131 General Chemistry I	5
General Education	11	ENGL 1020 Composition I	3
<b>Semester Total</b>	<b>15</b>	General Education	3
		<b>Semester Total</b>	<b>15</b>
<b>Sophomore Year</b> - Fall Semester	<b>Hrs</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs</b>
BIOL 2020 General Ecology	3	BIOL 2512 Cell Biology	3
CHEM 1132 General Chemistry II	5	Major Area Elective*	3
ENGL 1030 Composition II	3	General Education	9
General Education	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>14</b>		
<b>Junior Year</b> - Fall Semester	<b>Hrs</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs</b>
BIOL 3511 Genetics	4	BIOL 3211 Comparative Anatomy	4
PHYS 1101 College Physics I	4	BIOL 4102 Evolution	3
General Education	6	Free Choice Electives**	9
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>16</b>
<b>Senior Year</b> - Fall Semester	<b>Hrs</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs</b>
BIOL 3431 Animal Physiology	4	BIOL 4711 Animal Ecology	4
Free Choice Electives**	11-13	ICAP 4222 The Biological Perspective	3
<b>Semester Total</b>	<b>15-17</b>	Major Area Electives*	3-5
		Free Choice Electives**	5
		<b>Semester Total</b>	<b>15-16</b>

**Biology Major (Area 4: Integrative Biology, Animal Biology Emphasis), B.S. Degree - 120 hours**

- \*See the 2013 Undergraduate Catalog for list of appropriate major area electives.
- \*\*The number of free choice electives required will depend on selections made in the major and general education.
- This major does not build in the minimum number (30) of upper-level credit hours required for graduation. Be sure to include upper-level choices (3000/4000) in your major electives, general education, and/or free choice electives.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

Department of Biology and Earth Science

# BIOLOGY

## BACHELOR OF SCIENCE DEGREE, AREA 5: BIOMEDICAL/CELLULAR AND MOLECULAR BIOLOGY

The Department of Biology and Earth Science offers programs leading to a Bachelor of Science or Bachelor of Science in Education degree. Majors complete a core of courses which provide an understanding of biological principles. Upper-division courses provide integration, in-depth study, and an opportunity for specialization within the different degree emphases.

Students in the program gain analytical and laboratory skills that prepare them for entry-level positions in a variety of biologically related areas, including biotechnology, laboratory and/or field research, health science, wildlife biology, ecology, and conservation work. Students may also continue their education in professional schools in medicine, veterinary science, dentistry, or medical technology, or in graduate programs that focus on some aspect of biological science, such as genetics, microbiology, immunology, ecology, environmental health, or cell and molecular biology.

Students majoring in Biology generally have a strong interest in living things and in the questions pertaining to the functions of life itself. They concern themselves with how living things survive, with how they affect each other and their environments; with food, physiology, energy, growth reproduction and maintenance processes. Generally, professionals in this field are responsible for the recognition and investigation of biological problems and the various applications of theory to these problems. Many biologists also seek careers in public health, biotechnology, industry, ecology, conservation work, wildlife biology, law, research and education.

Classroom learning is reinforced in most courses through practical laboratory experiences that include application of computer, multimedia technology and biotechnology. A new molecular biology research and teaching facility allows use of molecular techniques in courses and new courses in biotechnology.

In addition to a wide range of academic and professional experiences, all tenure-track members of the department's faculty have doctorates in their fields of expertise. Active research programs, many involving undergraduate students, and workshop and seminar participation keep faculty members abreast of developments in their fields.

### Student Involvement

Students may participate in a wide variety of field-based research projects, including research on using GIS and remote sensing to create habitat suitability models for Missouri's threatened and endangered flora and fauna; bat habitat surveys in Missouri; endangered species surveys in Missouri; floral surveys of selected areas in Missouri. In addition, students may participate in organismal, molecular and cellular laboratory-based research projects involving both plants and animals.

Student organizations include Para-Medico for students interested in careers in allied health areas; the Pre-Vet Club for those pursuing careers in animal care; Beta Beta Beta, the department's Biology honor society; National Science Teachers Association Student Chapter; for students interested in science education techniques; the Wildlife

Society, for students interested in ecological concerns and wildlife conservation; American Fisheries Society, for students interested in aquatic sciences; and Geology Club, to provide a greater understanding of the science of geology. Many of the student organizations sponsor a series of speakers and Geology club sponsors a week-long field trip.

### Pertle Springs

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### To Learn More

For more information, contact the Department of Biology and Earth Science, UCM, Warrensburg, MO 64093, or call 660-543-4933.

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**Biology Major (Area 5: Biomedical/Cellular & Molecular Biology), B.S. Degree (43-05380)**

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<b>Freshman Year - Fall Semester</b>	<b>Hrs</b>	<b>Freshman Year -Spring Semester</b>	<b>Hrs</b>
BIOL 1000 The Discipline of Biology and Earth Science	1	BIOL 1111 Plant Biology	4
BIOL 1110 Principles of Biology	3	CHEM 1132 General Chemistry II	5
CHEM 1131 General Chemistry I*	5	ENGL 1020 Composition I	3
General Education	6	General Education	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs</b>
BIOL 1112 Animal Biology	4	BIOL 3611 Microbiology	4
BIOL 2512 Cell Biology	3	General Education	11
ENGL 1030 Composition II	3	<b>Semester Total</b>	<b>15</b>
General Education	6		
<b>Semester Total</b>	<b>16</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs</b>
BIOL 3511 Genetics	4	BIOL 4514 Molecular Biology	3
General Education	6	BIOL 4515 Molecular Technology Lab	2
Free Choice Electives**	5	Major Area Electives***	4
<b>Semester Total</b>	<b>15</b>	Free Choice Electives**	6
		<b>Semester Total</b>	<b>15</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs</b>
BIOL 3431 Animal Physiology (fall only)#	0-4#	BIOL 4411 Plant Physiology (spring only)#	0-4#
Major Area Electives***	3-4	ICAP 4222 The Biological Perspective	3
Free Choice Electives**	7-12	Free Choice Electives**	7-11
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>14</b>

**Biology Major (Area 5: Biomedical/Cellular & Molecular Biology), B.S. Degree - 120 hours**

- \*Placement in CHEM 1131 requires an ACT math score of 21 or higher or an SAT math score of 550 or higher. If this score is not met, take MATH 1111 in the first semester and CHEM 1131 in the second semester. A grade of C or higher in MATH 1111 is required for enrollment in CHEM 1131.
- \*\*The number of free choice electives required will depend on selections made in the major and general education.
- \*\*\*See the 2013 Undergraduate Catalog for list of appropriate major area electives.
- #Students are required to take a physiology course, either BIOL 3431 or BIOL 4411. Animal Physiology BIOL 3431 is only offered in the fall semesters and Plant Physiology BIOL 4411 is only offered in the spring semesters. Students should consult with their faculty mentor about which course to take.
- This major does not build in the minimum number (30) of upper-level credit hours required for graduation. Be sure to include upper-level choices (3000/4000) in your major electives, general education, and/or free choice electives.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Health, Science, and Technology

Department of Biology and Earth Science

# BIOLOGY

## BACHELOR OF SCIENCE DEGREE, AREA 6: PRE-MED., PRE-DENTAL, PRE-VET

The Department of Biology and Earth Science offers programs leading to a Bachelor of Science or Bachelor of Science in Education degree. Majors complete a core of courses which provide an understanding of biological principles. Upper-division courses provide integration, in-depth study, and an opportunity for specialization within the different degree emphases.

Students in the program gain analytical and laboratory skills that prepare them for entry-level positions in a variety of biologically related areas, including biotechnology, laboratory and/or field research, health science, wildlife biology, ecology, and conservation work. Students may also continue their education in professional schools in medicine, veterinary science, dentistry, or medical technology, or in graduate programs that focus on some aspect of biological science, such as genetics, microbiology, immunology, ecology, environmental health, or cell and molecular biology.

Students majoring in Biology generally have a strong interest in living things and in the questions pertaining to the functions of life itself. They concern themselves with how living things survive, with how they affect each other and their environments; with food, physiology, energy, growth reproduction and maintenance processes. Generally, professionals in this field are responsible for the recognition and investigation of biological problems and the various applications of theory to these problems. Many biologists also seek careers in public health, biotechnology, industry, ecology, conservation work, wildlife biology, law, research and education.

Classroom learning is reinforced in most courses through practical laboratory experiences that include application of computer, multimedia technology and biotechnology. A new molecular biology research and teaching facility allows use of molecular techniques in courses and new courses in biotechnology.

In addition to a wide range of academic and professional experiences, all tenure-track members of the department's faculty have doctorates in their fields of expertise. Active research programs, many involving undergraduate students, and workshop and seminar participation keep faculty members abreast of developments in their fields.

### Student Involvement

Students may participate in a wide variety of field-based research projects, including research on using GIS and remote sensing to create habitat suitability models for Missouri's threatened and endangered flora and fauna; bat habitat surveys in Missouri; endangered species surveys in Missouri; floral surveys of selected areas in Missouri. In addition, students may participate in organismal, molecular and cellular laboratory-based research projects involving both plants and animals.

Student organizations include Para-Medico for students interested in careers in allied health areas; the Pre-Vet Club for those pursuing careers in animal care; Beta Beta Beta, the department's Biology honor society; National Science Teachers Association Student Chapter; for students interested in science education techniques; the Wildlife

Society, for students interested in ecological concerns and wildlife conservation; American Fisheries Society, for students interested in aquatic sciences; and Geology Club, to provide a greater understanding of the science of geology. Many of the student organizations sponsor a series of speakers and Geology club sponsors a week-long field trip.

### Pertle Springs

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### To Learn More

For more information, contact the Department of Biology and Earth Science, UCM, Warrensburg, MO 64093, or call 660-543-4933.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Biology Major (Area 6: Pre-Med, Pre-Dental, Pre-Vet), B.S. Degree (43-06380)**

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<b>Freshman Year - Fall Semester</b>	<b>Hrs</b>	<b>Freshman Year -Spring Semester</b>	<b>Hrs</b>
BIOL 1000 The Discipline of Biology and Earth Science	1	BIOL 1112 Animal Biology	4
BIOL 1110 Principles of Biology	3	CHEM 1132 General Chemistry II	5
CHEM 1131 General Chemistry I*	5	ENGL 1020 Composition I	3
General Education	6	General Education	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs</b>
BIOL 2512 Cell Biology	3	CHEM 3342 Organic Chemistry II	4
BIOL 3511 Genetics	4	PHYS 1101 College Physics I	4
CHEM 3341 Organic Chemistry I	4	General Education	8
ENGL 1030 Composition II	3	<b>Semester Total</b>	<b>16</b>
<b>Semester Total</b>	<b>14</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs</b>
BIOL 3611 Microbiology	4	BIOL 3211 Comparative Anatomy or	
General Education	6	BIOL 3401 Human Anatomy	<b>3-4</b>
Free Choice Electives	5	Major Area Electives**	4
<b>Semester Total</b>	<b>15</b>	General Education	6
		Free Choice Electives	2
		<b>Semester Total</b>	<b>15-16</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs</b>
BIOL 3431 Animal Physiology or		ICAP 4222 The Biological Perspective	3
BIOL 3402 Human Physiology	4-5	General Education	3
Major Area Electives**	4	Free Choice Electives	9
Free Choice Electives	7	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15-16</b>		

**Biology Major (Area 6: Pre-Med, Pre-Dental, Pre-Vet), B.S. Degree - 120 hours**

- \*Enrollment in CHEM 1131 requires an ACT math score of 21 (or SAT math score of 550) or a grade of C or higher in MATH 1111.
- \*\*Eight hours of major electives are required. See the 2013 Undergraduate Catalog for list of appropriate major area electives. CHEM 3421 or PHYS 1102 are strongly recommended for admission into professional programs.
- It is highly recommended that students meet with their departmental academic advisor each semester.
- Students seeking professional school admission should complete an average of 15 or more credit hours per semester.
- This major does not build in the minimum number (30) of upper-level credit hours required for graduation. Be sure to include upper-level choices (3000/4000) in your major electives, general education, and/or free choice electives.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

Department of Biology and Earth Science

# BIOLOGY

## BACHELOR OF SCIENCE DEGREE - AREA 7: CONSERVATION ENFORCEMENT

The Bachelor of Science degree in Biology with an area in Conservation Enforcement is one of the programs offered by the Department of Biology and Earth Science at University of Central Missouri and provides a solid foundation for careers in these scientific disciplines.

### Conservation Enforcement

Conservation enforcement studies provide majors with the essential education to manage, conserve, and protect fish and wildlife, and the land and water environments. In addition to acquiring a knowledge of law enforcement and natural resource management, students develop the skills in persuasion and leadership necessary to deal with the confrontational situations conservation officers frequently face.

Graduates may be employed as aquaculturists, biological aides, conservation educators, environmental impact assessors, field crew leaders, field or laboratory technicians, natural resources law enforcement officers, park rangers, or preserve management assistants. They are hired by state and federal natural resources agencies, private consulting firms, and conservation organizations. Graduates may also start their careers with overseas assignments in the Peace Corps.

### Student Involvement

Students may participate in a wide variety of field-based research projects, student organizations and the department's seminar series

to add an extra dimension to their study of science at UCM. Student organizations include Para-Medico for students interested in careers in allied health areas, the Pre-Vet Club for those pursuing careers in animal care, and Beta Beta Beta, the department's honor society. In addition, Biology Club fosters interaction in professional as well as social settings among students and faculty, hosts lectureships, helps with area public school and community activities, and engages in rock climbing, canoeing, and other adventures.

### Pertle Springs

In addition to the extensive laboratory facilities in the W.C. Morris Science Building, UCM owns Pertle Springs, a 300-acre park a mile from the main campus. A unique natural laboratory for research and field experiences, Pertle Springs also serves as a campus recreation area. The department operates Nature Central there as an environmental education center. UCM also maintains a small astronomical observatory at Pertle Springs featuring a computer-controlled telescope with imaging capabilities and specialized auxiliary equipment.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide assistance with writing cover letters and resumes and offer a

career library, mock interviews, and career counseling. The office also serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students](http://ucmo.edu/career/students).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information contact the Department of Biology and Earth Science, UCM, Warrensburg, MO 64093, or call 660-543-4933.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Biology Major (Area 7: Conservation Enforcement), B.S. Degree (43-07380)**

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<b>Freshman Year - Fall Semester</b>	<b>Hrs</b>	<b>Freshman Year -Spring Semester</b>	<b>Hrs</b>
BIOL 1000 The Discipline of Biology and Earth Science	1	BIOL 1111 Plant Biology	4
BIOL 1110 Principles of Biology	3	CJ 1000 Introduction to Criminal Justice	3
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
General Education	6	General Education	5
<b>Semester Total</b>	<b>13</b>	<b>Semester Total</b>	<b>15</b>

<b>Sophomore Year - Fall Semester</b>	<b>Hrs</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs</b>
BIOL 1112 Animal Biology	4	BIOL 2020 General Ecology	3
CTE 3060 Technical Writing	3	Major Electives*	3
General Education	9	General Education	9
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>15</b>

<b>Junior Year - Fall Semester</b>	<b>Hrs</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs</b>
BIOL 3711 Plant Identification	4	BIOL 4919 Wildlife Policy and Law	3
COMM 2620 Public Relations	3	General Education	3
CJ 2300 Criminal Law and Procedure	3	Free Choice Electives**	9
General Education	3	<b>Semester Total</b>	<b>15</b>
Free Choice Electives**	3		
<b>Semester Total</b>	<b>16</b>		

<b>Senior Year - Fall Semester</b>	<b>Hrs</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs</b>
CJ 4302 Criminal Evidence	3	ICAP 4222 The Biological Perspective	3
Major Electives*	3	Major Electives*	4
Free Choice Electives**	8	Free Choice Electives**	9
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>16</b>

**Biology Major (Area 7: Conservation Enforcement), B.S. Degree - 120 hours**

- \*See catalog for choices to fulfill this area.
- \*\*The number of free choice electives required will depend on selections made in the major and general education.
- This major does not build in the minimum number (30) of upper-level credit hours required for graduation. Be sure to include upper-level choices (3000/4000) in your major electives, general education, and/or free choice electives.
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## College of Health, Science, and Technology

Department of Biology and Earth Science

# BIOLOGY

## BACHELOR OF SCIENCE IN EDUCATION DEGREE

A Bachelor of Science in Education degree with a major in Biology provides certification to teach any biology course in grades 9-12. A unified science endorsement, earned by taking additional science courses, provides certification to teach any introductory science course in addition to any biology course. All teacher education programs are accredited by the National Council for Accreditation of Teacher Education. The curriculum offers the student the opportunity to develop a strong foundation in chemistry, physics and earth science.

### About the Faculty

Biology and Earth Science classes are taught by experienced faculty members who believe in individualized attention for students. Classroom learning is reinforced in most courses through practical laboratory experiences that include application of computer, multimedia technology and biotechnology. Recently, a new molecular biology research and teaching facility was constructed. Four new faculty members use molecular techniques in their courses and have developed new courses in biotechnology.

In addition to a wide range of academic and professional experiences, all tenure track members of the department's faculty have doctorates in their fields of expertise. Active research programs, many involving undergraduate students, and workshop and seminar participation keep faculty members abreast of developments in their fields.

### Career Opportunities

Graduates of this program will find potential employers very eager to recruit and retain them as teachers. In addition, museums, zoos and nature centers also hire educators, who have strong background in biology to design exhibitions, lead nature hikes in wild areas and plan educational programs.

Students who successfully complete UCM's science programs have a wide variety of opportunities available to them. They can develop a program of study preparing them for careers in systematics, ecology, conservation, physiology, cell biology, genetics and geology. With the appropriate preparation, students may become biology or earth science teachers, conservation agents or medical technologists. In addition, they may become qualified for admittance to graduate programs in biology and geology, and the professional schools of medical, veterinary, dental and physical therapy occupations.

### Student Involvement

Students may participate in a wide variety of field-based research projects, including research on using GIS and remote sensing to create habitat suitability models for Missouri's threatened and endangered flora and fauna; bat habitat surveys in Missouri; endangered species surveys in Missouri; floral surveys of selected areas in Missouri. In addition, students may participate in organismal, molecular and cellular laboratory-based research projects involving both plants and animals.

Student organizations include Para-Medico for students interested in careers in allied health areas;

the Pre-Vet Club for those pursuing careers in animal care; Beta Beta Beta, the department's Biology honor society; National Science Teachers Association Student Chapter; for students interested in science education techniques; the Wildlife Society, for students interested in ecological concerns and wildlife conservation; American Fisheries Society, for students interested in aquatic sciences; and Geology Club, to provide a greater understanding of the science of geology.

### Pertle Springs

In addition to the extensive laboratory facilities in the W.C. Morris Science Building, UCM owns Pertle Springs, a 300-acre park a mile from the main campus. A unique natural laboratory for research and field experiences, Pertle Springs also serves as a campus recreation area. UCM also maintains a small astronomical observatory at Pertle Springs featuring a computer-controlled telescope with imaging capabilities and specialized auxiliary equipment. Each year The Wildlife Society sponsors BioBlitz, an annual gathering at Pertle Springs that focuses on surveying natural areas, birds, fish, fungi, mammals, insects, reptiles, and amphibians.

### To Learn More

For more information, contact the Department of Biology and Earth Science, UCM, Warrensburg, MO 64093, or call 660-543-4933.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Biology Major, B.S. in Ed. Degree (41-487)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs</b>	<b>Freshman Year -Spring Semester</b>	<b>Hrs</b>
BIOL 1000 The Discipline of Biology and Earth Science	1	BIOL 1112 Animal Biology	4
<b>BIOL 1111 Plant Biology</b>	4	<b>CHEM 1131 Chemistry I</b>	5
<b>EASC 1004 Introduction to the Sciences: Geology</b>	4	<b>ENGL 1030 Composition II</b>	3
<b>ENGL 1020 Composition I</b>	3	POLS 1510 American Government	3
<b>General Education MATH</b>	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		

<b>Sophomore Year - Fall Semester</b>	<b>Hrs</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs</b>
BIOL 3511 Genetics	4	BIOL 2020 General Ecology	3
BIOL 2512 Cell Biology	3	PHYS 1101 Physics I (4) or	
EDFL 2100 Foundations of Education	2	PHYS 1104 Introduction to Sciences: Physics (4) or	
FLDX 2150 Introductory Field Experience	1	PHYS 2121 University Physics (5)	4-5
EDFL 2240 Educational Psychology	3	General Education	9
<b>HIST 1350 or 1351 History of the United States</b>	3	<b>Semester Total</b>	<b>16-17</b>
<b>Semester Total</b>	<b>16</b>		

<b>Junior Year - Fall Semester</b>	<b>Hrs</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs</b>
BIOL 3611 Microbiology	4	BIOL 3431 Animal Physiology (fall only)** or	
BIOL 3712 Field Natural History	4	BIOL 4411 Plant Physiology (spring only)**	4
EDSP 2100 Education of the Exceptional Child	2	CTE 2000 Technology & Society	3
EDFL 4300 Educational Measurement & Evaluation	2	EDFL 4210 The Teaching of Reading in the Secondary School	2
Major Electives*	3	PSY 4230 Psychology of Adolescence	3
<b>Semester Total</b>	<b>15</b>	Major Electives*	3
		General Education	3
		<b>Semester Total</b>	<b>18</b>

<b>Senior Year - Fall Semester</b>	<b>Hrs</b>	<b>Senior Year - Spring Semester***</b>	<b>Hrs</b>
EDFL 3500 Secondary Teaching & Behavior Management	3	FLDX 4595 Student Teaching Secondary I	5
FLDX 3550 Practicum in Secondary Instruction	1	ICAP 4468 Student Teaching Secondary II	4
STCH 4050 Science Teaching Methods	3	STCH 4080 Teaching Secondary Science	3
Major Electives*	3-4	<b>Semester Total</b>	<b>12</b>
General Education	6		
<b>Semester Total</b>	<b>16-17</b>		

**Biology Major, B.S. in Ed. Degree - 124 hours**

- \*This major requires 9-10 hours of major electives (hours depend on PHYS option selected). See the Undergraduate catalog for appropriate major elective course choices and for the Unified Science Certification requirements.
- \*\*Students are required to take a physiology course, either animal or plant. Animal physiology is a Fall only class and Plant physiology is a Spring only class. Students should consult with their faculty advisor about which course to take.
- \*\*\*The courses listed for this semester constitute the professional education (student teaching) block. The student should not take any other courses during this semester.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before enrollment in professional education classes and student teaching. The application for student teaching is due approximately one year in advance.



## College of Education

Department of Career and Technology Education

# CAREER AND TECHNOLOGY TEACHER EDUCATION

BACHELOR OF SCIENCE IN EDUCATION DEGREE - AREA 1 BUSINESS TEACHER EDUCATION (9-12 CERTIFICATION)

The Department of Career and Technology Education at UCM offers bachelor, master, and education specialist degrees. The primary purpose of the department is to provide leadership (state, regional, national, and international) by conducting research, developing curricula, and delivering pre- and in-service training for educators in the fields of agriculture, business, family and consumer sciences, technology education, and trade, technical and health services.

### Areas of Concentration

Three areas of concentration are available in the Career and Technology Education major including: Business Teacher Education (9-12 Certification), Family and Consumer Sciences Teacher Education (Birth – 12 Certification), and Engineering and Technology Teacher Education (9-12 Certification).

Career opportunities vary including public or private school teacher, trade, industrial, or health science instructor, college-level instructor, and others. The department provides options to develop expertise and advancement in these areas.

### Business Teacher Education Concentration

Business Teacher Education (BTE) is an area of concentration within the Bachelor of Science degree in Career and Technology Education, and provides students with the skills and certification requirements to teach business and marketing education in the public school system, career and technical school system, or in the corporate environment. The BTE program is accredited by the National

Council for Accreditation of Teacher Education (NCATE), and meets certification requirements set by the Missouri Department of Elementary and Secondary Education (DESE).

The Business Teacher Education Program at UCM provides business education and marketing education certification courses for teachers seeking initial certification, including undergraduate students, M.S. & MAT students, AC and TAC teachers. Courses prepare students to become certified in business education and marketing education with successful completion of the appropriate exit assessment prescribed by the Missouri State Board of Education.

### Academic Program

The UCM CTE: BTE undergraduate program requires that students complete a total of 120 credit hours of content from business, such as management, accounting, business communications, economics, marketing, personal finance, and software applications, along with educational pedagogy for teaching, methods of teaching business and marketing education, implementing business education programs, and coordination of cooperative education.

An alternative certification program is an option for students who have business work experience and a bachelor's degree in a related business area.

### Online Class Opportunities

Many courses within the Career and Technology Teacher Education major areas are offered online or as partially online hybrid courses. Contact the program coordinator/ advisor to possibly create an online degree program plan.

### Student Involvement

Business and Marketing Education students are encouraged to participate in the collegiate level PBL (Phi Beta Lambda) and DECA student organizations and competitions.

### Scholarships

Several scholarships are offered in the College of Education and the Department of Career and Technology Education. Other benefactors have provided specifically for Business and Marketing Teacher Education students such as the Beulah Gutridge Winfrey, Wilda Dean Creighton, and Genge family memorial scholarships.

### Faculty

The faculty members in the Department of Career and Technology Education are dedicated professionals who bring enthusiasm for business teacher education to the classroom.

Their advisement comes from their belief that business education teachers have a major positive impact on students' lives beyond the classroom.

### For More Information

To learn more contact the Department of Career and Technology Education, Grinstead 120, UCM, Warrensburg, MO 64093; visit the department's web site at [ucmo.edu/cte](http://ucmo.edu/cte); or call 660-543-4452.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Career and Tech. Teacher Education Major, B.S. in Ed. Degree - Area 1 Business Teacher Education (41-1564)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
BTE 1210 Essentials of Managing Information	2	COMM 1000 Public Speaking	3
CTE 1000 Intro. to Career Technology Education (fall only)	2	ECON 1010 Principles of Macroeconomics	3
<b>ENGL 1020 Composition I</b>	3	<b>ENGL 1030 Composition II</b>	3
<b>MATH 1111 College Algebra or 1620 Contemporary Math*</b>	3	<b>HIST 1350 or 1351 History of the United States</b>	3
<b>General Education Science with laboratory</b>	4	POLS 1510 American Government	3
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>15</b>

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ACCT 2101 Principles of Financial Accounting	3	BLAW 2720 Legal Environment Business	3
EDFL 2100 Foundations of Education	2	CTE 3110 Financial Management Education	3
FLDX 2150 Introductory Field Experience	1	EDSP 2100 Education of Exceptional Child	2
EDFL 2240 Educational Psychology	3	General Education	6
General Education	6	<b>Semester Total</b>	<b>14</b>
<b>Semester Total</b>	<b>15</b>		

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
BTE 4535 Data Input Technologies	2	BTE 4536 Integrated Productivity Applications	3
MGT 3315 Management of Organizations	3	BTE 4550 Publishing Applications for Business	2
MGT 3325 Business Communications	3	CTE 4145 Curriculum Construction in CTE	3
MKT 3405 Marketing Policy	3	EDFL 4210 The Teaching of Reading in the Secondary School	2
PSY 4230 Psychology of Adolescence	3	General Education	3
Major Elective*	3	Major Electives*	4
<b>Semester Total</b>	<b>17</b>	<b>Semester Total</b>	<b>17</b>

**Apply for Student Teaching**

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester**</b>	<b>Hrs.</b>
BTE 4210 Methods of Teaching Business Education	3	BTE 4241 Coordination of Cooperative Education Programs	2
CTE 4280 Implementing CTE Programs and Lab Management	3	BTE 4220 Secondary Field Experience II	1
CTE 4501 Managing Classroom Technologies	2	CTE 4135 Professional Preparation in CTE	2
EDFL 3500 Behavioral Management	3	FLDX 4595 Student Teaching I	5
FLDX 3550 Practicum in Secondary Instruction	1	ICAP 4468 Student Teaching II	4
EDFL 4300 Education Measurement & Evaluation	2	<b>Semester Total</b>	<b>14</b>
<b>Semester Total</b>	<b>14</b>		

**Career and Technology Teacher Education Major, B.S. in Ed. Degree  
Area 1 Business Teacher Education (9-12 Certification) - 120 hours**

- \*This major area requires 7 credit hours of major electives. See program coordinator for course suggestions.
- \*\* The courses listed for this semester constitute the professional education (student teaching) block. The student should not take any other courses during this semester.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before enrollment in professional education classes and student teaching. The application for student teaching is due approximately one year in advance.

## College of Education

Department of Career and Technology Education

# CAREER AND TECHNOLOGY TEACHER EDUCATION

BACHELOR OF SCIENCE IN EDUCATION DEGREE - AREA 2 FAMILY  
CONSUMER SCIENCES TEACHER EDUCATION (BIRTH-12 CERTIFICATION)

The Department of Career and Technology Education at UCM offers bachelor, master, and education specialist degrees. The primary purpose of the department is to provide leadership (state, regional, national, and international) by conducting research, developing curricula, and delivering pre- and in-service training for educators in the fields of agriculture, business, family and consumer sciences, technology education, and trade, technical and health services.

### Areas of Concentration

Three areas of concentration are available in the Career and Technology Education major including: Business Teacher Education (9-12 Certification), Family and Consumer Sciences Teacher Education (Birth – 12 Certification), and Engineering and Technology Teacher Education (9-12 Certification).

Career opportunities vary including public or private school teacher, trade, industrial, or health science instructor, college-level instructor, and others. The department provides options to develop expertise and advancement in these areas.

### Family and Consumer Sciences Teacher Education Concentration

The Bachelor of Science in Education degree in career and technology teacher education is designed to prepare students for teaching careers in family and consumer sciences. Graduates are certified by the Missouri Department

of Elementary and Secondary Education to teach in Missouri public schools. The program at UCM is nationally accredited and emphasizes consumer affairs, health and nutrition, child and family development, and the use of technology in all areas of the field. Graduates are able to teach family and consumer sciences to K-12 students.

### Online Class Opportunities

Many courses within the Career and Technology Teacher Education major areas are offered online or as partially online hybrid courses. However, the entire degree is not available online.

### Student Involvement

Professional organizations open to family and consumer sciences students include the American Association of Family and Consumer Sciences and the Association of Career and Technical Education.

### Special Facilities

Students seeking this degree can enhance knowledge gained from classroom experiences through professional development opportunities, and urban education experiences available through Central Missouri's sponsorship of charter schools in the Kansas City area.

### Scholarships

Many scholarships are offered in the Family and Consumer Sciences Teacher Education area, including the Laura Baker Scholarship, Doris Houx

Kirkpatrick Family and Consumer Sciences Scholarship, Elizabeth Collings Weekley Scholarship, Edna Gehlken Scholarship in Home Economics, Doris Achenbach Sensenich Scholarship in FCSE, and Rita R. Youmans Scholarship in Home Economics.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide assistance with writing cover letters and resumes and offer a career library, mock interviews, and career counseling. The office also serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students](http://ucmo.edu/career/students).

### To Learn More

To learn more contact the Department of Career and Technology Education, Grinstead 120, UCM, Warrensburg, MO 64093; visit the department's web site at [ucmo.edu/cte](http://ucmo.edu/cte); or call 660-543-4452.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Career & Tech. Teacher Edu. Major, B.S. in Ed. Degree - Area 2 Family & Consumer Sci. (41-02564)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CFD 1010 Individual & Family Relationships	3	<b>CHEM 1104 Introduction to the Sciences: Chemistry</b>	4
CFD 1220 Child Development	3	COMM 1000 Public Speaking	3
CTE 1000 Intro. to Career & Technology Education (fall only)	2	<b>ENGL 1030 Composition II</b>	3
<b>ENGL 1020 Composition I</b>	3	<b>POLS 1510 American Government</b>	3
<b>MATH 1111 College Algebra or 1620 Contemporary Math*</b>	3	General Education	2-3
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>15-16</b>
AE 1400 Freshman Seminar*	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
BIOL 1003 Introduction to the Sciences: Ecology	3	EDSP 2100 Education of the Exceptional Child	2
FAME 1450 Fundamentals of Apparel Design and Construction	3	HIST 1350 or 1351 History of the United States	3
FOOD 2322 Food Preparation	3	General Education	9
EDFL 2100 Foundations of Education	2	<b>Semester Total</b>	<b>14</b>
FLDX 2150 Introductory Field Experience	1		
EDFL 2240 Educational Psychology	3		
<b>Semester Total</b>	<b>15</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
CFD 3230 Family Systems & Lifespan Development (fall only)	3	CFD 3240 Parent-Child Interaction (spring only)	3
CTE 3110 Financial Management Education	3	CTE 4145 Curriculum Construction for CTE	3
D&N 3340 Nutrition	3	CTE 4280 Implementing CTE Programs and Lab Management	3
ECEL 3260 Practicum in Child Development	1	FCSE 3120 Family Resource Management	3
FCSE 3710 Organization of Vocational FCSE (fall only)	3	HED 4320 Teaching Sexuality Education in the School	3
General Education	3	PSY 4230 Psychology of Adolescence	3
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>18</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester**</b>	<b>Hrs.</b>
EDFL 3500 Secondary Teaching & Behavioral Management	3	BTE 4241 Coordination of Cooperative Education Programs	2
FLDX 3550 Practicum in Secondary Instruction	1	CTE 4135 Professional Preparation in CTE	2
EDFL 4210 The Teaching of Reading in the Secondary School	2	FCSE 4725 Secondary Field Experience II	1
EDFL 4300 Educational Measurement & Evaluation	2	FLDX 4595 Student Teaching Secondary I	5
FCSE 4740 Methods of Teaching FCSE Education	3	ICAP 4468 Student Teaching Secondary II	4
FAME 4410 Materials for Interior Furnishings	3	<b>Semester Total</b>	<b>14</b>
<b>Semester Total</b>	<b>14</b>		

**Career and Technology Teacher Education Major, B.S. in Ed. Degree  
Area 2 Family and Consumer Sciences Teacher Education (Birth-12 Certification) 120 hrs**

- \*AE 1400 is a free choice elective and is highly recommended for academic success; however, this major does not require any free choice electives.
- \*\* The courses listed for this semester constitute the professional education (student teaching) block. The student should not take any other courses during this semester.
- Certification to teach family and consumer sciences from birth to grade 12.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before enrollment in professional education classes and student teaching. The application for student teaching is due approximately one year in advance.

## College of Education

Department of Career and Technology Education

# CAREER AND TECHNOLOGY TEACHER EDUCATION

## BACHELOR OF SCIENCE IN EDUCATION DEGREE - AREA 3 ENGINEERING AND TECHNOLOGY TEACHER EDUCATION (9-12)

The Department of Career and Technology Education at UCM offers bachelor, master, and education specialist degrees. The primary purpose of the department is to provide leadership (state, regional, national, and international) by conducting research, developing curricula, and delivering pre- and in-service training for educators in the fields of agriculture, business, family and consumer sciences, technology education, and trade, technical and health services.

### Areas of Concentration

Three areas of concentration are available in the Career and Technology Education major including: Business Teacher Education (9-12 Certification), Family and Consumer Sciences Teacher Education (Birth – 12 Certification), and Engineering and Technology Teacher Education (9-12 Certification).

Career opportunities vary including public or private school teacher, trade, industrial, or health science instructor, college-level instructor, and others. The department provides options to develop expertise and advancement in these areas.

### Engineering and Technology Teacher Education Concentration

The University of Central Missouri Department of Career and Technology Education's program in career and technology teacher education is designed for students who want to teach engineering and technology education in grades 9 through 12. In addition to certification in secondary education, successful completion of the program's

curriculum provides an excellent background in both technology education and teaching methods.

Students learn how to implement a contemporary technology education program with an emphasis in pre-engineering education. They also develop an understanding of the nature and history of technology and the influence of technology on society and the environment. Students will learn how to employ and teach problem-solving methods.

Graduates of the program possess demonstrated competence with various technologies including, communication, manufacturing, construction, transportation, energy, computer technology and engineering design education.

Students completing the program can be qualified nationally to teach one or more of the Project Lead the Way courses. If you are in, or have taken, any high school PLTW courses, you may be eligible for college credit. Contact the department office for details.

### Online Class Opportunities

Many courses within the Career and Technology Teacher Education major areas are offered online or as partially online hybrid courses. However, the entire degree is not available online.

### Student Involvement

Professional organizations open to Engineering and Technology Education students include the Technology and Engineering Education Collegiate Association, and other education related student organizations.

### Scholarships

See the Department or program area coordinator for details regarding scholarship opportunities for ETTE majors.

### Faculty and Facilities

Dedicated faculty and well-equipped facilities, including modern computer laboratories, offer students a quality learning experience. All department faculty members have extensive knowledge and experience in their field of specialization. With a university student-faculty ratio of about 17 to 1, faculty are able to provide personalized attention and instruction. Small classes allow informal class sessions and increased access to the department's computer and laboratory facilities.

### For More Information

To learn more contact the Department of Career and Technology Education, Grinstead 120, UCM, Warrensburg, MO 64093; visit the department's web site at [ucmo.edu/cte](http://ucmo.edu/cte); or call 660-543-4452.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).



**Career & Tech. Teacher Edu. Major, B.S. in Ed. Degree - Area 3 Eng. & Tech. Teacher Edu. (41-03564)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
COMM 1000 Public Speaking	3	CTE 1500 Gateway to Technology (spring only)	3
CTE 1000 Intro. to Career & Technical Education (fall only)	2	CADD 2170 Introduction to Computer-Aided Drafting	2
CTE 1300 Introduction to Engineering Design (fall only)	3	<b>ENGL 1030 Composition II</b>	3
<b>ENGL 1020 Composition I</b>	3	<b>HIST 1350 or 1351 History of the United States</b>	3
CADD 1105 Basic AutoCAD	1	<b>PHYS 1104 Introduction to the Sciences: Physics (Lab)</b>	4
<b>MATH 1111 College Algebra or 1620 Contemporary Math*</b>	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
EDFL 2100 Foundations of Education	2	BIOL 1003 or 1004 Ecology or 1005 Environmental Science**	3-4
FLDX 2150 Introductory Field Experience	1	ENGT 2515 Applied Manufacturing Processes	3
EDFL 2240 Educational Psychology	3	POLS 1510 American Government	3
ENGT 1000 Principles of Engineering	3	General Education	6
ENGT 1510 Introduction to Manufacturing Processes	3	<b>Semester Total</b>	<b>15-16</b>
ET 1020 General Electronics	3		
<b>Semester Total</b>	<b>15</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
CTE 2000 Technology & Society	3	CTE 4145 Curriculum Construction in CTE	3
CTE 4280 Implementing CTE Programs and Lab Management	3	EDSP 2100 Education of the Exceptional Child	2
ET 1050 Digital Principles and Applications	4	SOT 4570 Computer Graphics	3
General Education	6	IGEN 3116 Creative Problem Solving	3
<b>Semester Total</b>	<b>16</b>	PSY 4230 Psychology of Adolescence	3
		General Education	3
		<b>Semester Total</b>	<b>17</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester+</b>	<b>Hrs.</b>
CTE 4125 Methods of Teaching Problem-Based Learning	3	BTE 4241 Coordination of Cooperative Education Programs	2
EDFL 3500 Secondary Teaching & Behavioral Management	3	CTE 4135 Professional Preparation in CTE	2
FLDX 3550 Practicum in Secondary Instruction	1	FLDX 4595 Student Teaching Secondary I	5
EDFL 4210 The Teaching of Reading in the Secondary School	2	ICAP 4468 Student Teaching Secondary II	4
EDFL 4300 Educational Measurement & Evaluation	2	T&OE 4120 Secondary Field Experience	1
Major Electives***	3	<b>Semester Total</b>	<b>14</b>
<b>Semester Total</b>	<b>14</b>		

**Career and Technology Teacher Education Major, B.S. in Ed. Degree****Area 3 Engineering and Technology Teacher Education (9-12 Certification) - 121 hours**

- \*Students interested in Project Lead the Way (PLTW) curriculum, you must also have math at a higher level than Math 1111/1620. You may take Option 1 = MATH 1111 and 1112 or Option 2 = MATH 1150 or higher.
- \*\*Students interested in PLTW curriculum must have BIOL 1004 instead of BIOL 1003 or 1005.
- \*\*\*Suggested Major Electives (3 hours required) to enhance your degree program are: ATM1010 CADD 3160 or 4180, CMGT 3010, CTE 3060 or 4115, EDFL 4130 and 4340, ENGT 4520, or GRAP 1010.
- +The courses listed for this semester constitute the professional education (student teaching) block. The student should not take any other courses during this semester.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before enrollment in professional education classes and student teaching. The application for student teaching is due approximately one year in advance.



## College of Health, Science, and Technology

School of Environmental, Physical, and Applied Sciences

# CHEMISTRY

## BACHELOR OF SCIENCE DEGREE - AREA 1 GENERAL CHEMISTRY

The future depends greatly on how people solve the world's problems, and problem solving is what chemists and physicists do best. From medicinal chemistry to research in superconductivity, there are abundant opportunities in the sciences. The chemistry programs offered at the University of Central Missouri prepare students for many rewarding cutting-edge careers.

The chemistry degree programs at UCM provide a balanced curriculum of classroom instruction and practical laboratory experience. Students with a major in chemistry receive extensive state-of-the-art, hands-on experience with instrumentation, such as UV-Visible, FTIR, and FTNMR spectroscopy; chromatography (GC/MS/MS/HPLC); calorimetry; fluorometry; electrochemical analysis and others.

### Accreditation

The bachelor of science major in chemistry is approved by the American Chemical Society.

### About the Faculty

Active research, workshop and seminar participation keep chemistry faculty current in the ever-advancing field of science. In addition to a wide range of academic and professional experience, all faculty members in UCM's chemistry programs have earned doctorates in their fields of expertise.

The program's caring and experienced faculty provide individualized attention for their students, and the university's low student-to-faculty ratio allows for such personalized activity. Classroom learning is reinforced through practical laboratory experiences, where the use of instrumentation is emphasized.

### Facilities

The chemistry programs are located in the W. C. Morris Science Building. The facilities include areas for general instructional use, audio-visual facilities, a library study area and modern laboratories in various areas of specialization. The program also has modern, well-equipped computer laboratories in chemistry, as well as electronic classrooms.

### Career Opportunities

Chemistry is a common and well-suited major for many of the preprofessional programs (medicine, dentistry, veterinary, pharmacy, optometry) and also qualifies graduates to work as teachers or as chemists in industry and government. Chemistry students are provided very attractive financial assistance should they choose to continue their studies at the graduate level. Graduate studies in biochemistry, analytical, organic, inorganic, chemical education, petroleum and pharmaceutical chemistry are among the numerous options available.

### Student Involvement

Students are encouraged to supplement their academic programs through participation in campus organizations of special professional, service and academic interest. The American Chemical Society provides opportunities for members to have personal and informal association with the chemistry faculty outside of the classroom. The society meets regularly, sponsors lectures on contemporary science topics, and provides avenues of participation for campus activities. Students who merit academic recognition may be invited to join one or more of the honorary societies in science, such as Sigma Pi Sigma or Beta Beta Beta.

Chemistry students are considered for employment as laboratory or program assistants after completion of a minimum amount of training and study. This opportunity provides students with valuable teaching, research and technical experience.

The chemistry programs collaborate with the Departments of Criminal Justice and Biology and Earth Science to offer a minor in forensic science. Graduates completing the minor will be able to complete DNA testing and analyze trace evidence as entry level laboratory personnel.

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information contact the School of Environmental, Physical, and Applied Sciences, HUM 225, UCM, Warrensburg, MO 64093, call 660-543-4626, or visit the program's web site at [ucmo.edu/chemphys](http://ucmo.edu/chemphys).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Chemistry Major - Area 1 General Chemistry, B.S. Degree (43-393)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
CHEM 1131 General Chemistry I*	5	CHEM 1132 General Chemistry II	5
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
MATH 1151 Calculus & Analytical Geometry I*	5	MATH 1152 Calculus & Analytical Geometry II	5
General Education Technology	2-3	General Education	3
<b>Semester Total</b>	<b>15-16</b>	<b>Semester Total</b>	<b>16</b>
AE 1400 Freshman Seminar**	1		

<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
CHEM 3341 Organic Chemistry I	4	CHEM 3342 Organic Chemistry II	4
PHYS 1101 College Physics I	4	PHYS 1102 College Physics II	4
General Education	6	General Education	6
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>14</b>

<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
CHEM 3111 Intermediate Inorganic Chemistry***	4	CHEM 3212 Quantitative Analysis	3
CHEM 3421 Intermediate Biochemistry	3	CHEM 3920 Communication Skills in Chemistry***	2
CHEM 4231 Instrumental Analysis***	4	CHEM 4910 Research in Chemistry	1
CHEM 4910 Research in Chemistry	1	General Education	9
General Education	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		

<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs.</b>
CHEM 4111 Advanced Inorganic Chemistry or CHEM 4313 Advanced Organic Chemistry	3	CHEM 4421 Advanced Biochemistry	3
CHEM 4531 Physical Chemistry I***	4	CHEM 4532 Physical Chemistry II***	4
CHEM 4910 Research in Chemistry	1	CHEM 4910 Research in Chemistry	1
General Education (IGEN/ICAP)	3	Free Choice Electives	7
Free Choice Electives	5	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>16</b>		

**Chemistry Major - Area 1 General Chemistry, B.S. Degree - 120 hours**

- \*Enrollment in CHEM 1131 and MATH 1151 is dependent upon one or more of the following: math placement level, high school math courses completed, ACT/SAT standardized test scores, and/or a possible mathematics placement examination.
- \*\*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*\*Upper level chemistry courses offered variably. Check with the department for actual offerings.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

**College of Health, Science, and Technology**  
*School of Environmental, Physical, and Applied Sciences*

# CHEMISTRY

## BACHELOR OF SCIENCE DEGREE - AREA 2 ALTERNATIVE ENERGY

The future depends greatly on how people solve the world's problems, and problem solving is what chemists and physicists do best. From medicinal chemistry to research in superconductivity, there are abundant opportunities in the sciences. The chemistry programs offered at the University of Central Missouri prepare students for many rewarding cutting-edge careers.

The chemistry degree programs at UCM provide a balanced curriculum of classroom instruction and practical laboratory experience. Students with a major in chemistry receive extensive state of the art, hands-on experience with instrumentation, such as UV-Visible, FTIR, and FTNMR spectroscopy; chromatography (GC/MS/MS/HPLC); calorimetry; fluorometry; electrochemical analysis and others.

### Accreditation

The bachelor of science major in chemistry is approved by the American Chemical Society.

### About the Faculty

Active research, workshop and seminar participation keep chemistry faculty current in the ever-advancing field of science. In addition to a wide range of academic and professional experience, all faculty members in UCM's chemistry programs have earned doctorates in their fields of expertise.

The program's caring and experienced faculty provide individualized attention for their students, and the university's low student-to-faculty ratio allows for such personalized activity. Classroom learning is reinforced through practical laboratory experiences, where the use of instrumentation is emphasized.

### Facilities

The chemistry programs are located in the W. C. Morris Science Building. The facilities include areas for general instructional use, audio-visual facilities, a library study area and modern laboratories in various areas of specialization. The program also has modern, well-equipped computer laboratories in chemistry, as well as electronic classrooms.

### Career Opportunities

Chemistry is a common and well-suited major for many of the preprofessional programs (medicine, dentistry, veterinary, pharmacy, optometry) and also qualifies graduates to work as teachers or as chemists in industry and government. Chemistry students are provided very attractive financial assistance should they choose to continue their studies at the graduate level. Graduate studies in biochemistry, analytical, organic, inorganic, chemical education, petroleum and pharmaceutical chemistry are among the numerous options available.

### Student Involvement

Students are encouraged to supplement their academic programs through participation in campus organizations of special professional, service and academic interest. The American Chemical Society provides opportunities for members to have personal and informal association with the chemistry faculty outside of the classroom. The society meets regularly, sponsor lectures on contemporary science topics, and provide avenues of participation for campus activities. Students who merit academic recognition may be invited to join one or more of the honorary societies in science, such as Sigma Pi Sigma or Beta Beta Beta.

Chemistry students are considered for employment as laboratory or program assistants after completion of a minimum amount of training and study. This opportunity provides students with valuable teaching, research and technical experience.

The chemistry programs collaborate with the Departments of Criminal Justice and Biology and Earth Science to offer a minor in forensic science. Graduates completing the minor will be able to complete DNA testing and analyze trace evidence as entry level laboratory personnel.

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information contact the School of Environmental, Physical, and Applied Sciences, HUM 225, UCM, Warrensburg, MO 64093, call 660-543-4626, or visit the program's web site at [ucmo.edu/chemphys](http://ucmo.edu/chemphys).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Chemistry Major - Area 2 Alternative Energy, B.S. Degree (43-393)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
CHEM 1131 General Chemistry I*	5	CHEM 1132 General Chemistry II	5
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
MATH 1151 Calculus & Analytical Geometry I*	5	MATH 1152 Calculus & Analytical Geometry II	5
General Education Technology	2-3	General Education	3
<b>Semester Total</b>	<b>15-16</b>	<b>Semester Total</b>	<b>16</b>
AE 1400 Freshman Seminar**	1		

<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
CHEM 3341 Organic Chemistry I	4	CHEM 3342 Organic Chemistry II	4
ET 1010 Applied Electricity	4	GEOG 2212 World Geography	3
PHYS 1101 College Physics I	4	PHYS 1102 College Physics II	4
General Education	3	General Education	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>14</b>

<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
CHEM 3111 Intermediate Inorganic Chemistry***	4	CHEM 3212 Quantitative Analysis	3
CHEM 3421 Intermediate Biochemistry	3	CHEM 3920 Communication Skills in Chemistry***	2
CHEM 4231 Instrumental Analysis***	4	CHEM 4910 Research in Chemistry	1
CHEM 4910 Research in Chemistry	1	General Education	9
General Education	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		

<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs.</b>
CHEM 4531 Physical Chemistry I***	4	CHEM 4221 Environmental Chemistry***	3
CHEM 4910 Research in Chemistry	1	CHEM 4532 Physical Chemistry II***	4
ET 3017 Industrial Electronics	4	CHEM 4910 Research in Chemistry	1
General Education	6	Free Choice Electives	7
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

**Chemistry Major - Area 2 Alternative Energy, B.S. Degree - 120 hours**

- \*Enrollment in CHEM 1131 and MATH 1151 is dependent upon one or more of the following: math placement level, high school math courses completed, ACT/SAT standardized test scores, and/or a possible mathematics placement examination.
- \*\*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*\*Upper level chemistry courses offered variably. Check with the department for actual offerings.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

School of Environmental, Physical, and Applied Sciences

# CHEMISTRY

## BACHELOR OF SCIENCE DEGREE - AREA 3 ENVIRONMENTAL CHEMISTRY

The future depends greatly on how people solve the world's problems, and problem solving is what chemists and physicists do best. From medicinal chemistry to research in superconductivity, there are abundant opportunities in the sciences. The chemistry programs offered at the University of Central Missouri prepare students for many rewarding cutting-edge careers.

The chemistry degree programs at UCM provide a balanced curriculum of classroom instruction and practical laboratory experience. Students with a major in chemistry receive extensive state of the art, hands-on experience with instrumentation, such as UV-Visible, FTIR, and FTNMR spectroscopy; chromatography (GC/MS/MS/HPLC); calorimetry; fluorometry; electrochemical analysis and others.

### Accreditation

The bachelor of science major in chemistry is approved by the American Chemical Society.

### About the Faculty

Active research, workshop and seminar participation keep chemistry faculty current in the ever-advancing field of science. In addition to a wide range of academic and professional experience, all faculty members in UCM's chemistry programs have earned doctorates in their fields of expertise.

The program's caring and experienced faculty provide individualized attention for their students, and the university's low student-to-faculty ratio allows for such personalized activity. Classroom learning is reinforced through practical laboratory experiences, where the use of instrumentation is emphasized.

### Facilities

The chemistry programs are located in the W. C. Morris Science Building. The facilities include areas for general instructional use, audio-visual facilities, a library study area and modern laboratories in various areas of specialization. The program also has modern, well-equipped computer laboratories in chemistry, as well as electronic classrooms.

### Career Opportunities

Chemistry is a common and well-suited major for many of the preprofessional programs (medicine, dentistry, veterinary, pharmacy, optometry) and also qualifies graduates to work as teachers or as chemists in industry and government. Chemistry students are provided very attractive financial assistance should they choose to continue their studies at the graduate level. Graduate studies in biochemistry, analytical, organic, inorganic, chemical education, petroleum and pharmaceutical chemistry are among the numerous options available.

### Student Involvement

Students are encouraged to supplement their academic programs through participation in campus organizations of special professional, service and academic interest. The American Chemical Society provides opportunities for members to have personal and informal association with the chemistry faculty outside of the classroom. The society meets regularly, sponsor lectures on contemporary science topics, and provide avenues of participation for campus activities. Students who merit academic recognition may be invited to join one or more of the honorary societies in science, such as Sigma Pi Sigma or Beta Beta Beta.

Chemistry students are considered for employment as laboratory or program assistants after completion of a minimum amount of training and study. This opportunity provides students with valuable teaching, research and technical experience.

The chemistry programs collaborate with the Departments of Criminal Justice and Biology and Earth Science to offer a minor in forensic science. Graduates completing the minor will be able to complete DNA testing and analyze trace evidence as entry level laboratory personnel.

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information contact the School of Environmental, Physical, and Applied Sciences, HUM 225, UCM, Warrensburg, MO 64093, call 660-543-4626, or visit the program's web site at [ucmo.edu/chemphys](http://ucmo.edu/chemphys).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Chemistry Major - Area 3 Environmental Chemistry, B.S. Degree (43-393)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
CHEM 1131 General Chemistry I*	5	CHEM 1132 General Chemistry II	5
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
MATH 1151 Calculus & Analytical Geometry I*	5	MATH 1152 Calculus & Analytical Geometry II	5
General Education Technology	2-3	General Education	3
<b>Semester Total</b>	<b>15-16</b>	<b>Semester Total</b>	<b>16</b>
AE 1400 Freshman Seminar**	1		

<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
BIOL 1110 Principles of Biology	3	CHEM 3342 Organic Chemistry II	4
CHEM 3341 Organic Chemistry I	4	EASC 3010 Environmental Geology	3
PHYS 1101 College Physics I	4	PHYS 1102 College Physics II	4
General Education	3	General Education	6
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>17</b>

<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
CHEM 3111 Intermediate Inorganic Chemistry***	4	CHEM 3212 Quantitative Analysis	3
CHEM 3421 Intermediate Biochemistry	3	CHEM 3920 Communication Skills in Chemistry***	2
CHEM 4231 Instrumental Analysis***	4	CHEM 4910 Research in Chemistry	1
CHEM 4910 Research in Chemistry	1	General Education	9
General Education	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		

<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs.</b>
CHEM 4531 Physical Chemistry I***	4	CHEM 4221 Environmental Chemistry***	3
CHEM 4910 Research in Chemistry	1	CHEM 4532 Physical Chemistry II***	4
GEOG 4220 Geographic Information Systems I	3	CHEM 4910 Research in Chemistry	1
General Education	6	SAFE 3120 Industrial Hygiene	3
<b>Semester Total</b>	<b>14</b>	Free Choice Electives	3
		<b>Semester Total</b>	<b>14</b>

**Chemistry Major - Area 3 Environmental Chemistry, B.S. Degree - 120 hours**

- \*Enrollment in CHEM 1131 and MATH 1151 is dependent upon one or more of the following: math placement level, high school math courses completed, ACT/SAT standardized test scores, and/or a possible mathematics placement examination.
- \*\*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*\*Upper level chemistry courses offered variably. Check with the department for actual offerings.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Health, Science, and Technology

School of Environmental, Physical, and Applied Sciences

# CHEMISTRY

## BACHELOR OF SCIENCE DEGREE - AREA 4 ENTREPRENEURSHIP

The future depends greatly on how people solve the world's problems, and problem solving is what chemists and physicists do best. From medicinal chemistry to research in superconductivity, there are abundant opportunities in the sciences. The chemistry programs offered at the University of Central Missouri prepare students for many rewarding cutting-edge careers.

The chemistry degree programs at UCM provide a balanced curriculum of classroom instruction and practical laboratory experience. Students with a major in chemistry receive extensive state of the art, hands-on experience with instrumentation, such as UV-Visible, FTIR, and FTNMR spectroscopy; chromatography (GC/MS/MS/HPLC); calorimetry; fluorometry; electrochemical analysis and others.

### Accreditation

The bachelor of science major in chemistry is approved by the American Chemical Society.

### About the Faculty

Active research, workshop and seminar participation keep chemistry faculty current in the ever-advancing field of science. In addition to a wide range of academic and professional experience, all faculty members in UCM's chemistry programs have earned doctorates in their fields of expertise.

The program's caring and experienced faculty provide individualized attention for their students, and the university's low student-to-faculty ratio allows for such personalized activity. Classroom learning is reinforced through practical laboratory experiences, where the use of instrumentation is emphasized.

### Facilities

The chemistry programs are located in the W. C. Morris Science Building. The facilities include areas for general instructional use, audio-visual facilities, a library study area and modern laboratories in various areas of specialization. The program also has modern, well-equipped computer laboratories in chemistry, as well as electronic classrooms.

### Career Opportunities

Chemistry is a common and well-suited major for many of the preprofessional programs (medicine, dentistry, veterinary, pharmacy, optometry) and also qualifies graduates to work as teachers or as chemists in industry and government. Chemistry students are provided very attractive financial assistance should they choose to continue their studies at the graduate level. Graduate studies in biochemistry, analytical, organic, inorganic, chemical education, petroleum and pharmaceutical chemistry are among the numerous options available.

### Student Involvement

Students are encouraged to supplement their academic programs through participation in campus organizations of special professional, service and academic interest. The American Chemical Society provides opportunities for members to have personal and informal association with the chemistry faculty outside of the classroom. The society meets regularly, sponsor lectures on contemporary science topics, and provide avenues of participation for campus activities. Students who merit academic recognition may be invited to join one or more of the honorary societies in science, such as Sigma Pi Sigma or Beta Beta Beta.

Chemistry students are considered for employment as laboratory or program assistants after completion of a minimum amount of training and study. This opportunity provides students with valuable teaching, research and technical experience.

The chemistry programs collaborate with the Departments of Criminal Justice and Biology and Earth Science to offer a minor in forensic science. Graduates completing the minor will be able to complete DNA testing and analyze trace evidence as entry level laboratory personnel.

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information contact the School of Environmental, Physical, and Applied Sciences, HUM 225, UCM, Warrensburg, MO 64093, call 660-543-4626, or visit the program's web site at [ucmo.edu/chemphys](http://ucmo.edu/chemphys).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Chemistry Major - Area 4 Entrepreneurship, B.S. Degree (43-393)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CHEM 1131 General Chemistry I*	5	CHEM 1132 General Chemistry II	5
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
MATH 1151 Calculus & Analytical Geometry I*	5	MATH 1152 Calculus & Analytical Geometry II	5
General Education Technology	2-3	General Education	3
<b>Semester Total</b>	<b>15-16</b>	<b>Semester Total</b>	<b>16</b>
AE 1400 Freshman Seminar**	1		

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
CHEM 3341 Organic Chemistry I	4	ACCT 2100 Survey of Accounting	3
PHYS 1101 College Physics I	4	CHEM 3342 Organic Chemistry II	4
General Education	6	PHYS 1102 College Physics II	4
<b>Semester Total</b>	<b>14</b>	General Education	3
		<b>Semester Total</b>	<b>14</b>

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
CHEM 3111 Intermediate Inorganic Chemistry***	4	CHEM 3212 Quantitative Analysis	3
CHEM 3421 Intermediate Biochemistry	3	CHEM 3920 Communication Skills in Chemistry***	2
CHEM 4231 Instrumental Analysis***	4	CHEM 4910 Research in Chemistry	1
CHEM 4910 Research in Chemistry	1	General Education	9
General Education	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
CHEM 4531 Physical Chemistry I***	4	CHEM 4532 Physical Chemistry II***	4
CHEM 4910 Research in Chemistry	1	CHEM 4910 Research in Chemistry	1
CIS 3630 Management Information Systems	3	General Education	6
MGT 3315 Management of Organizations	3	Free Choice Electives	3
MGT 3385 or MKT 3485 or CIS 3685 IBE Practicum	3	<b>Semester Total</b>	<b>14</b>
MKT 3405 Marketing Policy	3		
<b>Semester Total</b>	<b>17</b>		

**Chemistry Major - Area 4 Entrepreneurship, B.S. Degree - 120 hours**

- \*Enrollment in CHEM 1131 and MATH 1151 is dependent upon one or more of the following: math placement level, high school math courses completed, ACT/SAT standardized test scores, and/or a possible mathematics placement examination.
- \*\*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*\*Upper level chemistry courses offered variably. Check with the department for actual offerings.
- #Students pursuing Area 4 must enroll in the IBE Block. This includes the IBE Practicum (MGT 3385, MKT 3485 or CIS 3685) concurrently with the IBE sections of MGT 3315, MKT 3405 and CIS 3630. See CIS department for enrollment in CIS 3630 due to prerequisites (ACCT 2101 and CIS 1605).
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

**College of Health, Science, and Technology**  
*School of Environmental, Physical, and Applied Sciences*

# CHEMISTRY

## BACHELOR OF SCIENCE IN EDUCATION DEGREE

Science students who would like to become teachers may earn a Bachelor of Science in Education degree in chemistry. It can include unified science certification to teach any of the beginning sciences in addition to all levels of chemistry in grades 9-12.

The future depends greatly on how people solve the world's problems, and problem solving is what chemists and physicists do best. From medicinal chemistry to research in superconductivity, there are abundant opportunities in the sciences. The programs offered at UCM prepare students for many rewarding cutting-edge careers.

The chemistry degree program at UCM provides a balanced curriculum of classroom instruction and practical laboratory experience. Students with a major in chemistry receive extensive state of the art, hands-on experience with instrumentation, such as UV-Visible, FTIR, and FTNMR spectroscopy; chromatography (GC/MS/MS/HPLC); calorimetry; fluorometry; electrochemical analysis and others. A research component in the chemistry program allows students an opportunity to work independently and to use acquired skills. All teacher education programs are accredited by the National Council for Accreditation of Teacher Education and the Missouri Department of Elementary and Secondary Education. In addition, secondary teacher education programs in the sciences are accredited by the National Science Teachers Association.

### About the Faculty

Active research, workshop and seminar participation keep chemistry faculty current in the ever-advancing field of science. In addition to a wide range of academic and professional experience, all faculty members in the program have earned doctorates in their fields of expertise.

The program's caring and experienced faculty provide individualized attention for their students, and the university's low student to faculty ratio allows for such personalized activity. Classroom learning is reinforced through practical laboratory experiences, where the use of instrumentation is emphasized.

### Facilities

The chemistry programs are located in the W. C. Morris Science Building. The facilities include areas for general instructional use, audio-visual facilities, a library study area and modern laboratories in various areas of specialization. The program also has modern, well-equipped computer laboratories in chemistry, as well as electronic classrooms.

### Career Opportunities

Chemistry is a common major for all of the preprofessional programs (medicine, dentistry, veterinary, pharmacy, optometry) and also qualifies graduates to work as teachers or as chemists in industrial and governmental positions. Chemistry students are provided very attractive financial assistance should they choose to continue their studies at the graduate level. Graduate studies in biochemistry, analytical, organic, inorganic,

chemical education, petroleum and pharmaceutical chemistry are among the numerous options available.

### Student Involvement

Students are encouraged to supplement their academic programs through participation in campus organizations of special professional, service and academic interest. The American Chemical Society and the National Science Teachers Association provide opportunities for members to have personal and informal association with the chemistry faculty outside the classroom. The societies meet regularly, sponsor lectures on contemporary science topics, and provide avenues of participation for campus activities. Students who merit academic recognition may be invited to join one or more of the honorary societies in science, such as Sigma Pi Sigma or Beta Beta Beta.

Chemistry students are considered for employment as laboratory or program assistants after completion of a minimum amount of training and study. This opportunity provides students with valuable teaching, research and technical experience.

### To Learn More

For more information contact the School of Environmental, Physical, and Applied Science at Humphreys Building 225, Warrensburg, MO 64093, call 660-543-4626, or visit the program's web site at [ucmo.edu/chemphys](http://ucmo.edu/chemphys).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Chemistry Major, B.S. in Ed. Degree (41-485)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>		<b>Hrs</b>	<b>Freshman Year - Spring Semester</b>		<b>Hrs</b>
BIOL 1110 Principles of Biology or BIOL 1111 Plant Biology*		3-4	<b>BIOL 1005 Introduction to Environmental Sciences</b>		3
CHEM 1131 General Chemistry I**		5	CHEM 1132 General Chemistry II		5
CTE 2000 Technology & Society		3	<b>ENGL 1030 Composition II</b>		3
<b>ENGL 1020 Composition I</b>		3	<b>HIST 1350 or 1351 History of the United States</b>		3
<b>Semester Total</b>		<b>14-15</b>	General Education		3
			<b>Semester Total</b>		<b>17</b>

<b>Sophomore Year - Fall Semester</b>		<b>Hrs</b>	<b>Sophomore Year - Spring Semester</b>		<b>Hrs</b>
CHEM 3341 Organic Chemistry I		4	CHEM 3212 Quantitative Analysis		3
EDFL 2100 Foundations of Education		2	EASC 1004 Introduction to the Sciences: Geology		4
FLDX 2150 Introductory Field Experience		1	EDSP 2100 Education of the Exceptional Child		2
EDFL 2240 Educational Psychology		3	PHYS 1101 or PHYS 2121 (or PHYS 2123 & 1123)		4-5
<b>MATH 1151 Calculus &amp; Analytic Geometry I**</b>		5	POLS 1510 American Government		3
<b>Semester Total</b>		<b>15</b>	<b>Semester Total</b>		<b>16-17</b>

<b>Junior Year - Fall Semester</b>		<b>Hrs</b>	<b>Junior Year - Spring Semester</b>		<b>Hrs</b>
CHEM 3111 Intermediate Inorganic Chemistry***		4	CHEM 4531 or 4532 Physical Chemistry***		4
PSY 4230 Psychology of Adolescence		3	EDFL 4210 The Teaching of Reading in the Secondary School		2
Major Elective#		3	EDFL 4300 Educational Measurement & Evaluation		2
General Education		6	General Education		6
<b>Semester Total</b>		<b>16</b>	<b>Semester Total</b>		<b>14</b>

<b>Senior Year - Fall Semester</b>		<b>Hrs</b>	<b>Senior Year - Spring Semester+</b>		<b>Hrs</b>
CHEM 3421 Intermediate Biochemistry		3	FLDX 4595 Student Teaching Secondary I		5
EDFL 3500 Secondary Teaching & Behavioral Management		3	ICAP 4468 Student Teaching Secondary II		4
FLDX 3550 Practicum in Secondary Instruction		1	STCH 4080 Secondary Science Teaching		3
STCH 4050 Science Teaching Methods		3	<b>Semester Total</b>		<b>12</b>
Major Elective#		1-2			
General Education		3			
<b>Semester Total</b>		<b>14-15</b>			

**Chemistry Major, B.S. in Ed. Degree - 120 hours**

- \*Students completing the Unified Science Certification requirements should choose BIOL 1111 instead of BIOL 1110. Meet with a departmental advisor to learn more about Unified Science Certification.
- \*\*Enrollment in CHEM 1131 and MATH 1151 is dependent upon one or more of the following: math placement level, high school math courses completed, ACT/SAT standardized test scores, and/or a possible mathematics placement examination.
- \*\*\* Upper level chemistry courses offered variably. Check with the department for actual offerings.
- #See catalog for major electives and Unified Science Certification requirements. Number of major electives ranges from 4-6 credit hours and will depend on biology and physics choices.
- +The courses listed for this semester constitute the professional education (student teaching) block. The student should not take any other courses during this semester.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before enrollment in professional education classes and student teaching. The application for student teaching is due approximately one year in advance.

## College of Education

Department of Educational Leadership and Human Development

# CHILD AND FAMILY DEVELOPMENT

## BACHELOR OF SCIENCE DEGREE

The mission of Central's Child and Family Development program is to prepare highly qualified graduates to work effectively with individuals and families in our diverse and multi-faceted society, which in turn, improves the quality of life for individuals and families. This mission will be accomplished through comprehensive curriculum rooted in sound theoretical framework and contemporary research, hands-on professional learning experiences with children and families in varied settings, strong support and valuable guidance, and leadership opportunities.

### What Do CFD Students Learn?

The Child and Family Development curriculum is primarily guided by the National Council of Family Relations Core Competencies.

The ten core competencies areas are: Families in Society,

Internal Dynamics of Families, Human Growth and Development Over the Life Span, Human Sexuality, Interpersonal Relationships, Family Resource Management, Parent Education and Guidance, Family Law and Public Policy, Ethics and Family Life Education Methodology.

In addition to acquiring a strong foundation for understanding development at all ages, students will gain hands-on experiences through courses, volunteer work, student organizations and campus activities.

### Degrees

This Bachelor of Science degree prepares students for leadership roles in child and/or family related careers, such as early care and education, human services and parent education.

### A Bright Future

The degree in Child and Family Development enables students to work with children and families in various settings. Due to the changes and diversities among modern families, there is an increasing demand for Child and Family Development Professionals. Opportunities at the state/federal level are anticipated due to the massive retirement of the baby boomer generation. In addition, many Child and Family Development graduates apply and are accepted to graduate schools in related fields such as Marriage and Family Therapy, School Counseling, Community Counseling, and Human Development and Family Sciences.

### Career Options

By focusing on concepts and principles of human development and the complexities of contemporary life, Central's child and family development degree program equips graduates to work in a variety of settings and capacities with individuals and families. Careers are found in local, state, and federal government agencies, preschools, residential facilities, hospitals, community centers, churches, schools, for profit, and non-profit organizations.

### About the Faculty

Child and family development faculty members have all earned doctoral degrees in child and family development. Additionally, faculty members have had professional work experience in human service agencies. Faculty members conduct applied research and present papers at international, national and state conferences.

### Student Involvement

The Central Society of Child and Family Development (CSCFD) is an organization for students studying Child and Family Development. This major specific student organization provides numerous networking and professional development opportunities.

### To Learn More

For more information, contact the coordinator of Child and Family Development programs in the Department of Educational Leadership and Human Development, UCM, Lovinger 4101, Warrensburg, MO 64093, call 660-543-8744 or visit [ucmo.edu/elhd/programs/cfd](http://ucmo.edu/elhd/programs/cfd).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Child and Family Development Major, B.S. Degree (43-121)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
AE 1450 Valuing Differences	1	CFD 1220 Child Development	3
CFD 1010 Individual & Family Relationships	3	ECEL 2110 World Diversity & America	3
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
PSY 1100 General Psychology	3	SOC 1800 General Sociology	3
General Education	5	General Education	4
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>16</b>
AE 1400 Freshman Seminar*	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
CFD 1230 Observation of Children	2	CTE 3110 or FCSE 3120 or FIN 1820	3
HIST 1350 or 1351 History of the United States	3	SOC 2805 Introduction to Social Research	3
General Education	9	General Education	3
<b>Semester Total</b>	<b>14</b>	Free Choice Electives**	6
		<b>Semester Total</b>	<b>15</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Second Semester</b>	<b>Hrs.</b>
CFD 3230 Family Systems & Life Span Development	3	CFD 3240 Parent-Child Interaction	3
CFD 3710 Field Experience in Child & Family Development	3	CFD 3250 Org. & Admin. of Programs for Young Children	3
General Education	3	CFD 4220 Sexuality Across the Lifespan	3
Free Choice Electives**	6	Free Choice Electives**	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Summer Semester</b>	<b>Hrs.</b>		
CFD 4710 Internship***	3		
<b>Semester Total</b>	<b>3</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
CFD 3260 Youth Culture and Development	3	CFD 4745 Senior Seminar	3
CFD 4260 Adulthood	3	CFD Major Elective (see Catalog for course choices)	3
CFD 4850 Family Policy and Advocacy	3	Free Choice Electives**	6
CFD Major Elective (see Catalog for course choices)	3	<b>Semester Total</b>	<b>12</b>
General Education	3		
<b>Semester Total</b>	<b>15</b>		

**Child and Family Development Major, B.S. Degree - 120 hrs**

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective.
- \*\*For free choice elective hours please work with CFD faculty advisor to find the most appropriate options.
- \*\*\*Internship is to be completed during the summer semester before the senior year. Students must complete the Internship Application form by February 1st. Contact your faculty advisor for more information.
- A grade of C or higher is required in all CFD prefix courses.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Arts, Humanities, and Social Sciences

Department of Communication and Sociology

# COMMUNICATION STUDIES

## BACHELOR OF SCIENCE DEGREE

The ability to communicate effectively is one of the most important skills an individual can possess in this era of rapid informational and technological change.

### Our Mission

Communication Studies is committed to preparing graduates to communicate effectively and excel at examining the role of messages in various types of human relationships, organizations, cultures, and social institutions. We are committed to promoting life-long learning by preparing graduates who have developed their ability to think critically; speak and write exceptionally; analyze and interpret messages thoughtfully; and creatively craft and present messages through a variety of mediums.

### Our Program

The UCM Communication Studies degree program represents the most contemporary educational trend in preparing professionals in the rapidly changing field of communication across media, contexts, channels, and cultures. This major emphasizes providing students with nationally demanded communication-related skills, consistent with placement requirements for entry level positions in a variety of industries. The modern organization seeks the “knowledge worker” who is valued for their aptitude to move from entry level competencies to life-long relational competencies. Thus, the program is inclusive and complimentary to related areas such as digital media, sociology and public relations.

Our major is highly customizable, allowing students the opportunity to create a program that reflects the skills and content interests of the student. Our major prepares students for professional life in areas such as: communication manager, consultant, client relations, social media coordinator, non-profit management, mediator, recruiter, trainer, etc.; and is

a perfect pre-professional degree for students seeking continued education in law; seminary; or graduate level communication programs.

In addition, understanding messages provides students with skills for life; to manage a variety of relational settings including: family, work, friends, and community.

The program includes communication courses that span the discipline, and includes a 15-hour emphasis in one of three areas:

- **Consultancy** students develop expertise in assessment, relationship building, and training for professional settings.

- **Social Influence and Media** focuses on the use of verbal and nonverbal persuasion in and among relational, group, presentation, and media contexts.

- **Relational** applies the practice of communication to individual, interpersonal, and intercultural contexts and uses the life cycle to integrate diverse applications of gender, race, and age differences.

The flexibility of our program offers students the time to take several elective courses. We highly encourage students to take courses which augment knowledge and skills related to the industry area students are looking to seek employment within.

### From Student to Professional

Students are encouraged to take a part in unique co-curricular activities. Some opportunities offered for our students include:

- **Dale Carnegie certification:** Dale Carnegie, arguably UCM’s most famous Alum, continues to enhance his legacy of common sense communication in the digital age. This Certificate provides the communication studies graduate with an efficient means to create career placement and advancement advantages and provides a desired set of communication competencies in a

manageable timeframe.

- **Talking Mules:** Our nationally competitive speech/debate team allows students to compete in a variety of debate and individual events. The team travels regionally, nationally, and even internationally. Each year select members of the team travel to Great Britain to compete for the Montgomery Cup.

- **Internships:** Internship programs are maintained by faculty and provide students with professional experience in a diversity of industries, including: health care services, media outlets, political campaigns and for-profit and non-profit business organizations.

- **Study Abroad:** The flexibility of our program encourages students to engage in the life enhancing experience of studying in a different culture. We have relationships with communication programs across the globe and our students have studied throughout Europe, Mexico and the Asia-Pacific region.

### Student Organizations:

Organizations open to students include: International Association of Business Communicators, the National Broadcasting Association, Public Relations Student Society of America, Society of Professional Journalists, Pi Kappa Delta and Nonprofit Leadership Alliance.

### Faculty

There are 20 full-time faculty members in the Department of Communication and Sociology with scholarly and/or work experience in their areas of specialization. Graduate assistants complement the programs as teachers and assistants.

### To Learn More

For more information contact the Department of Communication, Martin 136, Warrensburg, MO 64093; call 660-543-4840; or visit the department’s home page at [ucmo.edu/comm](http://ucmo.edu/comm).

For admission information call 877-SAY-UCMO (877-729-8266). Central Missouri’s web site is [ucmo.edu](http://ucmo.edu).

**Communication Studies Major, B.S. Degree (43-602)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year -Spring Semester</b>	<b>Hrs.</b>
COMM 1000 Public Speaking	3	COMM 2100 Introduction to Communication Theory	3
COMM 1100 Introduction to Communication	1	COMM 2320 Foundations of Rhetorical Theory*	3
COMM 1200 Introduction to Mass Communication	3	ENGL 1030 Composition II	3
ENGL 1020 Composition I	3	General Education	6
SOC 1800 General Sociology	3	<b>Semester Total</b>	<b>15</b>
General Education	3		
<b>Semester Total</b>	<b>16</b>		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
COMM 2380 Introduction to Organizational Communication*	3	COMM 3010 Interpersonal Communication	3
COMM 3315 Improving Listening Abilities*	3	COMM 3100 Communication Research Methods	3
General Education	9	General Education	9
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
COMM 3000 Film Appreciation	3	COMM 4320 Social Influence*	3
Major Area Electives**	6	Major Area Elective**	3
General Education	3	Free Choice Electives	9
Free Choice Electives	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
IGEN 3224 or 3232 or 4224	3	COMM 4790 Senior Capstone	1
Major Area Elective**	3	Major Area Elective**	3
Free Choice Electives	9	Upper-Level Free Choice Elective***	2
<b>Semester Total</b>	<b>15</b>	Free Choice Electives	8
		<b>Semester Total</b>	<b>14</b>

**Communication Studies Major, B.S. Degree - 120 hours**

- \*Course if offered only in the semester indicated.
- \*\*This major requires 15 credit hours of Major Area Electives from one of three content areas: Communication Consultancy; Social Influence and Media; Relational. See the Undergraduate Catalog for the approved courses in each area.
- \*\*\*This major does not build in the minimum number (30) of upper level credit hours required for graduation. Be sure to include upper level choices (3000/4000) in your general education and/or free choice electives.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## Harmon College of Business and Professional Studies

School of Accountancy and Computer Information Systems

AACSB Accredited

# COMPUTER INFORMATION SYSTEMS

SOFTWARE DEVELOPMENT CONCENTRATION, BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION DEGREE

Employers throughout the United States turn to UCM's School of Accountancy and Computer Information Systems for graduates with computer and business skills in computer information systems needed in business, industry, education and government. Graduates of the computer information systems (CIS) program gain proficiency with various computer languages, database programming, systems administration, network management and security, and client server computing in a business environment using state-of-the-art equipment. The program is fully accredited by the AACSB-International, the hallmark of a quality program that employers recognize and value.

Today's modern information society is constantly changing. Students at UCM are trained to succeed by adapting to these changes. The CIS program provides educational and hands-on experience for entry-level positions in programming, networking, systems administration, database administration and systems design. UCM's program encompasses not only a working knowledge of information technology, but also an understanding of business processes and policies that dictate the existing dynamic business environment.

The CIS curriculum is based on the model curriculum developed by the Association for Information Technology Professionals. All students complete a common core of business courses. Students then concentrate on CIS core courses that include programming courses in C#, Java, database (Oracle, SQL), UNIX and networking Analysis and Design. Students have to select one of the two areas of concentration - 1) Software

Development and 2) Networking / Systems Administration followed by a capstone System Architecture and Development course.

### Career Opportunities

According to the U.S. Department of Labor, many CIS related jobs will grow faster than the average in the near future. Pursuing a major in computer information systems at UCM is a sure step toward securing a seat among the many computer programmers, analysts, database administrators, network administrators and client server specialists across America.

The CIS program at UCM is one of the finest in the region, and in recent years CIS students have a nearly 100 percent placement record within three months of their graduation. Because of the education they receive, graduates are placed nationwide in top corporations with high starting salaries.

### Department Facilities

A wide variety of computing resources are available for students ranging from hundreds of PCs and server resources through campus-wide distributed network systems. The Harmon College of Business and Professional Studies Computing Lab houses 100+ workstations connected to the campus-wide network backbone. In addition, the CIS department houses a Software Engineering Lab, a Networking Lab, a Web Development Lab and a Usability Lab with state-of-the-art hardware, software and multimedia facilities. All CIS classrooms are equipped with on-demand multimedia resources, desktop plug-in network hookup and instructor PC workstation running on the campus network.

### Student Involvement

Various departmental organizations are available, including the student chapter of the Association for Information Technology Professionals and Delta Sigma Pi business fraternity. Participation allows students to compete in national competitions, visit businesses, meet executives and supervisors, interact with faculty members, and meet other students outside the classroom.

### Departmental Scholarships

In addition to about \$4 million in scholarships administered by the university, a number of corporate scholarships are available. These include: the Steward Scholars Program, Boeing Scholarships, Sprint Scholarships, Hallmark Cards Scholarships, Penzoil Scholarships and many more. Contact the School of Accountancy and Computer Information Systems for details.

### To Learn More

For more information contact the Department of Accountancy and Computer Information Systems, at UCM, Dockery 300, Warrensburg, MO 64093, call 660-543-4767 or visit [ucmo.edu/cis](http://ucmo.edu/cis).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Computer Information Systems Major (Software Development), B.S.B.A. Degree (46-266)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CIS 1600 Business Information Management*	3	COMM 1000 Public Speaking	3
ENGL 1020 Composition I	3	ECON 1010 Principles of Macroeconomics*	3
MATH 1111 College Algebra*	3	ENGL 1030 Composition II	3
PSY 1100 Gen. Psychology or SOC 1800 Gen. Sociology	3	General Education	6
General Education	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		
AE 1400 or BADM 1400 Freshman Seminar**	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ACCT 2101 Principles of Financial Accounting*	3	ACCT 2102 Principles of Managerial Accounting*	3
CIS 2605 Programming with Visual C#	3	BLAW 2720 Legal Environment of Business*	3
ECON 1011 Principles of Microeconomics*	3	CIS 2665 Principles of Data Communications & LAN	3
General Education	7	FIN 2801 Business Statistics I*	3
<b>Semester Total</b>	<b>16</b>	General Education	3
		<b>Semester Total</b>	<b>15</b>
		<b>Note: Complete all B.S.B.A. Admission requirements and apply for admission*</b>	
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
CIS 2615 Introduction to JAVA	3	CIS 3650 Database Management Systems	3
CIS 3630 Management Information Systems***	3	CIS 3660 Analysis & Design of Computer Information Systems	3
MGT 3315 Management of Organizations***	3	FIN 3801 Business Statistics II	3
MKT 3405 Marketing Policy***	3	MGT 3325 Business Communications	3
IBE Practicum (CIS 3685/MKT 3485/MGT 3385)***	3	CIS Major Elective	3
<b>Semester Total</b>	<b>15</b>	General Education	3
		<b>Semester Total</b>	<b>18</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
CIS 3670 User Interface Design	3	CIS 4690 Systems Architecture & Development	3
CIS 4660 Applications Development Using JAVA or CIS 4670 Applications Development Using VB.net	3	ICAP 4357 Organization Policy & Strategy	3
CIS 4680 Data Resource Management	3	CIS Major Electives	5
FIN 3850 Principles of Finance	3	General Education	3
MGT 3360 Production/Operations Management	3	Free Choice Elective	1
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

**Computer Information Systems Major (Software Development), B.S.B.A. Degree - 123 Hours**

- \*Students in this major must complete eight preadmission courses with a grade of C or higher and obtain a 2.25 cumulative GPA, and a 2.25 in these specific courses, for admission to the degree program. These courses are recommended for completion during the freshman and sophomore years. These courses are indicated with an (\*).
- \*\*AE or BADM 1400 (1 hr.) is highly recommended for academic success. AE or BADM 1400 counts as a free choice elective.
- \*\*\*All CIS majors must enroll in the IBE Block. This includes the IBE practicum (CIS 3685, MKT 3485 or MGT 3385) concurrently with the IBE sections of MGT 3315, MKT 3405, and CIS 3630. This is typically done during the fall of the junior year. Prerequisites for the IBE block include: ACCT 2101, CIS 1600, and junior standing.
- A 2.25 GPA on all coursework is required for graduation in this major.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## Harmon College of Business and Professional Studies

School of Accountancy and Computer Information Systems

AACSB Accredited

# COMPUTER INFORMATION SYSTEMS

NETWORKING CONCENTRATION, BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION DEGREE

Employers throughout the United States turn to UCM's School of Accountancy and Computer Information Systems for graduates with computer and business skills in computer information systems needed in business, industry, education and government. Graduates of the computer information systems (CIS) program gain proficiency with various computer languages, database programming, systems administration, network management and security, and client server computing in a business environment using state-of-the-art equipment. The program is fully accredited by the AACSB-International, the hallmark of a quality program that employers recognize and value.

Today's modern information society is constantly changing. Students at UCM are trained to succeed by adapting to these changes. The CIS program provides educational and hands-on experience for entry-level positions in programming, networking, systems administration, database administration and systems design. UCM's program encompasses not only a working knowledge of information technology, but also an understanding of business processes and policies that dictate the existing dynamic business environment.

The CIS curriculum is based on the model curriculum developed by the Association for Information Technology Professionals. All students complete a common core of business courses. Students then concentrate on CIS core courses that include programming courses in C#, Java, database (Oracle, SQL), UNIX and networking Analysis and Design. Students have to select one of the two areas of concentration - 1) Software

Development and 2) Networking / Systems Administration followed by a capstone System Architecture and Development course.

### Career Opportunities

According to the U.S. Department of Labor, many CIS related jobs will grow faster than the average in the near future. Pursuing a major in computer information systems at UCM is a sure step toward securing a seat among the many computer programmers, analysts, database administrators, network administrators and client server specialists across America.

The CIS program at UCM is one of the finest in the region, and in recent years CIS students have a nearly 100 percent placement record within three months of their graduation. Because of the education they receive, graduates are placed nationwide in top corporations with high starting salaries.

### Department Facilities

A wide variety of computing resources are available for students ranging from hundreds of PCs and server resources through campus-wide distributed network systems. The Harmon College of Business and Professional Studies Computing Lab houses 100+ workstations connected to the campus-wide network backbone. In addition, the CIS department houses a Software Engineering Lab, a Networking Lab, a Web Development Lab and a Usability Lab with state-of-the-art hardware, software and multimedia facilities. All CIS classrooms are equipped with on-demand multimedia resources, desktop plug-in network hookup and instructor PC workstation running on the campus network.

### Student Involvement

Various departmental organizations are available, including the student chapter of the Association for Information Technology Professionals and Delta Sigma Pi business fraternity. Participation allows students to compete in national competitions, visit businesses, meet executives and supervisors, interact with faculty members, and meet other students outside the classroom.

### Departmental Scholarships

In addition to about \$4 million in scholarships administered by the university, a number of corporate scholarships are available. These include: the Steward Scholars Program, Boeing Scholarships, Sprint Scholarships, Hallmark Cards Scholarships, Penzoil Scholarships and many more. Contact the School of Accountancy and Computer Information Systems for details.

### To Learn More

For more information contact the Department of Accountancy and Computer Information Systems at, UCM, Dockery 300, Warrensburg, MO 64093, call 660-543-4767 or visit [ucmo.edu/cis](http://ucmo.edu/cis).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).



**Computer Information Systems Major (Networking), B.S.B.A. Degree (46-266)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CIS 1600 Business Information Management*	3	COMM 1000 Public Speaking	3
ENGL 1020 Composition I	3	ECON 1010 Principles of Macroeconomics*	3
MATH 1111 College Algebra*	3	ENGL 1030 Composition II	3
PSY 1100 Gen. Psychology or SOC 1800 Gen. Sociology	3	General Education	6
General Education	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		
AE 1400 or BADM 1400 Freshman Seminar**	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ACCT 2101 Principles of Financial Accounting*	3	ACCT 2102 Principles of Managerial Accounting*	3
CIS 2605 Programming with Visual C#	3	BLAW 2720 Legal Environment of Business*	3
ECON 1011 Principles of Microeconomics*	3	CIS 2665 Principles of Data Communications & LAN	3
General Education	7	FIN 2801 Business Statistics I*	3
<b>Semester Total</b>	<b>16</b>	General Education	3
		<b>Semester Total</b>	<b>15</b>
		<b>Note: Complete all B.S.B.A. Admission requirements and apply for admission*</b>	
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
CIS 3630 Management Information Systems***	3	CIS 2615 Introduction to JAVA	3
CIS 3665 Data Communication Technologies (fall only)	3	CIS 3650 Database Management Systems	3
MGT 3315 Management of Organizations***	3	CIS 3660 Analysis & Design of Computer Information Systems	3
MKT 3405 Marketing Policy***	3	FIN 3801 Business Statistics II	3
IBE Practicum (CIS 3685/MKT 3485/MGT 3385)***	3	MGT 3325 Business Communications	3
<b>Semester Total</b>	<b>15</b>	General Education	3
		<b>Semester Total</b>	<b>18</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
CIS 4665 Data Communication & Distributed Data Processing	3	CIS 4685 Network Planning, Design and Security (spring only)	3
FIN 3850 Principles of Finance	3	CIS 4690 Systems Architecture & Development	3
MGT 3360 Production/Operations Management	3	ICAP 4357 Organization Policy & Strategy	3
CIS Elective	3	CIS Electives	5
General Education	3	Free Choice Elective	1
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

**Computer Information Systems Major (Networking), B.S.B.A. Degree - 123 Hours**

- \*Students in this major must complete eight preadmission courses with a grade of C or higher and obtain a 2.25 cumulative GPA, and a 2.25 in these specific courses, for admission to the degree program. These courses are recommended for completion during the freshman and sophomore years. These courses are indicated with an (\*).
- \*\*AE or BADM 1400 (1 hr.) is highly recommended for academic success. AE or BADM 1400 counts as a free choice elective.
- \*\*\*All CIS majors must enroll in the IBE Block. This includes the IBE practicum (CIS 3685, MKT 3485 or MGT 3385) concurrently with the IBE sections of MGT 3315, MKT 3405, and CIS 3630. This is typically done during the fall of the junior year. Prerequisites for the IBE block include: ACCT 2101, CIS 1600, and junior standing.
- A 2.25 GPA on all coursework is required for graduation in this major.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Health, Science, and Technology

Department of Mathematics and Computer Science

# COMPUTER SCIENCE

## OPTION 1: APPLIED COMPUTER SCIENCE, BACHELOR OF SCIENCE DEGREE

The computer industry is one of the fastest growing segments of our economy. Computers are used in almost every aspect of our lives from desktops at home and work to mainframe computers in government and industry to supercomputers expanding the frontiers of science and technology. More than ever, there is a demand for a work force with scientific and technical training necessary to perform effectively on the job.

UCM's Department of Mathematics and Computer Science is meeting this expanding need with a program that includes in-depth training in computer science. The undergraduate computer science curriculum is designed according to ACM's curricula recommendations and ABET's accreditation guidelines, and is periodically revised to meet the fast changing pace of computer science in today's world. It consists of classic topics in computer science, as well as a strong component of application programming and system design to align with the computer industry standards. Besides the software development arena, the curriculum also provides significant coverage of computer systems and architecture.

### Computer Facilities

The computer science program is supported by three laboratories of networked PCs running Linux and Windows. Electronic mail, World Wide Web access, programming language compilers, and a variety of computer software are available. Laboratory access is available via

the Internet. The Computer Science program is a member of the Microsoft Developer Network Academic Alliance (MSDNAA) and Oracle Academic Initiative (OAI).

### About the Faculty

Computer science classes are taught by experienced and caring faculty members who believe in individualized attention for their students. The student-faculty ratio at Central Missouri is about 17 to 1. The computer science faculty conduct both theoretical and applied research in their own areas, present their research results at various national/international conferences, and produce publications in major research journals. They are also committed to deliver today's technology to students.

### Student Involvement

The department sponsors a student chapter of ACM. It provides our computer science students with a platform of peer interaction and active participation in out-of-the-classroom experiences.

### Career Opportunities

Demand for computer science professionals in the United States and Missouri grows faster than universities can produce graduates. The Bureau of Labor Statistics listed the fastest growing occupations in the US that require a Bachelor's degree or higher through year 2020. Four of the top 15 fastest growing occupations are computer related.

Computer science is one of the four high-demanded occupational

categories in the state of Missouri. These disciplinary areas have been characterized as pivotal for the future of the state. Similar to the national trend, three of the top ten fastest growing occupations in Missouri that require a Bachelor's degree or higher are computer related. Graduates from computer science programs have long known that CS leads to great jobs and careers.

Here at the University of Central Missouri, the job placement of our graduates is excellent. According to the recent report from the Office of Career Services at UCM, our computer science students are among the most successful in finding jobs. Our computer science graduates are employed in companies such as Sprint, Boeing, VMWare, Cerner, Garmin, DST, YRC Worldwide, Honeywell, MasterCard, Commerce Bank, UMB, All-State, Shelter Insurance, AIG, Computer Associates International, Busch, and Scottrade with high starting salaries.

### To Learn More

For more information, contact the Department of Mathematics and Computer Science, W.C. Morris 222, UCM, Warrensburg, MO 64093; call 660-543-4930; or visit the department's web page, at [ucmo.edu/cs](http://ucmo.edu/cs).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Computer Science Major (Option 1 Applied Computer Science), B.S. Degree (43-01281)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CS 1100 Computer Programming I	3	CS 1110 Computer Programming II	3
ENGL 1020 Composition I	3	CS 2800 Interactive Systems Design***	3
General Education	9	ENGL 1030 Composition II	3
<b>Semester Total</b>	<b>15</b>	General Education	6
AE 1400 Freshman Seminar*	1	<b>Semester Total</b>	<b>15</b>

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
CS 2300 Data Structures***	3	CS 2200 Introduction to Computer Organization***	3
CS 2500 C and UNIX Systems Programming***	3	CS 2400 Discrete Structures***	3
MATH 1131 Applied Calculus or MATH 1151 Calculus & Analytic Geometry I	3-5	CS 3110 Applications Programming in C# and .NET***	3
General Education	6	General Education	6
<b>Semester Total</b>	<b>15-17</b>	<b>Semester Total</b>	<b>15</b>

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
CS 3200 Computer Architecture***	3	CS 3100 Programming Languages***	3
CS 4110 Mobile Applications Programming with Android	3	CS 4500 Operating Systems***	3
CS 4300 Algorithm Design & Analysis***	3	CS 4810 Computer Graphics	3
Option 1 Major Elective**	3	Option 1 Major Elective**	3
General Education	3	General Education	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
CS 4600 Database Theory & Applications***	3	CS 4910 Software Engineering***	3
MATH 1300 Basic Statistics or MATH 3311 Introduction to Mathematical Statistics***	3	Option 1 Major Elective**	6
Option 1 Major Elective**	3	Free Choice Electives##	4-6
General Education	6	<b>Semester Total</b>	<b>13-15</b>
<b>Semester Total</b>	<b>15</b>		

**Computer Science Major (Option 1 Applied Computer Science), B.S. Degree - 120 hours**

- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*Option 1 requires 15 hours of major electives. See the 2013 Undergraduate Catalog for the list of appropriate course choices.
- \*\*\*This class is only offered during the semester indicated.
- #This class is only offered during the semester indicated and is only offered every other year.
- ##The number of free choice electives will depend on the calculus selection made.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

Department of Mathematics and Computer Science

# COMPUTER SCIENCE

## OPTION 2: COMPUTER SCIENCE, BACHELOR OF SCIENCE DEGREE

The computer industry is one of the fastest growing segments of our economy. Computers are used in almost every aspect of our lives from desktops at home and work to mainframe computers in government and industry to supercomputers expanding the frontiers of science and technology. More than ever, there is a demand for a work force with scientific and technical training necessary to perform effectively on the job.

UCM's Department of Mathematics and Computer Science is meeting this expanding need with a program that includes in-depth training in computer science. The undergraduate computer science curriculum is designed according to ACM's curricula recommendations and ABET's accreditation guidelines, and is periodically revised to meet the fast changing pace of computer science in today's world. It consists of classic topics in computer science, as well as a strong component of application programming and system design to align with the computer industry standards. Besides the software development arena, the curriculum also provides significant coverage of computer systems and architecture.

### Computer Facilities

The computer science program is supported by three laboratories of networked PCs running Linux and Windows. Electronic mail, World Wide Web access, programming language compilers, and a variety of computer software are available. Laboratory access is available via the Internet. The Computer Science

program is a member of the Microsoft Developer Network Academic Alliance (MSDNAA) and Oracle Academic Initiative (OAI).

### About the Faculty

Computer science classes are taught by experienced and caring faculty members who believe in individualized attention for their students. The student-faculty ratio at Central Missouri is about 17 to 1. The computer science faculty conduct both theoretical and applied research in their own areas, present their research results at various national/international conferences, and produce publications in major research journals. They are also committed to deliver today's technology to students.

### Student Involvement

The department sponsors a student chapter of ACM. It provides our computer science students with a platform of peer interaction and active participation in out-of-the-classroom experiences.

### Career Opportunities

Demand for computer science professionals in the United States and Missouri grows faster than universities can produce graduates. The Bureau of Labor Statistics listed the fastest growing occupations in the US that require a Bachelor's degree or higher through year 2020. Four of the top 15 fastest growing occupations are computer related.

Computer science is one of the four high-demanded occupational categories in the state of Missouri.

These disciplinary areas have been characterized as pivotal for the future of the state. Similar to the national trend, three of the top ten fastest growing occupations in Missouri that require a Bachelor's degree or higher are computer related. Graduates from computer science programs have long known that CS leads to great jobs and careers.

Here at the University of Central Missouri, the job placement of our graduates is excellent. According to the recent report from the Office of Career Services at UCM, our computer science students are among the most successful in finding jobs. Our computer science graduates are employed in companies such as Sprint, Boeing, VMWare, Cerner, Garmin, DST, YRC Worldwide, Honeywell, MasterCard, Commerce Bank, UMB, All-State, Shelter Insurance, AIG, Computer Associates International, Busch, and Scottrade with high starting salaries.

### To Learn More

For more information, contact the Department of Mathematics and Computer Science, W.C. Morris 222, UCM, Warrensburg, MO 64093; call 660-543-4930; or visit the department's web page, at [ucmo.edu/cs](http://ucmo.edu/cs).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Computer Science Major (Option 2 Computer Science), B.S. Degree (43-02281)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CS 1100 Computer Programming I	3	CS 1110 Computer Programming II	3
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
General Education	9	MATH 1151 Calculus & Analytic Geometry I	5
<b>Semester Total</b>	<b>15</b>	General Education	3
AE 1400 Freshman Seminar*	1	<b>Semester Total</b>	<b>14</b>

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
CS 2300 Data Structures**	3	CS 2200 Introduction to Computer Organization**	3
CS 2500 C and UNIX Systems Programming**	3	CS 2400 Discrete Structures **	3
MATH 1152 Calculus & Analytic Geometry II	5	PHYS 1102 College Physics II	4
PHYS 1101 College Physics I	4	General Education	5
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
BIOL 1110, 2010, 2510, EASC 3010, 3112, or 3114	3	CS 3100 Programming Languages**	3
CS 3200 Computer Architecture**	3	CS 4500 Operating Systems**	3
CS 4300 Algorithm Design & Analysis**	3	Option 2 Major Elective***	3
General Education	6	General Education	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
CS 4600 Database Theory & Applications**	3	CS 4910 Software Engineering**	3
MATH 3311 Introduction to Mathematical Statistics**	3	MATH 2153 Calculus & Analytic Geometry III	
Option 2 Major Elective***	3	or MATH 3710 Linear Algebra or	
General Education	3	MATH 4450 Intro. to Graph Theory	3
Free Choice Electives	4	Option 2 Major Elective***	3
<b>Semester Total</b>	<b>16</b>	Free Choice Electives	6
		<b>Semester Total</b>	<b>15</b>

**Computer Science Major (Option 2 Computer Science), B.S. Degree - 120 hours**

- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*This class is only offered during the semester indicated.
- \*\*\*Option 2 requires 9 hours of major electives. See the 2013 Undergraduate Catalog for the list of appropriate course choices.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

Department of Mathematics and Computer Science

# COMPUTER SCIENCE

## OPTION 3: COMPUTER NETWORKING AND SECURITY, BACHELOR OF SCIENCE DEGREE

The computer industry is one of the fastest growing segments of our economy. Computers are used in almost every aspect of our lives from desktops at home and work to mainframe computers in government and industry to supercomputers expanding the frontiers of science and technology. More than ever, there is a demand for a work force with scientific and technical training necessary to perform effectively on the job.

UCM's Department of Mathematics and Computer Science is meeting this expanding need with a program that includes in-depth training in computer science. The undergraduate computer science curriculum is designed according to ACM's curricula recommendations and ABET's accreditation guidelines, and is periodically revised to meet the fast changing pace of computer science in today's world. It consists of classic topics in computer science, as well as a strong component of application programming and system design to align with the computer industry standards. Besides the software development arena, the curriculum also provides significant coverage of computer systems and architecture.

### Computer Facilities

The computer science program is supported by three laboratories of networked PCs running Linux and Windows. Electronic mail, World Wide Web access, programming language compilers, and a variety of computer software are available. Laboratory access is available via

the Internet. The Computer Science program is a member of the Microsoft Developer Network Academic Alliance (MSDNAA) and Oracle Academic Initiative (OAI).

### About the Faculty

Computer science classes are taught by experienced and caring faculty members who believe in individualized attention for their students. The student-faculty ratio at Central Missouri is about 17 to 1. The computer science faculty conduct both theoretical and applied research in their own areas, present their research results at various national/international conferences, and produce publications in major research journals. They are also committed to deliver today's technology to students.

### Student Involvement

The department sponsors a student chapter of ACM. It provides our computer science students with a platform of peer interaction and active participation in out-of-the-classroom experiences.

### Career Opportunities

Demand for computer science professionals in the United States and Missouri grows faster than universities can produce graduates. The Bureau of Labor Statistics listed the fastest growing occupations in the US that require a Bachelor's degree or higher through year 2020. Four of the top 15 fastest growing occupations are computer related.

Computer science is one of the four high-demanded occupational

categories in the state of Missouri. These disciplinary areas have been characterized as pivotal for the future of the state. Similar to the national trend, three of the top ten fastest growing occupations in Missouri that require a Bachelor's degree or higher are computer related. Graduates from computer science programs have long known that CS leads to great jobs and careers.

Here at the University of Central Missouri, the job placement of our graduates is excellent. According to the recent report from the Office of Career Services at UCM, our computer science students are among the most successful in finding jobs. Our computer science graduates are employed in companies such as Sprint, Boeing, VMWare, Cerner, Garmin, DST, YRC Worldwide, Honeywell, MasterCard, Commerce Bank, UMB, All-State, Shelter Insurance, AIG, Computer Associates International, Busch, and Scottrade with high starting salaries.

### To Learn More

For more information, contact the Department of Mathematics and Computer Science, W.C. Morris 222, UCM, Warrensburg, MO 64093; call 660-543-4930; or visit the department's web page, at [ucmo.edu/cs](http://ucmo.edu/cs).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Computer Science Major (Option 3 Computer Networking and Security), B.S. Degree (43-03281)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CS 1100 Computer Programming I	3	CS 1110 Computer Programming II	3
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
General Education	9	Option 3 Major Elective**	3
<b>Semester Total</b>	<b>15</b>	General Education	6
AE 1400 Freshman Seminar*	1	<b>Semester Total</b>	<b>15</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
CS 2300 Data Structures***	3	CS 2200 Introduction to Computer Organization***	3
CS 2500 C and UNIX Systems Programming***	3	CS 2400 Discrete Structures***	3
MATH 1131 Applied Calculus or		Option 3 Major Elective**	3
MATH 1151 Calculus & Analytic Geometry I	3-5	General Education	6
General Education	6	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15-17</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
CS 3200 Computer Architecture***	3	CS 3100 Programming Languages***	3
CS 4300 Algorithm Design & Analysis***	3	CS 4500 Operating Systems***	3
Option 3 Major Elective**	3	Option 3 Major Elective**	3
General Education	6	General Education	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
CS 4600 Database Theory & Applications***	3	CS 4910 Software Engineering***	3
MATH 1300 Basic Statistics or		Option 3 Major Elective**	6
MATH 3311 Introduction to Mathematical Statistics***	3	Free Choice Electives#	4-6
Option 3 Major Elective**	9	<b>Semester Total</b>	<b>13-15</b>
<b>Semester Total</b>	<b>15</b>		

**Computer Science Major (Option 3 Computer Networking and Security), B.S. Degree - 120 hours**

- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*Option 3 requires a total of 27 hours of major electives: 9-15 hours from set one and 12-18 hours from set two. See the 2013 Undergraduate Catalog for the list of appropriate course choices in each set.
- \*\*\*This class is only offered during the semester indicated.
- #The number of free choice electives will depend on the calculus selection made.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Health, Science, and Technology

Department of Mathematics and Computer Science

# COMPUTER SCIENCE

## OPTION 4: GAME DEVELOPMENT, BACHELOR OF SCIENCE DEGREE

The computer industry is one of the fastest growing segments of our economy. Computers are used in almost every aspect of our lives from desktops at home and work to mainframe computers in government and industry to supercomputers expanding the frontiers of science and technology. More than ever, there is a demand for a work force with scientific and technical training necessary to perform effectively on the job.

UCM's Department of Mathematics and Computer Science is meeting this expanding need with a program that includes in-depth training in computer science. The undergraduate computer science curriculum is designed according to ACM's curricula recommendations and ABET's accreditation guidelines, and is periodically revised to meet the fast changing pace of computer science in today's world. It consists of classic topics in computer science, as well as a strong component of application programming and system design to align with the computer industry standards. Besides the software development arena, the curriculum also provides significant coverage of computer systems and architecture.

### Computer Facilities

The computer science program is supported by three laboratories of networked PCs running Linux and Windows. Electronic mail, World Wide Web access, programming language compilers, and a variety of computer software are available. Laboratory access is available via

the Internet. The Computer Science program is a member of the Microsoft Developer Network Academic Alliance (MSDNAA) and Oracle Academic Initiative (OAI).

### About the Faculty

Computer science classes are taught by experienced and caring faculty members who believe in individualized attention for their students. The student-faculty ratio at Central Missouri is about 17 to 1. The computer science faculty conduct both theoretical and applied research in their own areas, present their research results at various national/international conferences, and produce publications in major research journals. They are also committed to deliver today's technology to students.

### Student Involvement

The department sponsors a student chapter of ACM. It provides our computer science students with a platform of peer interaction and active participation in out-of-the-classroom experiences.

### Career Opportunities

Demand for computer science professionals in the United States and Missouri grows faster than universities can produce graduates. The Bureau of Labor Statistics listed the fastest growing occupations in the US that require a Bachelor's degree or higher through year 2020. Four of the top 15 fastest growing occupations are computer related.

Computer science is one of the four high-demanded occupational

categories in the state of Missouri. These disciplinary areas have been characterized as pivotal for the future of the state. Similar to the national trend, three of the top ten fastest growing occupations in Missouri that require a Bachelor's degree or higher are computer related. Graduates from computer science programs have long known that CS leads to great jobs and careers.

Here at the University of Central Missouri, the job placement of our graduates is excellent. According to the recent report from the Office of Career Services at UCM, our computer science students are among the most successful in finding jobs. Our computer science graduates are employed in companies such as Sprint, Boeing, VMWare, Cerner, Garmin, DST, YRC Worldwide, Honeywell, MasterCard, Commerce Bank, UMB, All-State, Shelter Insurance, AIG, Computer Associates International, Busch, and Scottrade with high starting salaries.

### To Learn More

For more information, contact the Department of Mathematics and Computer Science, W.C. Morris 222, UCM, Warrensburg, MO 64093; call 660-543-4930; or visit the department's web page, at [ucmo.edu/cs](http://ucmo.edu/cs).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Computer Science Major (Option 4 Game Development), B.S. Degree (43-04281)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CS 1100 Computer Programming I	3	CS 1110 Computer Programming II	3
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
General Education	9	Option 4 Major Elective**	3
<b>Semester Total</b>	<b>15</b>	General Education	6
AE 1400 Freshman Seminar*	1	<b>Semester Total</b>	<b>15</b>

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
CS 2300 Data Structures***	3	CS 2200 Introduction to Computer Organization***	3
CS 2500 C and UNIX Systems Programming**	3	CS 2400 Discrete Structures***	3
MATH 1131 Applied Calculus or		Option 4 Major Elective**	3
MATH 1151 Calculus & Analytic Geometry I	3-5	General Education	6
General Education	6	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15-17</b>		

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
CS 2810 Introduction to Game Design	3	CS 3100 Programming Languages***	3
CS 3200 Computer Architecture***	3	CS 4110 Mobile Applications Programming with Android	3
CS 4300 Algorithm Design & Analysis***	3	CS 4500 Operating Systems***	3
Option 4 Major Elective**	3	Option 4 Major Elective**	3
General Education	3	General Education	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
CS 4600 Database Theory & Applications***	3	CS 4830 Game Development	3
MATH 1300 Basic Statistics or		CS 4910 Software Engineering***	3
MATH 3311 Introduction to Mathematical Statistics***	3	Option 4 Major Elective**	3
Option 4 Major Elective**	3	Free Choice Electives#	4-6
General Education	6	<b>Semester Total</b>	<b>13-15</b>
<b>Semester Total</b>	<b>15</b>		

**Computer Science Major (Option 4 Game Development), B.S. Degree - 120 hours**

- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*Option 4 requires 18 hours of major electives. See the 2013 Undergraduate Catalog for the list of appropriate course choices.
- \*\*\*This class is only offered during the semester indicated.
- #The number of free choice electives will depend on the calculus selection made.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

School of Technology

# CONSTRUCTION MANAGEMENT

## BACHELOR OF SCIENCE DEGREE

University of Central Missouri's Bachelor of Science in Construction Management degree program prepares individuals to enter and excel in a construction management career. This construction management program focuses on the development of competencies regarding teamwork, written and oral communication, project management and field management. The curriculum has been carefully balanced to provide students with the technical theory, "hands-on" knowledge, management skill, and communication know-how needed to manage the complete construction process.

This field has shown continual growth and extends from residential and commercial construction to the ever increasing demand for heavy/highway and public works expansion and replacement. Coursework includes computer estimating, construction methods, design principles, building codes, scheduling, materials, safety, project management, legal aspects, soils and site layout. Graduates are employed in such positions as field engineers, cost estimators, project managers, construction managers, and construction quality assurance managers.

### Professional Accreditation

Central Missouri's baccalaureate program in Construction Management is accredited by the Association of Technology, Management, and

Applied Engineering (ATMAE). The Construction Management program is also accredited by the American Council for Construction Education (ACCE). The program has international recognition by the Chartered Institute of Building in the United Kingdom.

### Student Involvement

Student organizations in the School of Technology include the Student Organization of Construction Managers (SOCM). SOCM is the umbrella organization for Associated General Contractors of America (AGC), Associated Builders and Contractors, Inc. (ABC), and the Association for the Advancement of Cost Engineers (AACE). MO's Homebuilders, an affiliate of Habitat for Humanity, also has active construction student membership and is an additional outlet for applied construction practice.

### Scholarships

Construction industry scholarships are offered by such organizations as the American Society of Professional Estimators, Associated Builders and Contractors, Associated General Contractors of America, Association for the Advancement of Cost Engineers International, Coleman Industrial Construction Inc., Concrete Reinforcing Steel Institute, Construction Specifications Institute of Kansas City, Crossland Construction Co., Heavy Constructors Association,

Kansas City Builders Association, Midwest Concrete Industry Board, National Association of Women in Construction, and Septagon Construction Co.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide assistance with writing cover letters and resumes and offer a career library, mock interviews, and career counseling. The office also serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students](http://ucmo.edu/career/students).

### To Learn More

For more information, contact the School of Technology, Grinstead 9, UCM, Warrensburg, MO 64093 or call 660-543-4439. The school's web address is [ucmo.edu/technology](http://ucmo.edu/technology) and [facebook/ucmsot](https://www.facebook.com/ucmsot).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Construction Management Major, B.S. Degree (43-239)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CADD 1105 Basic AutoCAD	1	CIS 1600 Business Information Management	3
CADD 1110 Fundamentals of Drafting	2	CMGT 2310 Construction Plans & Specifications	3
CMGT 1300 Introduction to Construction Management	3	ENGL 1030 Composition II	3
CMGT 1301 Seminar in Construction Management	.5	MATH 1112 College Trigonometry	2
EASC 1004 Introduction to the Sciences: Geology	4	PHYS 1103 Introduction to the Sciences: Physics	3
ENGL 1020 Composition I	3	General Education	3
MATH 1111 College Algebra	3	<b>Semester Total</b>	<b>17</b>
<b>Semester Total</b>	<b>16.5</b>		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
CMGT 1301 Seminar in Construction Management	.5	CADD 3160 Res. Arch. Drawing or CADD 3150 Civil Drafting or CADD 2160 Structural Drafting	3
CMGT 2020 Statics	3	CMGT 3020 Applied Strength Materials	3
CMGT 2325 Project Cost Estimating	3	EASC 2100 Engineering Geology	4
CMGT 2340 Surveying & Construction Layout	3	ECON 1010 Principles of Macroeconomics	3
MATH 1300 Basic Statistics	3	General Education	3
General Education	3	<b>Semester Total</b>	<b>16</b>
<b>Semester Total</b>	<b>15.5</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
ACCT 2101 Principles of Financial Accounting	3	ACCT 2102 Principles of Managerial Accounting or MKT 3405 Marketing Policy*	3
CMGT 1301 Seminar in Construction Management	.5	BLAW 2720 Legal Environment of Business	3
CMGT 3330 Building Codes & Code Administration	3	CMGT 3320 Principles of Construction Management	3
CMGT 3355 Construction Planning & Scheduling	3	ENGT 2040 Engineering Material Science	4
MGT 3315 Management of Organizations* or INDM 4210 Industrial Management	3	General Education	3
General Education	3	<b>Semester Total</b>	<b>16</b>
<b>Semester Total</b>	<b>15.5</b>		
<b>Summer - Between Junior &amp; Senior Year</b>	<b>Hrs.</b>		
SOT 3022 Internship in Technology**	1		
<b>Semester Total</b>	<b>1</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
CMGT 1301 Seminar in Construction Management	.5	CMGT 4310 Construction Safety	3
CMGT 3350 Building Structures: Methods & Materials	3	CMGT 4325 Advanced Estimating	3
CMGT 4355 Computer-Based Project Control	3	CMGT 4330 Mechanical Systems for Buildings or CMGT 4380 Heavy Construction: Methods and Materials	3
HRM 3920 Human Resources Management or INDM 4260 Organizational Dynamics	3	ICAP 4109 Construction Operations	3
General Education	6	General Education	3
<b>Semester Total</b>	<b>15.5</b>	<b>Semester Total</b>	<b>15</b>

**Construction Management Major, B.S. Degree - Minimum hours 128**

- \*Students can complete a Business Administration minor by choosing MGT 3315 and MKT 3405 in the major.
- \*\*SOT 3022 Internship in Technology should be done during the summer between the junior/senior years.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## Harmon College of Business and Professional Studies

Department of Criminal Justice

# CRIMINAL JUSTICE

## BACHELOR OF SCIENCE DEGREE

The undergraduate criminal justice program at UCM offers a holistic academic experience that balances classroom studies and hands-on opportunities. The program is broad and includes courses in criminal justice management and administration, policing, criminal investigation, forensics, the legal system, law, corrections, probation and parole, the juvenile justice system, and international criminal justice.

The majority of criminal justice employers stress the importance of a college education, and individuals' educational backgrounds influence their opportunities for promotion and command responsibility in the criminal justice field. UCM's Criminal Justice degree program is designed to provide students with the knowledge and training they need for career entry and advancement. It is one of the oldest criminal justice programs in the nation. This program is also one of the largest and most highly respected in the world.

### Justice Institute

The department is home to the Institute of Justice and International Studies, which supports collaboration between students and faculty members around the world. It also hosts an annual two-week study tour of a foreign country's criminal justice system, and an annual conference that brings international experts to UCM to present on a variety of current topics.

### About the Faculty

The faculty is composed of highly qualified and dedicated individuals who possess the necessary education and experience to present the theoretical and practical aspects

of criminal justice. All of the department's faculty members hold earned doctorates, or have received their Doctor of Jurisprudence degrees. Active research, workshop and seminar participation, as well as professional field service, keep faculty members on the cutting edge with their ever-growing field. UCM's criminal justice faculty members have become notable in a variety of research areas, including issues surrounding police accountability, juvenile justice, domestic and international terrorism, probation and parole, and the crime of sexual assault, among others.

### Career Opportunities

Numerous employment opportunities are available for men and women interested in criminal justice positions. Employment opportunities exist with federal agencies; private industry; educational institutions; city, county and state agencies; the Armed Forces; and correctional and rehabilitation agencies. Among UCM's criminal justice alumni are judges, attorneys, professors, hundreds of chiefs of police and police administrators from all parts of the world, as well as members of almost every federal law enforcement and corrections agency.

The department boasts above a 90% employment rate of their graduates within six months of graduation. The university's Office of Career Services assists criminal justice majors and other students who are seeking employment. Interviews are conducted on campus throughout the year.

### Student Involvement

There are many ways for criminal justice students to become involved

on campus. The department sponsors four career-oriented organizations, a chapter of Alpha Phi Sigma, National Criminal Justice Honor Society; American Criminal Justice Association - Lambda Alpha Epsilon; Pre-Law Students Association, a mock trial team; and a student chapter of the American Correctional Association. These organizations are dedicated to the promotion of high standards of professionalism in criminal justice disciplines. Moreover, Lambda Alpha Epsilon (LAE) has distinguished itself in both regional and national competitions with other LAE organizations by sweeping top honors for an unprecedented ten consecutive years.

The department also offers an internship course to qualified students. Internships allow students to gain practical experience in the operation of various components of the criminal justice system. Internships are available with law enforcement agencies, correctional institutions, juvenile justice agencies and other areas related to criminal justice. Stipends are provided to interns by some participating agencies.

### To Learn More

For more information contact the Department of Criminal Justice, 300 Humphreys, UCM, Warrensburg, MO 64093, or call 660-543-4950. The department's web address is [ucmo.edu/cj](http://ucmo.edu/cj).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Criminal Justice Major, B.S. Degree (43-842)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CJ 1000 Introduction to Criminal Justice	3	CJ 3010 Policing a Democratic Society	3
CJ 1605 Orientation to the Criminal Justice Major	1	ENGL 1030 Composition II	3
ENGL 1020 Composition I	3	General Education	9
General Education	6	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>13</b>		
AE 1400 Freshman Seminar*	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
CJ 2300 Criminal Law and Procedure	3	CJ 3006 Corrections	3
CJ Major Elective	3	CJ Major Elective	3
General Education	9	General Education	6
<b>Semester Total</b>	<b>15</b>	Free Choice Electives	3
		<b>Semester Total</b>	<b>15</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
CJ 3605 Junior Seminar in Criminal Justice	1	CJ Major Elective	3
CJ 4503 Dynamics of Criminal Behavior or SOC 3890 Criminology	3	General Education (include IGEN/ICAP)	6
General Education	3	Free Choice Elective	7
Free Choice Electives	9	<b>Semester Total</b>	<b>16</b>
<b>Semester Total</b>	<b>16</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
CJ 3600 Introduction to CJ Research & Statistics	3	CJ 4605 Senior Seminar in Criminal Justice	1
CJ Major Elective	3	CJ Major Elective	3
Free Choice Electives	9	Free Choice Electives	11
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

**Criminal Justice Major, B.S. Degree - 120 hours**

- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- A grade of C or higher (including transfer classes) is required in all CJ major required classes (including SOC 3890), but not the 15 hours of CJ major elective courses.
- This major does not require a minor, but one is strongly recommended. Most minors are between 18-24 credit hours. This major contains 39 hours of free choice electives, this gives a lot of flexibility for the addition of a minor, double minor, or double major. The number of free choice electives required will vary depending on the minor chosen.
- This major does not build in the minimum number (30) of upper-level credit hours required for graduation. Be sure to include upper-level choices (3000/4000) in your major electives, general education, and/or free choice electives.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## Harmon College of Business and Professional Studies

Institute for Rural Emergency Management, a division of the Missouri Safety Center

# CRISIS AND DISASTER MANAGEMENT

## BACHELOR OF SCIENCE DEGREE

The field of emergency management has advanced in recent decades, resulting in an increase in demand for qualified professionals. Citizens benefit from degreed crisis managers in the event of natural or man-made disasters. Homeland Security agencies are seeking qualified professionals with experience and education. The University of Central Missouri is preparing graduates for this growing field through its Bachelor of Science in Crisis and Disaster Management degree. Students who participate in this program may concentrate in the areas of emergency management, hazardous materials or business continuity.

The BS in Crisis and Disaster Management facilitates individual professional development in a student-centered learning environment. Its multidisciplinary curriculum focuses on the principles of preparedness, response, mitigation, and recovery in an integrated program of study. Students who seek this degree are required to complete a practicum which provides them with valuable experience in the field to compliment their educational accomplishments.

### Career Opportunities

The Crisis and Disaster Management degree program addresses the need within the state of Missouri and across the United States for technically educated emergency management professionals. Courses offered in the program are designed for individuals who are interested in the following careers:

- Public safety personnel (emergency management, fire, and homeland security)
- Industrial emergency responders (fire, rescue, and hazardous

materials)

- Institutional emergency planners (schools, hospitals and prisons)
- Business continuity planners (banking, corporations, insurance, and manufacturing)

### About the Faculty

UCM's 17-1 student-faculty ratio allows for personalized attention and mentoring. In addition to diverse backgrounds and experience in their fields of expertise, several faculty members hold professional certification. They are also active participants in research, writing and presentations at state, national and international professional conferences.

Other sources of departmental strength include working relationships between program faculty, the Department of Homeland Security, Federal Emergency Management Agency, Occupational Safety and Health Administration, Environmental Protection Agency, and the corresponding state level agencies.

### Student Involvement

Students are encouraged to participate in professional organizations.

The Institute for Rural Emergency Management, a division of the Missouri Safety Center, at UCM offers an opportunity for service learning to students by assisting rural communities and high-risk organizations to prepare for the inevitable emergency and potential disaster. These real-world experiences are vital to prepare students for the challenging careers that await them.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time,

and full-time employment. They also provide assistance with writing cover letters and resumes and offer a career library, mock interviews, and career counseling. The office also serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students](http://ucmo.edu/career/students).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information, contact Dianna Bryant, Institute for Rural Emergency Management, a division of the Missouri Safety Center, Humphreys 200, UCM, Warrensburg, MO 64093, at 660-543-4971. The department's web address is [ucmo.edu/irem](http://ucmo.edu/irem) and its email address is [irem@ucmo.edu](mailto:irem@ucmo.edu).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Crisis and Disaster Management, B.S. Degree (43-248, 250, 251)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
General Education	9-10	General Education	12
<b>Semester Total</b>	<b>12-13</b>	<b>Semester Total</b>	<b>15</b>
AE 1400 Freshman Seminar*	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
CDM 3000 Introduction to Crisis & Disaster Management	3	CHEM 1103 or 1104 Introduction to the Sciences: Chemistry	3-4
General Education	11-12	General Education	3
<b>Semester Total</b>	<b>14-15</b>	Free Choice Electives	9
		<b>Semester Total</b>	<b>15-16</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
CDM 3400 Community Mitigation & Recovery	3	CDM 4035 or CDM 4245 or CDM 4745**	3
CDM 3035 or CDM 3225 or CDM 4715**	3	CDM 4200 Disaster Management Technology	3
Free Choice Electives	9	Free Choice Electives	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>12</b>
<b>Summer - Between Junior &amp; Senior Year</b>	<b>Hrs.</b>		
CDM 4015 or CDM 4215 or CDM 4735**	3		
CDM 4900 Technology Application Studies***	3		
CDM 4990 Practicum in CDM	3		
<b>Semester Total</b>	<b>9</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
CDM 4400 Research Issues in CDM	3	CDM 4800 Integrated Emergency Management	3
CDM 4910 Field Exercise Project***	3	Free Choice Electives	9
Departmentally Approved Technical Elective	3	<b>Semester Total</b>	<b>12</b>
General Education (IGEN/ICAP)	3		
Free Choice Elective	3		
<b>Semester Total</b>	<b>15</b>		

**Crisis and Disaster Management, B.S. Degree – 120 hrs**

- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*Course choice will depend on the Area chosen: Business Continuity Area, Emergency Management Area, or the Environmental Hazards Area.
- \*\*\*CDM 4900 and 4910 can be taken any semester after the sophomore year.
- Some CDM major courses may be offered only once per year. Contact the program office in Humphreys 200 at 660-543-4971 for the most up to date course offering schedule.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

**College of Health, Science, and Technology**  
*School of Technology*

# DESIGN & DRAFTING TECHNOLOGY

**BACHELOR OF SCIENCE DEGREE**

Offering its first drafting class in 1904, the University of Central Missouri has a strong reputation for teaching Design & Drafting Technology courses. With evolving technology, and the demand for educated professionals increasing each year, the university's School of Technology continues to prepare graduates for challenging and rewarding careers in computer-aided drafting and design (CADD).

One of only four baccalaureate programs in the country, Central Missouri's Design & Drafting Technology program enrolls the largest number of declared Design & Drafting Technology majors of any university in the state. The American Design Drafting Association tests and certifies students upon graduation. This is the only four-year baccalaureate Design & Drafting Technology program accredited by the Association of Technology, Management, and Applied Engineering (ATMAE).

The school's Design & Drafting Technology program enjoys an excellent reputation as a national leader in the preparation of qualified, successful graduates. Many companies compete vigorously to hire graduates of this program.

Design & Drafting Technology prepares individuals for technical positions leading to design and management opportunities in industry. Graduates of this program have a broad-based background in CADD and elect an area of specialization tailored to their career goals. The areas of specialization include: Mechanical (Product/Machine) Design, Architectural/Structural, MEP (Mechanical, Electrical & Piping/

Plumbing) Systems, Civil/GIS, and Computer Graphics.

## **Internships**

All Design & Drafting Technology students must complete an internship to utilize classroom and laboratory principles and theories in actual work situations. Internships are usually scheduled during the last half of an undergraduate program. Students earn from one to six semester hours of credit upon completion of an internship.

## **State-of-the-Art Facilities**

Central Missouri's CADD facilities house more than 80 computers for student use and are among the most technologically advanced in the Midwest. CADD labs are equipped with the latest workstations housing the most up-to-date software. Whether it's traditional drafting, computer drafting, or three-dimensional modeling, students can be assured that with UCM's Design & Drafting Technology program, they will be confident in their skills upon graduation.

## **About the Faculty**

Students learn from highly experienced full-time faculty members who provide individualized student program advisement. The university's modest student-faculty ratio allows students to benefit from personalized attention. Faculty members are active in research and writing, and they participate in workshops and seminars to stay current in their field.

## **Student Involvement**

Students are encouraged to supplement their academic programs

through participation in campus organizations of special professional, service and academic interest. The student chapter of the American Design Drafting Association helps keep students current with events and activities in their career field. The American Institute of Building Design student chapter allows students to interface with professional designers and expand their opportunities in building design.

## **Career Services**

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide assistance with writing cover letters and resumes and offer a career library, mock interviews, and career counseling. The office also serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students](http://ucmo.edu/career/students).

## **To Learn More**

For more information contact the School of Technology, Grinstead 9, UCM, Warrensburg, MO 64093, call 660-543-4439, or visit the school's web sites at [ucmo.edu/technology](http://ucmo.edu/technology) and [facebook/ucmsot](https://www.facebook.com/ucmsot).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Design & Drafting Technology Major, B.S. Degree (43-568)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
BTE 1210 Essentials of Managing Information	2	CADD 1120 Machine Drafting*	3
CADD 1100 Orientation to Drafting*	1	CADD 2170 Introduction Computer-Aided Drafting	2
CADD 1105 Basic AutoCAD	1	CADD 2171 Introduction to MicroStation	2
CADD 1110 Fundamentals of Drafting or CTE 1300 Introduction to Engineering Design	2-3	EASC 1004 Introduction to the Sciences: Geology	4
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
MATH 1111 College Algebra	3	General Education	3
General Education	3	<b>Semester Total</b>	<b>17</b>
<b>Semester Total</b>	<b>15-16</b>		

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
CADD 2100 Sophomore Design/Drafting Seminar*	.5	CADD 2180 Technical Illustration	3
CADD 2150 Descriptive Geometry for Engin. Technology	3	CMGT 2020 Statics	3
CADD 2160 Structural Drafting	3	PHYS 1103 Introduction to the Sciences: Physics	3
GEOG 2212 World Geography	3	General Education	6
MATH 1112 College Trigonometry	2	<b>Semester Total</b>	<b>15</b>
General Education	3		
<b>Semester Total</b>	<b>14.5</b>		

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
CADD 3100 Junior Design/Drafting Seminar*	.5	CADD 3170 Computer Drafting Systems	3
CADD 3150 Civil Drafting	3	CTE 3060 Technical Writing	3
ENGT 2530 Machine Tool Technology	3	MGT 3315 Management of Organizations or INDM 4250 Project Management***	3
Major Area Electives**	3	Major Area Electives**	3
General Education	6	General Education	3
<b>Semester Total</b>	<b>15.5</b>	<b>Semester Total</b>	<b>15</b>

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
CADD 4100 Senior Design/Drafting Seminar*	1	CADD 3175 Managing Computer Applications for Drafting	3
CADD 4170 CADD for Engineering Technology	3	CADD 4180 Industrial Design	3
IGEN 3116 Creative Problem Solving	3	HRM 3920 Human Resource Management or INDM 4260 Organizational Dynamics***	3
SOT 3022 Internship in Technology	1	Major Area Electives**	6
SOT 4570 Computer Graphics	3	<b>Semester Total</b>	<b>15</b>
Major Area Electives**	3		
<b>Semester Total</b>	<b>14</b>		

**Design & Drafting Technology Major, B.S. Degree - 121-122 hours**

- \*This class is only offered the semester indicated.
- \*\*Students choose an area of specialty from the following four options: Mechanical (Product/Machine) Design, Architectural/Structural, MEP (Mechanical, Electrical & Piping/Plumbing) Systems, Civil/GIS, or Computer Graphics. Fifteen credit hours of Major Area Electives are required. See the Undergraduate Catalog for the list of classes required in each area.
- \*\*\*Students either take MGT 3315 and HRM 3920 OR INDM 4250 and INDM 4260.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

Department of Nutrition and Kinesiology

# DIETETICS

## BACHELOR OF SCIENCE DEGREE

Featuring small classes with personalized attention, University of Central Missouri's undergraduate program in dietetics is the only one of its kind in west central Missouri. It has received continued accreditation by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) through the Academy of Nutrition & Dietetics since 1957.

The dietetics program prepares students academically to meet the university's Bachelor of Science degree criteria while meeting the foundational knowledge and skills necessary to enter a post-baccalaureate dietetic internship. Students are then eligible to take the national registration exam to receive the credentials of Registered Dietitian (R.D.).

Through a foundation in liberal arts, service learning, technology and research, the student is prepared to be a lifelong learner who is able to enhance the field of dietetics.

### Career Opportunities

Dietitians study a variety of subjects ranging from food and nutrition sciences, food service systems management, business economics, sociology, communication, as well as chemistry, anatomy, physiology, microbiology, and biochemistry. Since the field of dietetics is a high-tech science of applying food and nutrition to health, it is a vital, growing field open to many directions and opportunities.

Health, nutrition, and fitness have become a way of life. As a registered dietitian, a graduate can work in hospitals, for HMOs or other health care facilities; community and

public health settings; fitness, sports nutrition and corporate wellness programs; education and research; sales, marketing and public relations; government; restaurant management; food companies, and private practice. The direction you take and how far you take it is your choice.

Program graduates are now working as clinical dietitians, consulting dietitians, community nutritionists, fitness-wellness specialists, and diabetes educators. Students who do not seek post-graduate internships are employed as nutritionists, community nutritionists, community educators, and school lunch program directors.

### Internships

Completing a bachelor's degree is only one step in the process of becoming a dietitian. The student also needs practical experience. This is what the internship provides. It must provide a minimum of 1200 hours of supervised practice, and is completed in six to 12 months, depending on the program. To apply for an internship, individuals must complete their bachelor's degree that includes ACEND-approved coursework. The program at UCM provides the courses needed for completion of a bachelor's degree. Following the dietetic internship, the national registration examination is taken to attain the Registered Dietitian status.

### Faculty

The faculty in the dietetics program are committed to student success. They bring practical, real world, hands-on experiences to the classroom, preparing students for their future careers.

### Student Involvement

UCM offers many opportunities for students to get involved with individuals who share similar interests. Classes foster learning opportunities including job shadow experiences and facility visits to prepare students for their careers. The Student Dietetic Association, for example, gives students an opportunity to take part in campus wellness activities, National Nutrition Month, listen to guest speakers, and volunteer opportunities.

### Scholarships

Dietetics students may be eligible to apply for the McClain Scholarships and McClain Distinguished Scholarships, some of the most prestigious awards at UCM. In addition to many different types of scholarships offered on campus, dietetics students also may be eligible for scholarships from the Academy of Nutrition & Dietetics, the Missouri Dietetic Association, as well as the Kansas City Dietetic Association.

### For More Information

To learn more about majoring in dietetics, contact the Department of Nutrition and Kinesiology at 660-543-4256, visit the web page at [ucmo.edu/nutrition](http://ucmo.edu/nutrition), or stop by our office in Morrow 125.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Dietetics Major, B.S. Degree (43-274)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
D&N 1300 Introduction to Dietetics#	1	CHEM 1104 Introduction to the Sciences: Chemistry	4
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
PSY 1100 General Psychology	3	SOC 1800 General Sociology	3
General Education	9	General Education	6
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>16</b>
AE 1400 Freshman Seminar*	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
BIOL 3401 Human Anatomy#	3	ACCT 2100 Survey of Accounting#	3
FOOD 2320 Sanitation and Safety#	1	BIOL 3402 Human Physiology#	5
FOOD 2322 Food Preparation#	3	D&N 3340 Nutrition#	3
General Education	8	General Education	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>14</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
BIOL 3611 Microbiology#	4	CHEM 1604 Elementary Organic & Biochemistry#	4
FOOD 3332 Quantity Food Production & Service#	3	FOOD 3334 Advanced Food Systems Management#**	3
FOOD 3333 Food Systems Management#**	3	PSY 4520 Statistics for the Behavioral Sciences#	3
Free Choice Electives	5	General Education (ICAP/IGEN)	3
<b>Semester Total</b>	<b>15</b>	Free Choice Electives	2
		<b>Semester Total</b>	<b>15</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
D&N 4340 Advanced Nutrition#**	3	BIOL 2510 Basic Genetics#	3
D&N 4342 Medical Nutrition I#**	3	D&N 3350 Community Nutrition#	3
D&N 4345 Senior Dietetics Seminar#**	3	D&N 4343 Medical Nutrition II#**	3
FOOD 4326 Experimental Foods#	3	D&N 4344 Nutrition Education & Counseling#**	2
Free Choice Elective	3	Free Choice Elective	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>14</b>

**Dietetics Major, B.S. Degree - 120 hours**

- #A grade of C or better is required in these courses.
- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*These classes are only offered during the term indicated.
- Registration as a dietitian requires an internship beyond BS degree. This degree fulfills the "Didactic Program in Dietetics Academic Requirements" of the Academy of Nutrition and Dietetics.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Arts, Humanities, and Social Sciences

Department of Communication and Sociology

# DIGITAL MEDIA PRODUCTION

## BACHELOR OF SCIENCE DEGREE

The ability to communicate effectively is one of the most important skills an individual can possess in this era of rapid informational and technological change. The skills to gather information and communicate that information in written, oral, and digital forms are the hallmark of the program in UCM's Department of Communication and Sociology.

Digital Media Production students must complete required and elective courses and, additionally, must choose an 18-hour area in audio, video, film, or news. Proven skills in digital media production including writing, audio production, video production, Web design and photojournalism--are required for graduation.

Small class sizes, up-to-date professional equipment, and opportunities for one-on-one instruction provide quality classroom experiences that complement the hands-on nature of digital media study. Students also have co-curricular opportunities for hands-on experience through professional internship and practica, the campus cable network, the campus newspaper, a community news Web site and the University's public radio and television stations.

The graduate with a Bachelor of Science degree in Digital Media Production will use the knowledge and skills obtained in the program to:

- Successfully convey ideas through the written and spoken word and through various forms of digital media.
- Synthesize classroom instruction and initiate the exploration, development, and execution of projects that build professional experience.
- Apply knowledge of emerging technology and social media in the creation and distribution of media.
- Apply an in-depth understanding of the ethical principles that guide the student's chosen profession.
- Demonstrate a working knowledge of digital media law to produce content that is legal and promotes the

principles of freedom of expression.

- Demonstrate proficiency in video, audio, film, or news production:
  - Proficiency in the video production concentration means the student can successfully complete each step in the production process, from conception through distribution, using both field and studio techniques.
  - Proficiency in the audio production concentration means the student can manipulate sound to perform and produce audio programming and apply promotion techniques for audio distribution outlets.
  - Proficiency in the film production concentration means the student can work within the parameters of the narrative film production process, as well as analyze and critique film.
  - Proficiency in the news production concentration means the student can generate news stories, images, and features for print, broadcast, and Web using appropriate style, design, and editing techniques.

### Career Opportunities

The Bachelor of Science degree program in Digital Media Production prepares students for careers in various production, news and management roles in the radio, television, film and newspaper industries. University of Central Missouri graduates include a national television network vice president; a top nationally syndicated radio personality; a director with one of television's most successful production companies; an associate producer of a blockbuster film; operatives at MissouriNet and the Brownfield Network; radio station owners; reporters, producers, directors, editors and news anchors in a number of broadcast stations and newspapers around the world.

### Faculty

The Department of Communication and Sociology has a number of full-time faculty members with work experience

and scholarly expertise in their areas of specialization. Graduate assistants complement the laboratory programs.

### KTBG-FM and KMOS-TV

The University's 100,000-watt, state-of-the-art Public Broadcasting Stations provide a unique opportunity for students to gain professional, hands-on experience in radio and television both on air and behind the scenes. In addition to a full complement of National Public Radio and Public Broadcasting System programming, the stations feature a variety of locally produced programs, which are enjoyed by a potential audience of more than one million people.

### Student Involvement

UCM's students are encouraged to take part in co-curricular activities that relate to their major, such as CTV, the UCM Media Network, an outlet designed to showcase live remote and studio productions; the Muleskinner, an award-winning campus newspaper; and digitalBURG, a student managed, local community news site. The Department of Communication and Sociology also sponsors several student communication organizations--some with national professional affiliation.

### Study Abroad

The Department of Communication and Sociology promotes undergraduate and graduate learning experiences abroad. For a complete list of available study abroad programs see the International Center's website: [ucmo.edu/international](http://ucmo.edu/international).

### To Learn More

For more information contact the Department of Communication and Sociology, Martin 136, UCM, Warrensburg, MO 64093; 660-543-4840; or visit the department's home page at [ucmo.edu/comm/](http://ucmo.edu/comm/).

For admission information, call 877-SAY-UCMO, (877-729-8266). Central Missouri's web site is [ucmo.edu](http://ucmo.edu).

**Digital Media Production Major, B.S. Degree (43-604)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs</b>
COMM 1000 Public Speaking	3	COMM 2100 Introduction to Communication Theory	3
COMM 1100 Introduction to Communication	1	COMM 2200 Writing Across the Media	3
COMM 1200 Introduction to Mass Communication	3	ENGL 1030 Composition II	3
ENGL 1020 Composition I	3	General Education	6
General Education	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>13</b>		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs</b>
COMM 2410 Multimedia I	3	COMM 2411 Audio Production I	3
COMM 3100 Communication Research Methods	3	Major Area Course*	3
Major Area Course*	3	General Education	9
General Education	6	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs</b>
COMM 2412 Video Production I	3	COMM 2530 Photo Journalism	3
COMM 3000 Film Appreciation	3	COMM 3010 Interpersonal Communication	3
Major Area Course*	3	IGEN 3224 Critical Thinking or IGEN 3232 Media Literacy	3
General Education	6	Major Area Course*	3
<b>Semester Total</b>	<b>15</b>	Free Choice Elective	3
		<b>Semester Total</b>	<b>15</b>
<b>Summer - Between Junior/Senior Year</b>	<b>Hrs</b>		
COMM 3200 Digital Media Practicum or COMM 4295 Internship**	3		
<b>Semester Total</b>	<b>3</b>		
<b>Senior Year-Fall Semester</b>	<b>Hrs</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs</b>
COMM 4250 The Law & Digital Media	3	COMM 4490 Senior Capstone Seminar***	1
Major Area Course*	3	Major Area Course*	3
Free Choice Elective	9	Free Choice Electives	10
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>14</b>

**Digital Media Production Major, B.S. Degree - 120 hours**

- \*Students will choose a major area (18 credit hours) from: Audio, Video, Film, or News. See the 2013 Undergraduate Catalog for the list of courses to fulfill the major area.
- \*\*Students must complete, in any combination, a total of three credit hours of COMM 3200 (practicum) or COMM 4295 (internship).
- \*\*\*COMM 4490 must be taken during the student's final semester.
- See the 2013 Undergraduate Catalog or the Department of Communication and Sociology for the statement of policy for admission to the major program.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

Department of Biology and Earth Science

# EARTH SCIENCE

## BACHELOR OF SCIENCE IN EDUCATION DEGREE

A Bachelor of Science in Education degree with a major in Earth Science provides certification to teach any Earth Science course in grades 9-12. A unified science endorsement, earned by taking additional science courses, provides certification to teach any introductory science course in addition to any Earth Science course. All teacher education programs are accredited by the National Council for Accreditation of Teacher Education. The curriculum offers the student the opportunity to develop a strong foundation in biology, chemistry, physics and earth science.

### About the Faculty

Biology and Earth Science classes are taught by experienced faculty members who believe in individualized attention for students. Classroom learning is reinforced in most courses through practical laboratory experiences that include application of computer, multimedia technology and biotechnology. A recently acquired seismograph station can be used by students in the Earthquakes & Volcanoes class to study local earthquakes and larger events that happen worldwide.

In addition to a wide range of academic and professional experiences, all tenure track members of the department's faculty have doctorates in their fields of expertise. Active research programs, many involving undergraduate students, and workshop and seminar participation keep faculty members abreast of developments in their fields.

### Career Opportunities

Graduates of this program will find potential employers very eager to recruit and retain them as teachers. In addition, museums, zoos and nature

centers also hire educators, who have strong background in biology or earth science to design exhibitions, lead nature hikes in wild areas and plan educational programs.

Students who successfully complete UCM's science programs have a wide variety of opportunities available to them. They can develop a program of study preparing them for careers in systematics, ecology, conservation, physiology, cell biology, genetics and geology. With the appropriate preparation, students may become biology or earth science teachers, conservation agents or medical technologists. In addition, they may become qualified for admittance to graduate programs in biology and geology, and the professional schools of medical, veterinary, dental and physical therapy occupations.

### Student Involvement

Students may participate in a wide variety of field-based research projects, including research on using GIS and remote sensing to create habitat suitability models for Missouri's threatened and endangered flora and fauna; bat habitat surveys in Missouri; endangered species surveys in Missouri; floral surveys of selected areas in Missouri. In addition, students may participate in organismal, molecular and cellular laboratory-based research projects involving both plants and animals, including molecular systematics and population genetics of plants; biological clock mechanisms; the physiological impact of environmental stressors on vertebrates, and the molecular regulation of reproduction in fishes.

Student organizations include Para-Medico for students interested in careers in allied health areas, the

Pre-Vet Club for those pursuing careers in animal care, Beta Beta Beta, the department's Biology honor society, National Science Teachers Association Student Chapter, for students interested in science education techniques, the Wildlife Society, for students interested in ecological concerns and wildlife conservation, American Fisheries Society, for students interested in aquatic sciences, and Geology Club, to provide a greater understanding of the science of geology. Many of the student organizations sponsor a series of speakers and Geology club sponsors a week-long field trip.

### Pertle Springs

In addition to the extensive laboratory facilities in the W.C. Morris Science Building, UCM owns Pertle Springs, a 300-acre park a mile from the main campus. A unique natural laboratory for research and field experiences, Pertle Springs also serves as a campus recreation area. UCM also maintains a small astronomical observatory at Pertle Springs featuring a computer-controlled telescope with imaging capabilities and specialized auxiliary equipment. Each year The Wildlife Society sponsors BioBlitz, an annual gathering at Pertle Springs that focuses on surveying natural areas, birds, fish, fungi, mammals, insects, reptiles, and amphibians.

### To Learn More

For more information, contact the Department of Biology and Earth Science, UCM, Warrensburg, MO 64093, or call 660-543-4933. For admission information, call toll free 877-SAY-UCMO (877-729-8266). The university's home page on the web is [ucmo.edu](http://ucmo.edu).

**Earth Science Major, B.S. in Ed. Degree (41-280)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs</b>	<b>Freshman Year -Spring Semester</b>	<b>Hrs</b>
<b>EASC 1004 Introduction to the Sciences: Geology</b>	4	BIOL 1112 Animal Biology	4
<b>ENGL 1020 Composition I</b>	3	CTE 2000 Technology & Society	3
<b>General Education MATH</b>	3	EASC 3320 Mineralogy	4
General Education	6	<b>ENGL 1030 Composition II</b>	3
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>14</b>
AE 1400 Freshman Seminar*	1		

<b>Sophomore Year - Fall Semester</b>	<b>Hrs</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs</b>
EASC 2200 Historical Geology***	4	EASC 3112 Astronomy	3
EASC 3114 Meteorology	3	EASC 3115 Oceanography	3
CHEM 1131 General Chemistry I	5	EDFL 2100 Foundations of Education	2
<b>POLS 1510 American Government</b>	3	FLDX 2150 Introductory Field Experience	1
General Education	3	EDFL 2240 Educational Psychology	3
<b>Semester Total</b>	<b>18</b>	HIST 1350 or HIST 1351 History of the United States	3
		<b>Semester Total</b>	<b>15</b>

<b>Junior Year - Fall Semester</b>	<b>Hrs</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs</b>
EASC 3501 Invertebrate Paleontology***	4	BIOL 4102 Evolution	3
PHYS 1101 College Physics I or PHYS 1104 Introduction to the Sciences: Physics or PHYS 2121 University Physics	4-5	EASC 3010 Environmental Geology	3
EDSP 2100 Education of Exceptional Child	2	PSY 4230 Psychology of Adolescence	3
Major Elective**	3	EDFL 4210 The Teaching of Reading in the Secondary School	2
General Education	3	EDFL 4300 Educational Measurement & Evaluation	2
<b>Semester Total</b>	<b>16-17</b>	Major Elective**	3-4
		<b>Semester Total</b>	<b>16-17</b>

<b>Senior Year - Fall Semester</b>	<b>Hrs</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs</b>
EDFL 3500 Secondary Teaching & Behavioral Management	3	FLDX 4595 Student Teaching Secondary I	5
FLDX 3550 Practicum in Secondary Instruction	1	ICAP 4468 Student Teaching Secondary II	4
STCH 4050 Science Teaching Methods	3	STCH 4080 Teaching Secondary Science	3
Major Elective**	3	<b>Semester Total</b>	<b>12</b>
General Education	6		
<b>Semester Total</b>	<b>16</b>		

**Earth Science Major, B.S. in Ed. Degree - 124 hours**

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however this major does not require any free choice electives.
- \*\*Students must take 9-10 hours of major electives to bring the total major hours to sixty (hours depend on PHYS option selected). The Unified Science Certification requires 13-14 hours of major electives (see note below). See the Undergraduate catalog for appropriate major elective course choices and for the Unified Science Certification requirements.
- \*\*\*These courses are offered in alternate Fall semesters - if one is not available, take the other.
- Students seeking Unified Science certification must complete BIOL 1111 (4), CHEM 1132 (5), and PHYS 1102 or 2122 (4 or 5) for the Major Elective hours. Unified Science certification in Earth Science qualifies students for certification to teach any of the beginning sciences (i.e., Chemistry I, Physics I, etc.) and all levels of Earth Science, grades 9-12.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before student teaching and enrollment in professional education classes. The application for student teaching is due approximately one year in advance.

## Harmon College of Business and Professional Studies

Department of Economics, Finance, and Marketing

# ECONOMICS

## BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION DEGREE

At its roots, the study of economics provides a foundation for understanding the motivation of individuals and firms as well as the forces that cause growth in living standards, recessions, and inflation. Whether your interests focus on personal issues, such as understanding the incentives that induce human behaviors, or examining issues of critical social importance, economics is a stimulating, broad-based field with wide-ranging employment opportunities.

Students are required to complete courses in accounting, computer information systems, management, and marketing. This extensive training makes it possible for our graduates to target a wide variety of employment opportunities or continue their education in graduate school.

### About the Faculty

Economics classes at UCM are taught by dynamic, experienced, and nationally recognized faculty members who provide personalized attention for each student. These faculty members bring diverse training and work experiences to the classroom and are actively engaged in economic research. This research, which includes environmental aid, labor market analysis, valuation of sports teams and investigations of statistical methodologies, along with involvement in professional organizations, places the faculty at the forefront of their respective fields.

### Student Involvement

Students pursuing an economics degree have access to a variety of campus organizations and events. The Department of Economics, Finance, and Marketing sponsors the Economics Club which promotes social interaction between students and faculty.

In addition to on-campus activities, students are encouraged to complete an internship in economics in order to gain greater practical skills and insight during the completion of the undergraduate degree.

### Special Facilities

The department's offices are housed in the Dockery Building. Classrooms, however, are located in the state-of-the-art Ward Edwards Building, which includes a large computer lab, group computer rooms, group and individual study rooms, student organization offices, and common areas for students. Classrooms are equipped with up-to-date computer hardware and software.

### Placement

Training in economics will give you practical skills and many career choices. An economics degree or background is ideal for students planning for careers in the following areas: research analysts for private corporations such as banks, financial service institutions, and insurance companies; consultants for management, data processing, and health care firms; and analysts for government agencies at the federal, state, and local levels. Studies show that the average compensation for graduates holding

an economics degree is higher than all other undergraduate fields except engineering.

UCM's Office of Career Services assists students in finding employment throughout the academic year. Recent graduates have landed a variety of positions in diverse settings including: Ph.D. programs and law schools, the Central Intelligence Agency, managerial consultants, financial brokers, and analysts for the state of Missouri.

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information, contact the Department of Economics, Finance, and Marketing, UCM, Warrensburg, MO 64093 at 660-543-4246. The department's web address is [ucmo.edu/efm](http://ucmo.edu/efm).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Economics Major, B.S.B.A. Degree (46-611)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CIS 1600 Business Information Management*	3	COMM 1000 Public Speaking	3
ECON 1010 Principles of Macroeconomics*	3	ECON 1011 Principles of Microeconomics*	3
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
MATH 1111 College Algebra*	3	PSY 1100 General Psychology or SOC 1800 General Sociology	3
General Education	3	General Education	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
AE 1400 or BADM 1400 Freshman Seminar**	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ACCT 2101 Principles of Financial Accounting*	3	ACCT 2102 Principles of Managerial Accounting*	3
BLAW 2720 Legal Environment of Business*	3	FIN 2801 Business Statistics I*	3
General Education	9	General Education	9
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
		<b>Note: Complete all B.S.B.A. admission requirements and apply for admission*</b>	
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
ECON 3010 Intermediate Macroeconomics (fall only)	3	CIS 3630 Management Information Systems	3
FIN 3801 Business Statistics II	3	ECON 3030 Intermediate Microeconomics	3
FIN 3850 Principles of Finance	3	MGT 3325 Business Communication	3
MGT 3315 Management of Organizations	3	MGT 3360 Production/Operations Management	3
Free Choice Electives	3	MKT 3405 Marketing Policy	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
ICAP 4357 Organizational Policy and Strategy	3	ECON 4000 Portfolio Assessment	3
Major Electives***	6	Major Electives***	6
Free Choice Elective	6	Free Choice Electives	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

**Economics Major, B.S.B.A. Degree - 120 Hours**

- \*Students in this major must complete eight preadmission courses with a grade of C or higher and must obtain a 2.25 cumulative GPA and a 2.25 in these specific courses, for admission to the degree program. These courses are recommended for completion during the freshman and sophomore years. These courses are indicated with an (\*).
- \*\*AE 1400 or BADM 1400 (1 hr.) are free choice electives and are highly recommended for academic success. If AE 1400 or BADM 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*\*Some major electives are offered fall or spring semester only, or are only taught online – check with the department for course offerings.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Health, Science, and Technology

School of Technology

# ELECTRONICS TECHNOLOGY

BACHELOR OF SCIENCE DEGREE, AREA 1: ELECTRICAL/ELECTRONIC COMMUNICATION TECHNOLOGY

University of Central Missouri's Bachelor of Science in Electronics Technology degree program prepares students to fit into a wide variety of electronics-related positions. This program has a strong management component which allows graduates to move into management and supervisory positions within the industry.

Students in Electronics Technology have two specialty areas in which to choose from. These include the electrical/electronic communication technology and computer/networking electronics technology specialties.

### Career Opportunities

Graduates have been placed in job classifications such as engineering assistants, service representatives, sales representatives, system troubleshooters, computer maintenance support, network supervisors, production supervisors, and audio-visual engineers.

### Professional Accreditation

Central Missouri's baccalaureate program in electronics technology is accredited by the Association of Technology, Management, and Applied Engineering (ATMAE).

### Internships

All electronics technology students must complete an internship to utilize classroom and laboratory principles and theories in actual work situations. Internships are usually scheduled during the last half of an undergraduate program. Students

earn from three to nine semester hours of credit upon completion of an internship. Internships are arranged through a variety of employers throughout the country.

### Facilities and Equipment

The Gaines Technology Building provides some of the best classroom and laboratory facilities on the UCM campus. Over one-fourth of the 66,000 square foot area is devoted to the electronics technology program. Special laboratories are set up for programmable logic controllers, communications systems, AC/DC, and networking. Labs also have up-to-date computers for circuit simulation and the networking lab has routers and switches for setting up real-world networks and laptop computers for designing virtual networks.

### About the Faculty

Students learn from highly experienced full-time faculty members who provide individualized student program advisement. The university's modest student-faculty ratio allows students to benefit from personalized attention.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide assistance with writing cover letters and resumes and offer a career library, mock interviews, and career counseling. The office also serves representatives of business,

government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students](http://ucmo.edu/career/students).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information, contact the School of Technology, Grinstead 9, UCM, Warrensburg, MO 64093, 660-543-4439. The school's web address is [ucmo.edu/technology](http://ucmo.edu/technology) and [facebook.com/ucmsot](https://www.facebook.com/ucmsot).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Electronics Technology Major (Area 1 Electrical/Electronic Comm. Tech.), B.S. Degree (43-01221)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
ET 1026 DC Circuit Analysis*	4	ET 1027 AC Circuit Analysis*	4
ET 1050 Digital Principles & Applications*	4	ET 2048 Active Electronic Devices*	4
MATH 1111 College Algebra	3	MATH 1112 College Trigonometry or	
General Education	2	TECH 1042 Technical Mathematics II	2-3
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>13-14</b>
AE 1400 Freshman Seminar**	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
CHEM 1104 Introduction to the Sciences: Chemistry	4	COMM 1000 Public Speaking	3
ET 2060 Microprocessors: Theory & Applications*	4	ET 2065 Computer Programming for Electronics Technology*	4
ET 3020 Circuit Analysis & Implementation*	4	PHYS 1104 Introduction to the Sciences: Physics	4
MATH 1131 Applied Calculus or		General Education	3
TECH 2040 Calculus for Technology	3	<b>Semester Total</b>	<b>14</b>
<b>Semester Total</b>	<b>15</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
CTE 3060 Technical Writing	3	ET 3014 Analog-Digital Circuitry*	4
ET 3017 Industrial Electronics*	4	IGEN 3116 Creative Problem Solving or	
ET 3041 Communication Systems*	4	ICAP 4110 Engineering Technology Problem Solving	3
MGT 3315 Management of Organizations or		Departmentally Approved Area 1 Electives***	3
INDM 4210 Industrial Management	3	General Education	6
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>16</b>
<b>Junior Year - Summer Semester</b>	<b>Hrs.</b>		
SOT 3022 Internship in Technology	3		
<b>Semester Total</b>	<b>3</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
Departmentally Approved Area 1 Elective***	3	Departmentally Approved Area 1 Elective***	8-9
Management Elective#	3	General Education	6
General Education	9	<b>Semester Total</b>	<b>14-15</b>
<b>Semester Total</b>	<b>15</b>		

**Electronics Technology Major (Area 1 Electrical/Electronic Communication Technology)  
B.S. Degree - 121 hours**

- \*This class is only offered during the semester indicated.
- \*\* AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*\*See department chairperson for appropriate choices for the Departmentally Approved Area 1 Electives. Eleven hours are required, two hours must be at the upper-level (3000/4000).
- #See department chairperson for appropriate choices for the Management Elective.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

School of Technology

# ELECTRONICS TECHNOLOGY

## BACHELOR OF SCIENCE DEGREE, AREA 2: COMPUTER/NETWORKING ELECTRONICS TECHNOLOGY

University of Central Missouri's Bachelor of Science in Electronics Technology degree program prepares students to fit into a wide variety of electronics-related positions. This program has a strong management component which allows graduates to move into management and supervisory positions within the industry.

Students in Electronics Technology have two specialty areas in which to choose from. These include the electrical/electronic communication technology and computer/networking electronics technology specialties.

### Career Opportunities

Graduates have been placed in job classifications such as engineering assistants, service representatives, sales representatives, system troubleshooters, computer maintenance support, network supervisors, production supervisors, and audio-visual engineers.

### Professional Accreditation

Central Missouri's baccalaureate program in electronics technology is accredited by the Association of Technology, Management, and Applied Engineering (ATMAE).

### Internships

All electronics technology students must complete an internship to utilize classroom and laboratory principles and theories in actual work situations. Internships are usually scheduled during the last half of an undergraduate program. Students

earn from three to nine semester hours of credit upon completion of an internship. Internships are arranged through a variety of employers throughout the country.

### Facilities and Equipment

The Gaines Technology Building provides some of the best classroom and laboratory facilities on the UCM campus. Over one-fourth of the 66,000 square foot area is devoted to the electronics technology program. Special laboratories are set up for programmable logic controllers, communications systems, AC/DC, and networking. Labs also have up-to-date computers for circuit simulation and the networking lab has routers and switches for setting up real-world networks and laptop computers for designing virtual networks.

### About the Faculty

Students learn from highly experienced full-time faculty members who provide individualized student program advisement. The university's modest student-faculty ratio allows students to benefit from personalized attention.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide assistance with writing cover letters and resumes and offer a career library, mock interviews, and career counseling. The office also

serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students](http://ucmo.edu/career/students).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information, contact the School of Technology, Grinstead 9, UCM, Warrensburg, MO 64093, 660-543-4439. The school's web address is [ucmo.edu/technology](http://ucmo.edu/technology) and [facebook.com/ucmsot](https://facebook.com/ucmsot).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

### Electronics Technology Major (Area 2 Computer/Networking Electronics Technology) B.S. Degree (43-02221)

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
ET 1026 DC Circuit Analysis*	4	ET 1027 AC Circuit Analysis*	4
ET 1050 Digital Principles & Applications*	4	ET 2048 Active Electronic Devices*	4
MATH 1111 College Algebra	3	NET 1058 Computer Technologies*	3
<b>Semester Total</b>	<b>14</b>	General Education	2-3
AE 1400 Freshman Seminar**	1	<b>Semester Total</b>	<b>16-17</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
CHEM 1104 Introduction to the Sciences: Chemistry	4	COMM 1000 Public Speaking	3
ET 2060 Microprocessors: Theory & Applications*	4	ET 2065 Computer Programming For Electronics Technology*	4
NET 1060 Introduction to Networking Basics*	3	NET 2060 Switching Basics and Intermediate Routing*	3
NET 1061 Routers & Routing Basics*	3	NET 2061 WAN Technologies*	3
<b>Semester Total</b>	<b>14</b>	PHYS 1104 Introduction to the Sciences: Physics	4
		<b>Semester Total</b>	<b>17</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
CTE 3060 Technical Writing	3	IGEN 3116 or ICAP 4110	3
NET 4060 Advanced Network Routing*	3	NET 3068 Network Security I	4
Departmentally Approved Elective#	2	Area 2 Major Elective***	3
General Education	6	General Education	6
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>16</b>
<b>Junior Year - Summer Semester</b>	<b>Hrs.</b>		
SOT 3022 Internship in Technology	3		
<b>Semester Total</b>	<b>3</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
NET 4062 Advanced Switching*	3	NET 4063 Networking Support*	3
Area 2 Major Elective***	3	Area 2 Major Elective***	3
Departmentally Approved Elective#	3	General Education	6
General Education	6	<b>Semester Total</b>	<b>12</b>
<b>Semester Total</b>	<b>15</b>		

### Electronics Technology Major (Area 2 Computer/Networking Electronics Technology) B.S. Degree - 121 hours

- \*This class is only offered during the semester indicated.
- \*\*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*\*For the Major Electives choose either set of three courses: NET 4040, 4042, and 4043 OR NET 3000, 3062, or 4064.
- #See department chairperson for appropriate choices for the Departmentally Approved Elective. Three hours are required.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Education

Department of Elementary and Early Childhood Education

# ELEMENTARY EDUCATION

EARLY CHILDHOOD, BIRTH-GRADE 3 OPTION, TRADITIONAL PATHWAY,  
BACHELOR OF SCIENCE IN EDUCATION DEGREE

Candidates pursuing a bachelor of science degree with a major in elementary education have three options:

- elementary education in grades 1-6 option, which leads to certification to teach elementary education in grades one through six
- early childhood option, which leads to certification to teach early childhood and elementary education in pre-kindergarten through grade three
- dual certification elementary and early childhood option, which leads to certification to teach children from birth through grade six.

Early childhood education majors study a core of education and liberal arts classes. Combined with a professional education semester that includes 16 weeks of student teaching at two different age levels, this curriculum prepares candidates upon graduation to be highly qualified pre-school or primary elementary school classroom teachers.

According to the Missouri Department of Elementary and Secondary Education, UCM is "one of the premier teacher education institutions in the state," and has a reputation for preparing some of the finest teachers in the classroom today. Full accreditation by the National Council for Accreditation of Teacher Education (NCATE) and the Missouri Department of Elementary and Secondary Education (DESE), as well as national recognition by the National Association for the Education of Young Children (NAEYC) and the Association for Childhood Education International (ACEI) provides further verification of high quality. UCM's programs meet all Missouri certification requirements at the undergraduate level.

Central Missouri's teacher education program prepares teachers to be competent, caring, reflective practitioners committed to the premise that all can learn. Graduates are well grounded in general, major, and professional knowledge and skills that are guided by performance standards and assessments, including development of reflective decision-making skills. Program expectations have been derived from consultation with practitioners and review of recommendations of appropriate professional groups.

### Clinical Experiences

Pre-service teachers complete a series of scaffolded field experiences in the sophomore, junior, and senior years. The senior year professional development school experience is co-designed and taught by school practitioners and university faculty. The culminating experience is the student-teaching semester.

### International Opportunities

Students in the Department of Elementary and Early Childhood Education may choose to participate in international study experiences offered by the Office of International Programs. Short-term study tours abroad may also offer an excellent introduction to education in other countries.

### About the Faculty

Department faculty members all have public school or early childhood teaching experience and are qualified teachers who engage regularly in a variety of professional development opportunities and work closely with and in our public partner schools.

### Student Involvement

Students may choose to join one or more professional organization that sponsor opportunities for service and professional networking as well as offering membership benefits. Education -related organizations include:

- Student Missouri State Teachers Association (SMSTA)
- Missouri National Educators Association (MNEA)
- Kappa Delta Pi, a national honorary fraternity
- Leading Educator Advocates for Diversity (LEAD)

### Teacher Education Admission

Candidates seeking an initial teaching certificate who meet departmental requirements are admitted to the teacher education program when they have completed 48 semester hours of college credit. After completing 90 hours and meeting additional requirements, students are admitted to the professional education semester and the student-teaching portion of the program.

### To Learn More

For more information, please contact the Department of Elementary and Early Childhood Education, UCM, Lovinger 3300, Warrensburg, MO 64093; 660-543-4235; or visit [ucmo.edu/ecel](http://ucmo.edu/ecel).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Elementary Education Major (Birth - Grade 3), Traditional Pathway, B.S. in Ed. Degree (41-286)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
ART 1800 Ideas & the Visual Arts or MUS 1210 Exper. Music	3	<b>ENGL 1030 Composition II</b>	3
COMM 1000 Public Speaking or THEA 1100 Oral Interpretation	3	HIST 1350 or 1351 History of the United States	3
<b>ENGL 1020 Composition I</b>	3	<b>MATH 1620 Contemporary Math</b>	3
<b>POLS 1510 American Government</b>	3	<b>General Education Science w/lab</b>	4
Modern Language	3	General Education Technology	2-3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15-16</b>
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
ART 3910 Art for Elementary Schools	2	ECEL 1310 or 1320 Science for Teachers	3
CFD 1220 Child Development	3	ECEL 2830 Early Childhood Principles	3
D&N 2310 Early Childhood Nutrition & Health	2	ECEL 2110 World Diversity & America	3
EDFL 2100 Foundations of Education	2	EDFL 3410 Children's Literature	2
FLDX 2150 Introductory Field Experience	1	EDSP 2100 Education of the Exceptional Child	2
EDFL 2240 Educational Psychology	3	PE 2410 Movement Skills & Activities for Primary Grades General	2
GEOG 2212 World Geography	3	Education Literature	3
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>18</b>
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
CD 2000 Bases of Speech & Language#	2	ECEL 2310 Computer/Technology in Education#	2
ECEL 3260 Practicum in Child Development#	1	ECEL 3420 Teaching Social Studies & Economics#	3
ECEL 3850 Development & Learning Through Play#	3	EDSP 3150 Community & Family Resources	2
ECEL 3220 The Teaching of Language Arts#	3	EDSP 3151 Community & Family Resources Practicum	1
EDFL 3210 Methods of Reading Instruction#	3	EDSP 4370 Screening, Diagnosing, & Prescribing Instructions#	3
MATH 3800 Introduction to Elementary & M.S. Math#	2	HED 3310 Methods in Elementary School Health	2
MATH 3801 Conc. & Meth. in Elementary School Math#	3	MUS 3301 Music for Elementary Schools	2
<b>Semester Total</b>	<b>17</b>	PSY 2220 Child Psychology or PSY 3220 Lifespan Development	3
		<b>Semester Total</b>	<b>18</b>
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester**	<b>Hrs.</b>
CFD 3250 Org. & Admin. of Programs for Young Children	3	ECEL 4150 Student Teaching Professional Seminar	2
ECEL 4350 Elementary Science Teaching Strategies#	3	FLDX 4493 Student Teaching Early Childhood	6
ECEL 4400 Classroom Management & Interactions*	3	FLDX 4496 Student Teaching Elementary II	4
ECEL 4830 Early Childhood Curriculum#	3	<b>Semester Total</b>	<b>12</b>
HED 4330 First Aid and CPR for Educators	1		
IGEN 3468 Community, School, & Family Connections	3		
<b>Semester Total</b>	<b>16</b>		

**Elementary Education Major (Birth - Grade 3), Traditional Pathway, B.S. in Ed. Degree - 127 hours**

- \*A grade of C or higher is required in all professional education courses including ECEL 4400 for departmental recommendation for student teaching.
- \*\*The courses listed for this semester constitute the professional education (student teaching) block. The student should not take any other courses during this semester.
- #There may be an option for students to pursue a Clinical Pathway experience; a series of field-embedded blocks during Junior and Senior years in which all the teaching methods courses are tied to elementary classroom practica. To be eligible for the Clinical Pathway, students need to maintain a strong GPA; complete the majority of general education courses; complete EDFL 2100, 2240, FLDX 2150; and pass the Entry Level General Knowledge and Skills Assessment (or scores in progress) by the end of Sophomore Year. Students do not take any of the methods courses prior to Junior year. Methods courses are indicated by a #.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before enrollment in professional education classes and student teaching. The application for student teaching is due approximately one year in advance.



## College of Education

Department of Elementary and Early Childhood Education

# ELEMENTARY EDUCATION

EARLY CHILDHOOD, BIRTH-GRADE 3 OPTION, CLINICAL PATHWAYS,  
BACHELOR OF SCIENCE IN EDUCATION DEGREE

Candidates pursuing a bachelor of science degree with a major in elementary education have three options:

- elementary education in grades 1-6 option, which leads to certification to teach elementary education in grades one through six
- early childhood option, which leads to certification to teach early childhood and elementary education in pre-kindergarten through grade three
- dual certification elementary and early childhood option, which leads to certification to teach children from birth through grade six.

Early childhood education majors study a core of education and liberal arts classes. Combined with a professional education semester that includes 16 weeks of student teaching at two different age levels, this curriculum prepares candidates upon graduation to be highly qualified pre-school or primary elementary school classroom teachers.

According to the Missouri Department of Elementary and Secondary Education, UCM is "one of the premier teacher education institutions in the state," and has a reputation for preparing some of the finest teachers in the classroom today. Full accreditation by the National Council for Accreditation of Teacher Education (NCATE) and the Missouri Department of Elementary and Secondary Education (DESE), as well as national recognition by the National Association for the Education of Young Children (NAEYC) and the Association for Childhood Education International (ACEI) provides further verification of high quality. UCM's programs meet all Missouri certification requirements at the undergraduate level.

Central Missouri's teacher education program prepares teachers to be competent, caring, reflective practitioners committed to the premise that all can learn. Graduates are well grounded in general, major, and professional knowledge and skills that are guided by performance standards and assessments, including development of reflective decision-making skills. Program expectations have been derived from consultation with practitioners and review of recommendations of appropriate professional groups.

### Clinical Experiences

Pre-service teachers complete a series of scaffolded field experiences in the sophomore, junior, and senior years. The senior year professional development school experience is co-designed and taught by school practitioners and university faculty. The culminating experience is the student-teaching semester.

### International Opportunities

Students in the Department of Elementary and Early Childhood Education may choose to participate in international study experiences offered by the Office of International Programs. Short-term study tours abroad may also offer an excellent introduction to education in other countries.

### About the Faculty

Department faculty members all have public school or early childhood teaching experience and are qualified teachers who engage regularly in a variety of professional development opportunities and work closely with and in our public partner schools.

### Student Involvement

Students may choose to join one or more professional organization that sponsor opportunities for service and professional networking as well as offering membership benefits. Education -related organizations include:

- Student Missouri State Teachers Association (SMSTA)
- Missouri National Educators Association (MNEA)
- Kappa Delta Pi, a national honorary fraternity
- Leading Educator Advocates for Diversity (LEAD)

### Teacher Education Admission

Candidates seeking an initial teaching certificate who meet departmental requirements are admitted to the teacher education program when they have completed 48 semester hours of college credit. After completing 90 hours and meeting additional requirements, students are admitted to the professional education semester and the student-teaching portion of the program.

### To Learn More

For more information, please contact the Department of Elementary and Early Childhood Education, UCM, Lovinger 3300, Warrensburg, MO 64093; 660-543-4235; or visit [ucmo.edu/ecel](http://ucmo.edu/ecel).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Elementary Education Major (Birth - Grade 3), Clinical Pathways, B.S. in Ed. Degree (41-286)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
ART 1800 Ideas & the Visual Arts or MUS 1210 Exper. Music	3	<b>ENGL 1030 Composition II</b>	3
COMM 1000 Public Speaking or THEA 1100 Oral Interpretation	3	HIST 1350 or 1351 History of the United States	3
<b>ENGL 1020 Composition I</b>	3	<b>MATH 1620 Contemporary Math</b>	3
<b>POLS 1510 American Government</b>	3	<b>General Education Science w/lab</b>	4
Modern Language	3	General Education Technology	2-3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15-16</b>
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
ART 3910 Art for Elementary Schools	2	ECEL 1310 or 1320 Science for Teachers	3
CFD 1220 Child Development	3	ECEL 2830 Early Childhood Principles and Observation	3
D&N 2310 Early Childhood Nutrition & Health	2	ECEL 2110 World Diversity & America	3
EDFL 2100 Foundations of Education	2	EDFL 3410 Children's Literature	2
FLDX 2150 Introductory Field Experience	1	EDSP 2100 Education of the Exceptional Child	2
EDFL 2240 Educational Psychology	3	PE 2410 Movement Skills & Activities for Primary Grades	2
GEOG 2212 World Geography	3	General Education Literature	3
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>18</b>
<b>Junior Year</b> - Fall Semester - <i>Jr. Block 1 - PreK-K</i>	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester - <i>Jr. Block 2 - Grades 1-3</i>	<b>Hrs.</b>
ECEL 3100 Early Childhood Assessment and Screening	2	CFD 3250 Org. & Admin. of Programs for Young Children	3
ECEL 3150 Early Childhood Practicum	2	ECEL 3151 Young Learner Practicum (Grades 1-3)	2
ECEL 3300 Literacy and Communication Arts for EC	1	ECEL 3310 Literacy and Communication Arts for the YL	2
ECEL 3400 Language Development	2	ECEL 3510 Social Studies and Economics for the Young Learner	1
ECEL 3500 Social Studies for Early Childhood	1	ECEL 3610 Science for the Young Learner	1
ECEL 3600 Science for Early Childhood	1	MATH 3810 Math for the Young Learner	2
ECEL 3800 Math for Early Childhood	1	EDSP 3150 Community & Family Resources	2
MUS 3301 Music for Elementary Schools	2	EDSP 3151 Community & Family Resources Practicum	1
PSY 2220 Child Psychology or PSY 3220 Lifespan Development	3	HED 3310 Methods in Elementary School Health	2
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>16</b>
<b>Senior Year</b> - Fall Semester - <i>Senior Block 1 - Senior Experience</i>	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester**	<b>Hrs.</b>
ECEL 4120 Curriculum Design and Assessment	3	ECEL 4150 Student Teaching Professional Seminar	2
ECEL 4140 Communication Arts Integration	5	FLDX 4493 Student Teaching Early Childhood	6
ECEL 4400 Classroom Management & Interactions*	3	FLDX 4496 Student Teaching Elementary II	4
MATH 4800 Curriculum Design and Assessment in Math	1	<b>Semester Total</b>	<b>12</b>
HED 4330 First Aid and CPR for Educators	1		
IGEN 3468 Community, School, & Family Connections	3		
<b>Semester Total</b>	<b>16</b>		

**Elementary Education Major (Birth - Grade 3), Clinical Pathways, B.S. in Ed. Degree - 123 hours**

- \*A grade of C or higher is required in all professional education courses including ECEL 4400 for departmental recommendation for student teaching.
- \*\*The courses listed for this semester constitute the professional education (student teaching) block. The student should not take any other courses during this semester.
- Courses in italics are the Clinical Pathways blocks. The department will enroll you in these courses, and you will self-enroll in any non-CP course you plan to take in that semester. Students pursuing the double certification clinical pathways option will have the opportunity to complete all three Junior Blocks. Please see your Academic Advisor for course planning assistance.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
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## College of Education

Department of Elementary and Early Childhood Education

# ELEMENTARY EDUCATION

## GRADES 1-6 OPTION, TRADITIONAL PATHWAY, BACHELOR OF SCIENCE IN EDUCATION DEGREE

Candidates pursuing a bachelor of science degree with a major in elementary education have three options:

- elementary education in grades 1-6 option, which leads to certification to teach elementary education in grades one through six
- early childhood option, which leads to certification to teach early childhood and elementary education in pre-kindergarten through grade three
- dual certification elementary and early childhood option, which leads to certification to teach children from birth through grade six.

Elementary education majors study a core of education and liberal arts classes. Combined with a professional education semester that includes 16 weeks of student teaching, this curriculum prepares candidates upon graduation to be highly qualified elementary school classroom teachers. Elementary 1-6 majors choose a teaching area of concentration, a content area for which UCM sponsors certification. These are: Art, English, Instructional Technology, Mathematics, Modern Languages, Science, Social Studies, and Speech Communication/Theatre. Each range in credit hours from 21 to 28. Early Childhood Education, Family and Consumer Sciences, Health Education, and Special Education may be chosen as a teaching area of concentration and will result in an additional area of teaching certification.

Middle school (5-9) certification may be added for elementary 1-6 candidates who choose one of the following teaching areas of concentration: Art, Family and Consumer Sciences, Instructional Technology, Mathematics, Modern Languages, Science, Social Studies, or Speech Communication/Theatre; and successfully complete these additional courses: PSY 4230 Psychology of Adolescence, EDFL 4130 The Middle School, and EDFL 4340 Teaching Strategies in the Middle School. Students must successfully pass the appropriate

methods class for the content area they are pursuing certification.

According to the Missouri Department of Elementary and Secondary Education, UCM is "one of the premier teacher education institutions in the state," and has a reputation for preparing some of the finest teachers in the classroom today. Full accreditation by the National Council for Accreditation of Teacher Education (NCATE) and the Missouri Department of Elementary and Secondary Education (DESE) as well as national recognition by the National Association for the Education of Young Children (NAEYC) and the Association for Childhood Education International (ACEI) provides further verification of high quality. UCM's programs meet all Missouri certification requirements.

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### Clinical Experiences

Pre-service teachers complete a series of scaffolded field experiences in the sophomore, junior, and senior years. The senior year professional development school experience is co-designed and taught by school practitioners and university faculty. The culminating experience is the student-teaching semester.

### International Opportunities

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in international study experiences offered by the Office of International Programs. Short-term study tours abroad may also offer an excellent introduction to education in other countries.

### About the Faculty

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### Student Involvement

Students may choose to join one or more professional organization that sponsor opportunities for service and professional networking as well as offering membership benefits. Education-related organizations include:

- Student Missouri State Teachers Association (SMSTA)
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- Kappa Delta Pi, a national honorary fraternity
- Leading Educator Advocates for Diversity (LEAD)

### Teacher Education Admission

Candidates seeking an initial teaching certificate who meet departmental requirements are admitted to the teacher education program when they have completed 48 semester hours of college credit. After completing 90 hours and meeting additional requirements, students are admitted to the professional education semester and the student-teaching portion of the program.

### To Learn More

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**Elementary Education Major (Grades 1 - 6), Traditional Pathway, B.S. in Ed. Degree (41-285)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
ART 1800 Ideas & the Vis. Arts or MUS 1210 Exper. Music	3	<b>ENGL 1030 Composition II</b>	3
COMM 1000 Public Speaking or THEA 1100 Oral Interpretation	3	HIST 1350 or 1351 History of the United States	3
<b>ENGL 1020 Composition I</b>	3	<b>MATH 1620 Contemporary Math</b>	3
<b>POLS 1510 American Government</b>	3	<b>General Education Science w/lab</b>	4
Modern Language	3	General Education Technology	2-3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15-16</b>
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
ECEL 2110 World Diversity & America	3	ECEL 1310 or 1320 Science for Teachers	3
EDFL 2240 Educational Psychology	3	EDSP 2100 Education of Exceptional Child	2
EDFL 2100 Foundations of Education	2	GEOG 2212 World Geography	3
FLDX 2150 Introductory Field Experience	1	Teaching area of concentration*	6
PE 3420 Elementary School PE Activities	2	General Education Literature	3
Teaching area of concentration*	3	<b>Semester Total</b>	<b>17</b>
<b>Semester Total</b>	<b>14</b>		
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
ECEL 3220 The Teaching of Language Arts#	3	ART 3910 Art for Elementary Schools	2
EDFL 3210 Methods of Reading Instruction#	3	ECEL 3420 Teaching Social Studies & Economics#	3
EDFL 3410 Children's Literature	2	EDFL 3215 Reading in the Content Fields#	3
MATH 3800 Intro. to Teaching Elementary & M.S. Math#	2	HED 3310 Methods in Elementary School Health	2
MATH 3801 Concepts & Methods in Elementary Sch. Math#	3	MUS 3301 Music for Elementary Schools	2
Teaching area of concentration*	3	PSY 2220 Child Psychology or PSY 3220 Lifespan Development	3
<b>Semester Total</b>	<b>16</b>	Teaching area of concentration*	3
		<b>Semester Total</b>	<b>18</b>
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester+	<b>Hrs.</b>
ECEL 2310 Computer/Technology in Education#	2	ECEL 4150 Student Teaching Professional Seminar	2
ECEL 4350 Elementary Science Teaching Strategies#	3	FLDX 4495 Student Teaching Elementary I	6
ECEL 4400 Classroom Management & Interactions**	3	FLDX 4496 Student Teaching Elementary II	4
EDFL 4220 Analysis & Correction of Reading Disabilities#	2	<b>Semester Total</b>	<b>12</b>
EDFL 4250 Practicum in Reading#	1		
HED 4330 First Aid & CPR for Educators	1		
IGEN 3468 Community, School, and Family Connections	3		
<b>Semester Total</b>	<b>15</b>		

**Elementary Education Major (Grades 1 - 6), Traditional Pathway, B.S. in Ed. Degree - 122 hours**

- \*A second approved area of concentration in a teaching/specialty area is required for Elementary (Grades 1-6) majors. Select 15 hours of coursework from one of the following approved areas of concentration: Art, English, Instructional Technology, Mathematics, Science, Social Studies, and Speech Communication/Theatre.
- \*For Elementary Education (Grades 1-6) majors, one of the following areas may be completed as a second area of certification in lieu of choosing a 15 hour area of concentration. These range in hours from 22 to 27. Students may choose from Early Childhood Birth-Grade 3, Family and Consumer Science B-12, Special Education Cross-Cat K-12, or Modern Language (FREN, GER, SPAN) K-12. If students would like to add a Middle School endorsement (9 hours) they will need to choose from Math, Science, Social Studies, Speech/Comm Theatre. See your academic advisor for requirements.
- \*\*A grade of C or higher is required in all professional education courses including ECEL 4400 for departmental recommendation for student teaching.
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## College of Education

Department of Elementary and Early Childhood Education

# ELEMENTARY EDUCATION

## GRADES 1-6 OPTION, CLINICAL PATHWAYS, BACHELOR OF SCIENCE IN EDUCATION DEGREE

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**Elementary Education Major (Grades 1 - 6), Clinical Pathways, B.S. in Ed. Degree (41-285)**

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<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ART 1800 Ideas & the Visual Arts or MUS 1210 Exper. Music	3	<b>ENGL 1030 Composition II</b>	3
COMM 1000 Public Speaking or THEA 1100 Oral Interpretation	3	HIST 1350 or 1351 History of the United States	3
<b>ENGL 1020 Composition I</b>	3	<b>MATH 1620 Contemporary Math</b>	3
<b>POLS 1510 American Government</b>	3	<b>General Education Science w/lab</b>	4
Modern Language	3	General Education Technology	2-3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15-16</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ECEL 2110 World Diversity & America	3	ART 3910 Art for Elementary Schools	2
EDFL 2240 Educational Psychology	3	ECEL 1310 or 1320 Science for Teachers	3
EDFL 2100 Foundations of Education	2	GEOG 2212 World Geography	3
FLDX 2150 Introductory Field Experience	1	Teaching area of concentration*	6
EDSP 2100 Education of Exceptional Child	2	General Education Literature	3
PE 3420 Elementary School PE Activities	2	<b>Semester Total</b>	<b>17</b>
Teaching area of concentration*	3		
<b>Semester Total</b>	<b>16</b>		
<b>Junior Year - Fall Semester - Junior Block 2 - YL Grades 1-3</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester - Junior Block 3 - IL Grades 4-6</b>	<b>Hrs.</b>
ECEL 3151 Young Learner Practicum (Grades 1-3)	2	ECEL 3152 Intermediate Learner Practicum Grades 4-6	2
ECEL 3310 Literacy and Communication Arts for the YL	2	ECEL 3320 Literacy and Communication Arts for the IL	2
ECEL 3510 Social Studies and Economics for the Young Learner	1	ECEL 3520 Social Studies and Economics for the IL	1
ECEL 3610 Science for the Young Learner	1	ECEL 3620 Science for the Intermediate Learner	1
MATH 3810 Math for the Young Learner	2	MATH 3820 Mathematics for the Intermediate Learner	2
HED 3310 Methods in Elementary School Health	2	MUS 3301 Music for Elementary Schools	2
EDFL 3410 Children's Literature	2	PSY 2220 Child Psychology or PSY 3220 Lifespan Development	3
Teaching area of concentration**	3	Teaching area of concentration**	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>16</b>
<b>Senior Year - Fall Semester - Senior Block 1 - Senior Experience</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester+</b>	<b>Hrs.</b>
ECEL 4120 Curriculum Design and Assessment	3	ECEL 4150 Student Teaching Professional Seminar	2
ECEL 4140 Communication Arts Integration	5	FLDX 4495 Student Teaching Elementary I	6
ECEL 4400 Classroom Management & Interactions*	3	FLDX 4496 Student Teaching Elementary II	4
MATH 4800 Curriculum Design and Assessment in Math	1	<b>Semester Total</b>	<b>12</b>
HED 4330 First Aid and CPR for Educators	1		
IGEN 3468 Community, School, & Family Connections	3		
<b>Semester Total</b>	<b>16</b>		

**Elementary Education Major (Grades 1 - 6), Clinical Pathways, B.S. in Ed. Degree - 122 hours**

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- Courses in italics are the Clinical Pathways blocks. The department will enroll you in these courses, and you will self-enroll in any non-CP course you plan to take in that semester. Students pursuing the double certification clinical pathways option will have the opportunity to complete all three Junior Blocks. Please see your Academic Advisor for course planning assistance.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before enrollment in professional education classes and student teaching. The application for student teaching is due approximately one year in advance.



## College of Health, Science, and Technology

School of Technology

# ENGINEERING TECHNOLOGY

## BACHELOR OF SCIENCE DEGREE, OPTION 1: ELECTRONICS ENGINEERING TECHNOLOGY

University of Central Missouri's Engineering Technology degree allows students to specialize in one of the following option areas: Electronics Engineering Technology, Mechanical Engineering Technology, Industrial Engineering Technology, and Civil Engineering Technology.

Engineering technologists use the principles and theories of science, engineering, and mathematics to solve technical problems in design, sales, construction, electronics, research and development, and/or manufacturing. Their work is more practically oriented than that of engineers and emphasizes solving industrial problems using engineering theories.

Engineering technologists work in quality control, inspecting products and processes, conducting tests, or collecting data. In industry, they may assist in product design, bridge and highway design, infrastructure project administration, development or production.

Engineering technologists who work in research and development build or set up equipment, prepare and conduct experiments, collect data, calculate or record results, and help engineers or scientists in other ways, such as making prototype versions of newly designed equipment. They also assist in design work, often using computer-aided design (CAD) equipment.

Most engineering technologists specialize in certain areas of industry, learning skills, and working in the same disciplines as engineers. Graduates of this program will be proficient in materials, processes,

current technologies, applied calculus, applied science, communications, and an area of technical specialization as identified in the program of study.

### Career Opportunities

Graduates in the engineering technology program work in a variety of fields. They may work in research and development, quality control, product design, production, data collection, testing, electronics manufacturing, networking, broadcasting, and/or computer software/hardware systems, and infrastructure construction.

The flexibility of UCM's Engineering Technology degree program allows students to specialize in the option area of their choice. Career opportunities are excellent.

### Student Involvement

Several student organizations relate to this degree program. The student chapter of the American Design Drafting Association and the American Institute of Building Design relates to the Mechanical Option. The Society of Manufacturing Engineers (SME) chapter relates to the Industrial Engineering Option. The Student Organization of Construction Managers (SOCM) relates to the Civil Engineering Technology Option.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide assistance with writing cover letters and resumes and offer a career library, mock interviews, and

career counseling. The office also serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students](http://ucmo.edu/career/students).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information, contact the School of Technology, Grinstead 9, UCM, Warrensburg, MO 64093 at 660-543-4439. The school's web addresses are [ucmo.edu/technology](http://ucmo.edu/technology) and [facebook.com/ucmsot](https://facebook.com/ucmsot).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Engineering Technology, Option 1 (Electronics Engineering Technology) B.S. Degree (43-01282)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	CADD 1105 Basic AutoCAD	1
ENGT 1500 Orientation to Engineering Technology*	1	CTE 1300 Introduction to Engineering Design (3) or CADD 1110 Fundamentals of Drafting (2)	2-3
ET 1010 Applied Electricity	4	ENGL 1030 Composition II	3
ET 1026 DC Circuit Analysis*	4	ENGT 1000 Principles of Engineering or ENGT 1120 Welding	3
MATH 1112 College Trigonometry**	2	ET 1027 AC Circuit Analysis*	4
<b>Semester Total</b>	<b>14</b>	MATH 1131 Applied Calculus	3
		<b>Semester Total</b>	<b>16-17</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ECON 1010 Principles of Macroeconomics	3	CHEM 1103 Introduction to the Sciences: Chemistry	3
ENGT 1012 Global Production Technology	2	ET 2048 Active Electronic Devices*	4
ENGT 1501 Seminar in Engineering Technology	1	ET 2065 Computer Programming for Electronics Tech.*	4
ET 1050 Digital Principles & Applications*	4	General Education	3
PHYS 1101 College Physics I	4	<b>Semester Total</b>	<b>14</b>
General Education	3		
<b>Semester Total</b>	<b>17</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
ENGT 1501 Seminar in Engineering Technology	1	CTE 3060 Technical Writing	3
ENGT 3520 Engineering Economy	3	ENGT 4580 Quality Systems	3
ET 2060 Microprocessors: Theory & Applications*	4	ET 3014 Analog-Digital Circuitry*	4
ET 3017 Industrial Electronics*	4	General Education	6
General Education	3	<b>Semester Total</b>	<b>16</b>
<b>Semester Total</b>	<b>15</b>		
<b>Junior Year - Summer Semester</b>	<b>Hrs.</b>		
SOT 3022 Internship in Technology	3		
<b>Semester Total</b>	<b>3</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
COMM 3010 Interpersonal Communication	3	ENGT 3530 Inspection and Quality Control	3
ENGT 4520 Robotics and Automation	3	ICAP 4110 Engineering Technology Problem Solving	3
ET 3020 Circuit Analysis & Implementation*	4	INDM 4250 Project Management	3
ET 3041 Communication Systems*	4	General Education	6
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>15</b>

**Engineering Technology, Option 1 (Electronics Engineering Technology) B.S. Degree - 124-125 hours**

- \*This class is only offered during the semester indicated.
- \*\*Enrollment in MATH 1112 assumes you have met the prerequisite MATH requirements in your high school curriculum. If you have not met these requirements MATH 1111 or proper MATH placement will be required per University planned placement guidelines.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

School of Technology

# ENGINEERING TECHNOLOGY

## BACHELOR OF SCIENCE DEGREE, OPTION 2: MECHANICAL ENGINEERING TECHNOLOGY PRODUCT DESIGN

University of Central Missouri's Engineering Technology degree allows students to specialize in one of the following option areas: Electronics Engineering Technology, Mechanical Engineering Technology, Industrial Engineering Technology, and Civil Engineering Technology.

Engineering technologists use the principles and theories of science, engineering, and mathematics to solve technical problems in design, sales, construction, electronics, research and development, and/or manufacturing. Their work is more practically oriented than that of engineers and emphasizes solving industrial problems using engineering theories.

Engineering technologists work in quality control, inspecting products and processes, conducting tests, or collecting data. In industry, they may assist in product design, bridge and highway design, infrastructure project administration, development or production.

Engineering technologists who work in research and development build or set up equipment, prepare and conduct experiments, collect data, calculate or record results, and help engineers or scientists in other ways, such as making prototype versions of newly designed equipment. They also assist in design work, often using computer-aided design (CAD) equipment.

Most engineering technologists specialize in certain areas of industry, learning skills, and working in the same disciplines as engineers. Graduates of this program will be proficient in materials, processes,

current technologies, applied calculus, applied science, communications, and an area of technical specialization as identified in the program of study.

### Career Opportunities

Graduates in the engineering technology program work in a variety of fields. They may work in research and development, quality control, product design, production, data collection, testing, electronics manufacturing, networking, broadcasting, and/or computer software/hardware systems, and infrastructure construction.

The flexibility of UCM's Engineering Technology degree program allows students to specialize in the option area of their choice. Career opportunities are excellent.

### Student Involvement

Several student organizations relate to this degree program. The student chapter of the American Design Drafting Association and the American Institute of Building Design relates to the Mechanical Option. The Society of Manufacturing Engineers (SME) chapter relates to the Industrial Engineering Option. The Student Organization of Construction Managers (SOCM) relates to the Civil Engineering Technology Option.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide assistance with writing cover letters and resumes and offer a

career library, mock interviews, and career counseling. The office also serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students](http://ucmo.edu/career/students).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information, contact the School of Technology, Grinstead 9, UCM, Warrensburg, MO 64093 at 660-543-4439. The school's web addresses are [ucmo.edu/technology](http://ucmo.edu/technology) and [facebook.com/ucmsot](https://facebook.com/ucmsot).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Engineering Technology, Option 2 (Mech. Eng. Tech. - Product Design) B.S. Degree (43-02282)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CADD 1105 Basic AutoCAD	1	CADD 1120 Machine Drafting*	3
CTE 1300 Introduction to Engineering Design (3) or CADD 1110 Fundamentals of Drafting (2)	2-3	CADD 2170 Introduction to Computer-Aided Drafting	2
ENGT 1000 Principles of Engineering or ENGT 1120 Welding	3	ENGL 1020 Composition I	3
ENGT 1500 Orientation to Engineering Technology*	1	ET 1010 Applied Electricity	4
ENGT 1510 Introduction to Manufacturing Processes*	3	MATH 1131 Applied Calculus	3
MATH 1112 College Trigonometry**	2	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>12-13</b>		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
CMGT 2020 Statics	3	CHEM 1103 Introduction to the Sciences: Chemistry	3
ENGL 1030 Composition II	3	CMGT 3020 Applied Strength of Materials	3
ENGT 1012 Global Production Technology	2	ECON 1010 Principles of Macroeconomics	3
ENGT 1501 Seminar in Engineering Technology	1	ENGT 2530 Machine Tool Technology	3
ENGT 2040 Engineering Materials Science	4	General Education	3
PHYS 1101 College Physics I	4	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>17</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
CADD 3124 Production Design Drafting*	3	CADD 4174 Machine Design*	3
CADD 4170 CAD & Design for Engineering Technology	3	CADD 4124 Geometric Dim. & Tol. for Engineering Tech.*	2
COMM 3010 Interpersonal Communication	3	ENGT 3530 Inspection and Quality Control	3
CTE 3060 Technical Writing	3	General Education	6
ENGT 1501 Seminar in Engineering Technology	1	<b>Semester Total</b>	<b>14</b>
General Education	3		
<b>Semester Total</b>	<b>16</b>		
<b>Junior Year - Summer Semester</b>	<b>Hrs.</b>		
SOT 3022 Internship in Technology	3		
<b>Semester Total</b>	<b>3</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
CADD 4175 Advanced 3D Analysis & Rapid Prototyping*	3	ENGT 4580 Quality Systems	3
ENGT 3520 Engineering Economy	3	ICAP 4110 Engineering Technology Problem Solving	3
INDM 4250 Project Management	3	Departmentally Approved Upper-Level Major Elective***	5
ATM 4032 Hydraulics & Pneumatics	3	General Education	6
General Education	3	<b>Semester Total</b>	<b>17</b>
<b>Semester Total</b>	<b>15</b>		

**Engineering Technology, Option 2 (Mechanical Eng. Tech. - Product Design) B.S. Degree - 124-125 hours**

- \*This class is only offered during the semester indicated.
- \*\*Enrollment in MATH 1112 assumes you have met the prerequisite MATH requirements in your high school curriculum. If you have not met these requirements MATH 1111 or proper MATH placement will be required per University planned placement guidelines.
- \*\*\*See departmental advisor for a listing of the approved elective courses within the major.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

School of Technology

# ENGINEERING TECHNOLOGY

BACHELOR OF SCIENCE DEGREE, OPTION 3 INDUSTRIAL ENGINEERING TECHNOLOGY

University of Central Missouri's Engineering Technology degree allows students to specialize in one of the following option areas: Electronics Engineering Technology, Mechanical Engineering Technology, Industrial Engineering Technology, and Civil Engineering Technology.

Engineering technologists use the principles and theories of science, engineering, and mathematics to solve technical problems in design, sales, construction, electronics, research and development, and/or manufacturing. Their work is more practically oriented than that of engineers and emphasizes solving industrial problems using engineering theories.

Engineering technologists work in quality control, inspecting products and processes, conducting tests, or collecting data. In industry, they may assist in product design, bridge and highway design, infrastructure project administration, development or production.

Engineering technologists who work in research and development build or set up equipment, prepare and conduct experiments, collect data, calculate or record results, and help engineers or scientists in other ways, such as making prototype versions of newly designed equipment. They also assist in design work, often using computer-aided design (CAD) equipment.

Most engineering technologists specialize in certain areas of industry, learning skills, and working in the same disciplines as engineers. Graduates of this program will be proficient in materials, processes,

current technologies, applied calculus, applied science, communications, and an area of technical specialization as identified in the program of study.

### Career Opportunities

Graduates in the engineering technology program work in a variety of fields. They may work in research and development, quality control, product design, production, data collection, testing, electronics manufacturing, networking, broadcasting, and/or computer software/hardware systems, and infrastructure construction.

The flexibility of UCM's Engineering Technology degree program allows students to specialize in the option area of their choice. Career opportunities are excellent.

### Student Involvement

Several student organizations relate to this degree program. The student chapter of the American Design Drafting Association and the American Institute of Building Design relates to the Mechanical Option. The Society of Manufacturing Engineers (SME) chapter relates to the Industrial Engineering Option. The Student Organization of Construction Managers (SOCM) relates to the Civil Engineering Technology Option.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide assistance with writing cover letters and resumes and offer a

career library, mock interviews, and career counseling. The office also serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students](http://ucmo.edu/career/students).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information, contact the School of Technology, Grinstead 9, UCM, Warrensburg, MO 64093 at 660-543-4439. The school's web addresses are [ucmo.edu/technology](http://ucmo.edu/technology) and [facebook.com/ucmsot](https://facebook.com/ucmsot).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Engineering Technology, Option 3 (Industrial Engineering Technology), B.S. Degree (43-03282)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CADD 1105 Basic AutoCAD	1	ENGL 1030 Composition II	3
CTE 1300 Introduction To Engineering Design (3) or CADD 1110 Fundamentals of Drafting (2)	2-3	ENGT 2040 Engineering Materials Science	4
ENGL 1020 Composition I	3	ENGT 2530 Machine Tool Technology	3
ENGT 1120 Welding	3	MATH 1131 Applied Calculus	3
ENGT 1500 Orientation to Engineering Technology*	1	General Education	3
ENGT 1510 Introduction to Manufacturing Processes	2	<b>Semester Total</b>	<b>16</b>
MATH 1112 College Trigonometry**	3		
<b>Semester Total</b>	<b>15-16</b>		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ENGT 1012 Global Production Technology	2	CADD 1120 Machine Drafting	3
ENGT 1501 Seminar in Engineering Technology	1	CHEM 1103 Introduction to the Sciences: Chemistry	3
ENGT 2600 Lean Enterprises	3	ECON 1010 Principles of Macroeconomics	3
ET 1010 Applied Electricity	4	ENGT 3530 Inspection & Quality Control*	3
PHYS 1101 College Physics I	4	ENGT 3562 Computer Numerical Control*	3
General Education	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>17</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
CTE 3060 Technical Writing	3	CADD 4124 Geometric Dim. & Tol. Principles for Eng. Tech.	2
ENGT 1501 Seminar in Engineering Technology	1	COMM 3010 Interpersonal Communication	3
ET 1050 Digital Principles & Applications*	4	ENGT 3120 Advanced Welding Technology	3
INDM 4240 Facilities Engineering	3	ENGT 3520 Engineering Economy	3
General Education	3	General Education	3
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>14</b>
<b>Junior Year - Summer Semester</b>	<b>Hrs.</b>		
SOT 3022 Internship in Technology	3		
<b>Semester Total</b>	<b>3</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
ATM 4032 Hydraulics & Pneumatics	3	ENGT 4580 Quality Systems	3
ENGT 4520 Robotics & Automation*	3	ENGT 4750 Lean Six Sigma	3
ENGT 4590 Computer Integrated Manufacturing*	3	ICAP 4110 Engineering Technology Problem Solving*	3
INDM 4250 Project Management	3	General Education	6
General Education	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		

**Engineering Technology, Option 3 (Industrial Engineering Technology), B.S. Degree – 124-125 hours**

- \*This class is only offered during the semester indicated.
- \*\*Enrollment in MATH 1112 assumes you have met the prerequisite MATH requirements in your high school curriculum. If you have not met these requirements MATH 1111 or proper MATH placement will be required per University planned placement guidelines.
- \*\*\*See departmental advisor for a listing of the approved elective courses within the major.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Health, Science, and Technology

School of Technology

# ENGINEERING TECHNOLOGY

BACHELOR OF SCIENCE DEGREE, OPTION 4: CIVIL ENGINEERING TECHNOLOGY,  
INFRASTRUCTURE PROJECT ADMIN.

University of Central Missouri's Engineering Technology degree allows students to specialize in one of the following option areas: Electronics Engineering Technology, Mechanical Engineering Technology, Industrial Engineering Technology, and Civil Engineering Technology.

Engineering technologists use the principles and theories of science, engineering, and mathematics to solve technical problems in design, sales, construction, electronics, research and development, and/or manufacturing. Their work is more practically oriented than that of engineers and emphasizes solving industrial problems using engineering theories.

Engineering technologists work in quality control, inspecting products and processes, conducting tests, or collecting data. In industry, they may assist in product design, bridge and highway design, infrastructure project administration, development or production.

Engineering technologists who work in research and development build or set up equipment, prepare and conduct experiments, collect data, calculate or record results, and help engineers or scientists in other ways, such as making prototype versions of newly designed equipment. They also assist in design work, often using computer-aided design (CAD) equipment.

Most engineering technologists specialize in certain areas of industry, learning skills, and working in the same disciplines as engineers. Graduates of this program will be proficient in materials, processes,

current technologies, applied calculus, applied science, communications, and an area of technical specialization as identified in the program of study.

### Career Opportunities

Graduates in the engineering technology program work in a variety of fields. They may work in research and development, quality control, product design, production, data collection, testing, electronics manufacturing, networking, broadcasting, and/or computer software/hardware systems, and infrastructure construction.

The flexibility of UCM's Engineering Technology degree program allows students to specialize in the option area of their choice. Career opportunities are excellent.

### Student Involvement

Several student organizations relate to this degree program. The student chapter of the American Design Drafting Association and the American Institute of Building Design relates to the Mechanical Option. The Society of Manufacturing Engineers (SME) chapter relates to the Industrial Engineering Option. The Student Organization of Construction Managers (SOCM) relates to the Civil Engineering Technology Option.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide assistance with writing cover letters and resumes and offer a

career library, mock interviews, and career counseling. The office also serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students](http://ucmo.edu/career/students).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

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For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

### Engineering Technology, Option 4 (Civil Engineering Tech., Infrastructure Project Admin. Emphasis) B.S. Degree (43-04282)

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<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CADD 1105 Basic AutoCAD	1	CADD Structural Drafting	3
CTE 1300 Introduction to Engineering Design (3) or CADD 1110 Fundamentals of Drafting (2)	2-3	CHEM 1103 Introduction to the Sciences: Chemistry or EASC 1004 Introduction to the Sciences: Geology	3-4
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
ENGT 1000 Principles of Engineering or ENGT 1120 Welding	3	MATH 1131 Applied Calculus	3
ENGT 1012 Global Production Technology	2	General Education	3
ENGT 1500 Orientation to Engineering Technology*	1	<b>Semester Total</b>	<b>15-16</b>
MATH 1112 College Trigonometry**	2		
<b>Semester Total</b>	<b>14-15</b>		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
CMGT 2020 Statics	3	CMGT 3020 Applied Strengths of Materials	3
ENGT 1501 Seminar in Engineering Technology	1	CMGT 2325 Project Cost Estimating	3
ENGT 2040 Engineering Material Sciences	4	EASC 2100 Engineering Geology	4
PHYS 1101 College Physics I	4	ECON 1010 Principles of Macroeconomics	3
General Education	3	ET 1010 Applied Electricity	4
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>17</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
CMGT 2340 Surveying and Construction Layout	3	CADD 3150 Civil Drafting	3
ENGT 1501 Seminar in Engineering Technology	1	COMM 3010 Interpersonal Communication	3
ENGT 3520 Engineering Economy*	3	CMGT 4380 Heavy Construction Methods and Materials	3
ENGT 4140 Soils and Foundation Design*	3	CTE 3060 Technical Writing	3
INDM 4250 Project Management or CMGT 3320 Principles of Construction Management	3	ENGT 4120 Hydrology and Drainage Design*	3
General Education	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>16</b>		
<b>Junior Year - Summer Semester</b>	<b>Hrs.</b>		
SOT 3022 Internship in Technology	3		
<b>Semester Total</b>	<b>3</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
CMGT 4310 Construction Safety	3	ENGT 4580 Quality Systems	3
ENGT 4160 Transportation Systems Design*	3	ICAP 4110 Engineering Technology Problem Solving	3
ENGT 4180 Water and Wastewater Systems Design*	3	General Education	6
General Education	6	<b>Semester Total</b>	<b>12</b>
<b>Semester Total</b>	<b>15</b>		

### Engineering Technology, Option 4 (Civil Engineering Technology, Infrastructure Project Admin.) B.S. Degree - 122-124 hours

- \*This class is only offered during the semester indicated.
- \*\*Enrollment in MATH 1112 assumes you have met the prerequisite MATH requirements in your high school curriculum. If you have not met these requirements MATH 1111 or proper MATH placement will be required per University planned placement guidelines.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

School of Technology

# ENGINEERING TECHNOLOGY

## BACHELOR OF SCIENCE DEGREE, OPTION 4: CIVIL ENGINEERING TECHNOLOGY, DESIGN

University of Central Missouri's Engineering Technology degree allows students to specialize in one of the following option areas: Electronics Engineering Technology, Mechanical Engineering Technology, Industrial Engineering Technology, and Civil Engineering Technology.

Engineering technologists use the principles and theories of science, engineering, and mathematics to solve technical problems in design, sales, construction, electronics, research and development, and/or manufacturing. Their work is more practically oriented than that of engineers and emphasizes solving industrial problems using engineering theories.

Engineering technologists work in quality control, inspecting products and processes, conducting tests, or collecting data. In industry, they may assist in product design, bridge and highway design, infrastructure project administration, development or production.

Engineering technologists who work in research and development build or set up equipment, prepare and conduct experiments, collect data, calculate or record results, and help engineers or scientists in other ways, such as making prototype versions of newly designed equipment. They also assist in design work, often using computer-aided design (CAD) equipment.

Most engineering technologists specialize in certain areas of industry, learning skills, and working in the same disciplines as engineers. Graduates of this program will be proficient in materials, processes,

current technologies, applied calculus, applied science, communications, and an area of technical specialization as identified in the program of study.

### Career Opportunities

Graduates in the engineering technology program work in a variety of fields. They may work in research and development, quality control, product design, production, data collection, testing, electronics manufacturing, networking, broadcasting, and/or computer software/hardware systems, and infrastructure construction.

The flexibility of UCM's Engineering Technology degree program allows students to specialize in the option area of their choice. Career opportunities are excellent.

### Student Involvement

Several student organizations relate to this degree program. The student chapter of the American Design Drafting Association and the American Institute of Building Design relates to the Mechanical Option. The Society of Manufacturing Engineers (SME) chapter relates to the Industrial Engineering Option. The Student Organization of Construction Managers (SOCM) relates to the Civil Engineering Technology Option.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide assistance with writing cover letters and resumes and offer a

career library, mock interviews, and career counseling. The office also serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students](http://ucmo.edu/career/students).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information, contact the School of Technology, Grinstead 9, UCM, Warrensburg, MO 64093 at 660-543-4439. The school's web addresses are [ucmo.edu/technology](http://ucmo.edu/technology) and [facebook.com/ucmsot](https://facebook.com/ucmsot).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

### Engineering Technology, Option 4 (Civil Engineering Technology, Design Emphasis) B.S. Degree (43-04282)

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
CADD 1105 Basic AutoCAD	1	CADD Structural Drafting	3
CTE 1300 Introduction to Engineering Design (3) or CADD 1110 Fundamentals of Drafting (2)	2-3	CHEM 1103 Introduction to the Sciences: Chemistry or EASC 1004 Introduction to the Sciences: Geology	3-4
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
ENGT 1000 Principles of Engineering or ENGT 1120 Welding	3	MATH 1131 Applied Calculus	3
ENGT 1012 Global Production Technology	2	General Education	3
ENGT 1500 Orientation to Engineering Technology*	1	<b>Semester Total</b>	<b>15-16</b>
MATH 1112 College Trigonometry**	2		
<b>Semester Total</b>	<b>14-15</b>		
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
CADD 4162 Commercial Architectural Design/Drafting (BIM)	3	CMGT 3020 Applied Strengths of Materials	3
CMGT 2020 Statics	3	CMGT 2325 Project Cost Estimating	3
ENGT 1501 Seminar in Engineering Technology	1	EASC 2100 Engineering Geology	4
PHYS 1101 College Physics I	4	ECON 1010 Principles of Macroeconomics	3
General Education	6	ET 1010 Applied Electricity	4
<b>Semester Total</b>	<b>17</b>	<b>Semester Total</b>	<b>17</b>
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
CADD 2171 Introduction to MicroStation	2	CADD 3150 Civil Drafting	3
CMGT 2340 Surveying and Construction Layout	3	COMM 3010 Interpersonal Communication	3
ENGT 1501 Seminar in Engineering Technology	1	CMGT 3350 Building Structures: Methods and Materials	3
ENGT 3520 Engineering Economy*	3	CTE 3060 Technical Writing	3
ENGT 4140 Soils and Foundation Design*	3	ENGT 4120 Hydrology and Drainage Design*	3
INDM 4250 Project Management or CMGT 3320 Principles of Construction Management	3	<b>Semester Total</b>	<b>15</b>
General Education	3		
<b>Semester Total</b>	<b>18.5</b>		
<b>Junior Year</b> - Summer Semester	<b>Hrs.</b>		
SOT 3022 Internship in Technology	3		
<b>Semester Total</b>	<b>3</b>		
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs.</b>
CADD 4150 Applied Civil Drafting	3	ENGT 4580 Quality Systems	3
ENGT 4160 Transportation Systems Design*	3	ICAP 4110 Engineering Technology Problem Solving	3
GEOG 4220 Geographic Information Systems I*	3	General Education	6
General Education	3	<b>Semester Total</b>	<b>12</b>
<b>Semester Total</b>	<b>12</b>		

### Engineering Technology, Option 4 (Civil Engineering Technology, Design Emphasis) B.S. Degree - 123-125 hours

- \*This class is only offered during the semester indicated.
- \*\*Enrollment in MATH 1112 assumes you have met the prerequisite MATH requirements in your high school curriculum. If you have not met these requirements MATH 1111 or proper MATH placement will be required per University planned placement guidelines.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Arts, Humanities, and Social Sciences

Department of English and Philosophy

# ENGLISH

## BACHELOR OF ARTS DEGREE

The two degree options for English majors are housed in the Department of English and Philosophy, a large department with a diverse faculty dedicated to teaching a wide variety of courses in literature, writing, linguistics, and critical thought. A number of students from across the university maintain their interest in reading, writing, and critical thinking by choosing to minor in English, creative writing, or philosophy. These minors complement almost any other major.

### Bachelor of Arts in English

With flexibility and creativity, an English major can use this versatile degree to land a job in business, government, or the non-profit sector. Employers need employees with the analytical skills and writing abilities students develop by majoring in English. This degree also provides a good foundation for further study at the graduate and professional levels. Law, library science, and teaching English as a second language are among the fields that have attracted our graduates. Of course, some BA in English graduates pursue graduate studies in literature to teach English at the post-secondary level.

The BA in English degree program consists of courses in Shakespeare, History of the English Language, and literature (American, British and world). Students have considerable flexibility in choosing which courses will fulfill the BA in English requirements.

### Bachelor of Science in English Education

Central Missouri's BSE in English program is accredited by the National Council for Accreditation of Teacher Education and the Missouri Department of Elementary and Secondary Education. This degree leads to certification for teaching high school English in Missouri. Certification may be transferable to other states, depending on their requirements.

An attractive feature of the BSE degree is the program's excellent placement record; nearly all of our students who have sought a teaching job in Missouri have found one. Graduates find their work with high school students challenging and rewarding. Like the BA, the BSE also provides a good foundation for graduate work in English and other fields.

The courses required for the BSE degree include courses in American, British, and World Literature; Composition and Evaluation, Advanced Rhetoric, English Grammar, History of the English Language, Literature for Adolescents, and a block of professional education courses. During the last semester of undergraduate study, students perform supervised student teaching in a Missouri high school.

### Student Activities

Students in both degree programs are eligible to apply for membership in Sigma Tau Delta, the English Honor Society. Affiliated with the national organization, the local chapter serves as a social and service organization for English majors. Recent chapter activities include book sales, poetry readings, pizza parties, and theater trips.

English majors interested in creative writing can earn a minor in that area and participate in the editing process of *Pleiades: A Journal of New Writing*, the highly regarded, internationally distributed literary magazine produced by the department's award-winning creative writing faculty.

Faculty in all areas of the department work closely with students while maintaining their own research interests, and English majors generally get to know several faculty members well.

### Contact the Department

To learn more about majoring in English at UCM, contact the Department of English and Philosophy at 660-543-4425, visit the web page at [ucmo.edu/engphil](http://ucmo.edu/engphil), or stop by Martin 336.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**English Major, B.A. Degree (42-303)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
Modern Language Requirement*	3	Modern Language Requirement*	3
General Education	9	General Education	9
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
AE 1400 Freshman Seminar**	1		

<b>Sophomore Year - Fall Semester</b>	<b>Hrs</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs</b>
ENGL 2210 or 2215 British Literature	3	ENGL 2200 or 2205 American Literature	3
General Education	6	ENGL 2220 World Masterpieces*	3
Free Choice Elective	6	General Education	9
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

<b>Junior Year - Fall Semester</b>	<b>Hrs</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs</b>
ENGL 3240 Critical Approaches to Literature	3	ENGL 3120 History of English Language	3
ENGL British Literature A or B Elective***	3	ENGL 4360 Shakespeare	3
Minor Coursework	6	ENGL American Literature A or B Elective***	3
Free Choice Elective	3	Minor Coursework	6
<b>Semester Total</b>	<b>15</b>	Free Choice Elective	3
		<b>Semester Total</b>	<b>18</b>

<b>Senior Year - Fall Semester</b>	<b>Hrs</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs</b>
ENGL American Literature A or B Elective***	3	ICAP 4240 Literature and Its Discourses	3
ENGL British Literature A or B Elective***	3	Upper-Level ENGL Electives	6
Upper-Level ENGL Elective	3	Minor Coursework	3
Minor Coursework	6	Free Choice Elective	4
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>16</b>

**English Major, B.A. Degree - 124 hours**

- \*Refer to the Bachelor's Degree Requirements section of the catalog for the BA Modern Language requirements. This plan is based on 6 hours of modern language and 3 hours of ENGL 2220 World Masterpieces.
- \*\*AE 1400 is a free choice elective and is highly recommended for academic success.
- \*\*\*See the Undergraduate Catalog for the choices that fulfill this requirement.
- This guide is based on a 21 hour minor. The number of free choice electives required will depend on the minor chosen.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Arts, Humanities, and Social Sciences

Department of English and Philosophy

# ENGLISH

## BACHELOR OF SCIENCE IN EDUCATION DEGREE

This program is designed for University of Central Missouri students who want to teach English and leads to certification to teach high school English in Missouri. Certification may also be transferable to other states, depending on their requirements.

The courses required for this program include composition and evaluation, advanced rhetoric, English grammar, history of the English language, literature for adolescents, and a block of professional education courses. English education majors also choose several courses in American, British, and world literature. During their last semester, students in this program student teach in an area high school. All teacher education programs at UCM are accredited by the National Council for Accreditation of Teacher Education and by the Missouri Department of Elementary and Secondary Education.

This degree also provides a good foundation for graduate work in English or another field.

### Career Opportunities

Graduates of this program enjoy a 100 percent placement record in Missouri.

### Student Activities

Students are eligible to apply for membership in Sigma Tau Delta, the English Honor Society. Affiliated with the national organization, the local

chapter serves as a social and service organization for English majors. Recent chapter activities include book sales, poetry readings, pizza parties, and theater trips. Students interested in creative writing may want to learn more about *Pleiades: A Journal of New Writing*, which is distributed nationally and produced by the department's award-winning creative writing faculty.

### About the Faculty

The Department of English and Philosophy has a diverse faculty dedicated to teaching a wide variety of courses in literature, writing, linguistics, and critical thought. Faculty in all areas of the department work closely with students while maintaining their own research interests, and English majors generally get to know several faculty members quite well.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide assistance with writing cover letters and resumes and offer a career library, mock interviews, and career counseling. The office also serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit

UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students](http://ucmo.edu/career/students).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### For More Information

To learn more contact the Department of English and Philosophy, Martin 336, UCM, Warrensburg, MO 64093; call 660-543-4425; or visit the department's web page at [ucmo.edu/englphil](http://ucmo.edu/englphil).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**English Education Major, B.S. in Ed. Degree (41-311)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs</b>
<b>ENGL 1020 Composition I</b>	3	<b>ENGL 1030 Composition II</b>	3
General Education	12	<b>POLS 1510 American Government</b>	3
<b>Semester Total</b>	<b>15</b>	<b>General Education Math</b>	3
AE 1400 Freshman Seminar*	1	General Education	6
		<b>Semester Total</b>	<b>15</b>

<b>Sophomore Year - Fall Semester</b>	<b>Hrs</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs</b>
EDFL 2240 Educational Psychology	3	ENGL 2200 or 2205 American Literature	3
EDFL 2100 Foundations of Education	2	ENGL 2220 World Masterpieces (General Education)	3
FLDX 2150 Introductory Field Experience	1	ENGL 3120 History of the English Language	3
ENGL 2210 or 2215 British Literature	3	<b>HIST 1350 or 1351 History of the United States</b>	3
ENGL 2830 Literature for Adolescents	3	General Education	2-3
<b>General Education Science w/lab</b>	4	<b>Semester Total</b>	<b>14-15</b>
<b>Semester Total</b>	<b>16</b>		

<b>Junior Year - Fall Semester</b>	<b>Hrs</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs</b>
EDSP 2100 Education of the Exceptional Child	2	EDFL 4300 Educational Measurement & Evaluation	2
ENGL 3110 English Grammar	3	ENGL 3040 Advanced Rhetoric	3
ENGL 3240 Critical Approaches to Literature	3	Upper-Level American Literature**	3
PSY 4230 Psychology of Adolescence	3	Upper-Level British Literature**	3
Upper-Level American Literature**	3	Upper-Level English Elective	6
Free Choice Electives	1-2	<b>Semester Total</b>	<b>17</b>
<b>Semester Total</b>	<b>15-16</b>		

<b>Senior Year - Fall Semester</b>	<b>Hrs</b>	<b>Senior Year - Spring Semester***</b>	<b>Hrs</b>
EDFL 4210 The Teaching of Reading in the Secondary School	2	ENGL 4820 Secondary Field Experience II	1
ENGL 4360 Shakespeare	3	ENGL 4890 Methods of Teaching English	2
ENGL 4840 Composition & Evaluation	3	FLDX 4595 Student Teaching Secondary I	5
EDFL 3500 Secondary Teaching & Behavioral Management	3	ICAP 4468 Student Teaching Secondary II	4
FLDX 3550 Practicum in Secondary Instruction	1	<b>Semester Total</b>	<b>12</b>
Upper-Level British Literature**	3		
<b>Semester Total</b>	<b>15</b>		

**English Education Major, B.S. in Ed. Degree - 120 hours**

- \* AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*See the current catalog for the choices that fulfill this requirement.
- \*\*\* The courses listed for this semester constitute the professional education (student teaching) block. The student should not take any other courses during this semester.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before enrollment in professional education classes and student teaching. The application for student teaching is due approximately one year in advance.

**Harmon College of Business and Professional Studies**  
Department of Management

AACSB Accredited

# ENTREPRENEURSHIP AND SOCIAL ENTERPRISE

## BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION DEGREE

The Department of Management in the Harmon College of Business and Professional Studies (HCBPS) at UCM offers students hands-on real experiences to help them prepare for a socially aware entrepreneurial career, a career in social enterprise, or both.

This major is unique in its focus on promoting new ventures that start from the ground up with practical, innovative and sustainable approaches to benefit society in general. No other university in Missouri or Kansas addresses for-profit entrepreneurship in a social enterprise setting. Courses are taught utilizing team-based learning and real experiences, rather than lecture, to give students both the theory and practice of entrepreneurship and social enterprise.

In the B.S.B.A. in Entrepreneurship and Social Enterprise, our students will use knowledge and skills from the program to:

- Design, launch and/or grow new businesses in a variety of sectors, return home to assist family businesses, or take on business development roles at growth-oriented companies.
- Interact with others to create business solutions and innovations with a social conscience, develop technology that is environmentally sustainable and tackle social problems with profitable solutions.
- Apply analysis and problem solving skills to provide meaningful and sustainable service to the University, community, and citizens of Missouri and the world.
- Develop skills and attitudes required for life-long learning and serving others.

### Qualified, Committed Faculty

We have highly qualified faculty with Ph.D.s and real entrepreneurial

business experience. Faculty are very committed to working with students to ensure their success. See our "How Your Management & Business Communication Faculty Can Help You" link [ucmo.edu/management](http://ucmo.edu/management).

### Team-Based, Experiential Learning Style of Instruction

Faculty members prepare students to work effectively and efficiently in team environments.

### The Integrative Business Experience (IBE)

(<http://ibe.ucmo.edu>)

The BSBA in Entrepreneurship and Social Enterprise requires the IBE. IBE classes create and operate start-up businesses (based on bank loans of up to \$5,000 per business) and manage hands-on service projects for non-profit organizations. IBE teams have donated approximately \$220,000 in profits to non-profit organizations and have completed service projects involving more than 15,000 hours for the community.

### Real-World Business Experience Internship Programs

Business majors participate in paid internships. The HCBPS Business Internship Center information is at <http://ucmo.edu/intern>.

### Course & Enterprise Collaborations

This major is unique in that it has office space for students to begin their social ventures in UCM's StartUp Center. It has business space in the MulePen, located in downtown Warrensburg, for students to begin startups and sell their innovative products. High performing students are matched with non-UCM business mentors for a 1-to-1 relationship that encourages leadership and entrepreneurial launches. Students also benefit from relationships with the Small Business Development office.

### Business Organizations

The most popular clubs for Entrepreneurship and Social Enterprise majors are Enactus (formerly SIFE) and DECA which any UCM major may join. Student business organizations are at [ucmo.edu/orgrequest/orglist.cfm](http://ucmo.edu/orgrequest/orglist.cfm)

### AACSB Accredited Degree

All UCM business programs are accredited by the AACSB International ([aacsb.edu](http://aacsb.edu)).

### Employer Interest in Entrepreneurship and Social Enterprise Majors

College recruiting is up 20% this year and is expected to continue to rise for the next 3-5 years. Entrepreneurship and Social Enterprise Majors would be hired by small firms, which represent 99.7% of all employers. Small startups generated 100% of net new jobs in the U.S. in the past 20 years, while large established firms eliminated more jobs than they hired. Other hiring employers include nonprofit, education, healthcare and government sectors. The number of nonprofit organizations grew 27 percent from 1994 to 2004, while the number of public charities grew at more than twice that rate.

### To Learn More

For more information contact the Harmon College of Business and Professional Studies, UCM, Warrensburg, MO 64093; [ucmo.edu/HCBPS](http://ucmo.edu/HCBPS); call the Department of Management at 660-543-4026 or HCBPS at 660-543-4560.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Entrepreneurship and Social Enterprise Major, B.S.B.A. Degree (46-331)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CIS 1600 Business Information Management*	3	COMM 1000 Public Speaking	3
ENGL 1020 Composition IMATH 1111 College Algebra*PSY 1100 Gen.	3	ECON 1010 Principles of Macroeconomics*	3
Psychology orSOC 1800 Gen. Sociology#	3	ENGL 1030 Composition II	3
General Education	3	General Education	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
AE 1400 or BADM 1400 Freshman Seminar**	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ACCT 2101 Principles of Financial Accounting*	3	ACCT 2102 Principles of Managerial Accounting*	3
ECON 1011 Principles of Microeconomics*	3	BLAW 2720 Legal Environment of Business*	3
FIN 2801 Business Statistics I*	3	General Education	10
General Education#	6	<b>Semester Total</b>	<b>16</b>
<b>Semester Total</b>	<b>15</b>	<b>Note: Complete all BSBA Admission requirements and apply for admission.*</b>	
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
ENT 3800 Social Enterprise for Entrepreneurs (fall only)	3	ENT 3360 Commercialization (spring only)	3
<b>(IBE Block-below)**</b> CIS 3630 Management Information Systems***	3	FIN 3801 Business Statistics II	3
MGT 3315 Management of Organizations***	3	FIN 3850 Principles of Finance	3
MKT 3405 Marketing Policy***	3	MGT 3325 Business Communications	3
IBE Practicum (CIS 3685/MKT 3485/MGT 3385)***	3	MGT 3360 Production/Operations Management	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
MGT 4310 Quality & Innovation	3	ENT 4315 Entrepreneurial Business Planning (spring only)	3
MKT 4470 Marketing Research	3	ICAP 4357 Organizational Policy & Strategy	3
Major Electives##	3	Major Electives##	3
Free Choice Electives (internship recommended)	7	Free Choice Electives (internship recommended)**	4
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>13</b>

**Entrepreneurship and Social Enterprise Major, B.S.B.A. Degree - 120 Hours**

- \*Students in this major must complete eight preadmission courses with a grade of C or higher and obtain a 2.25 cumulative GPA and a 2.25 in these specific courses, for admission to the degree program. These courses are recommended for completion during the freshman and sophomore years. These courses are indicated with an (\*).
- \*\*AE or BADM 1400 (1 hr.) is highly recommended for academic success. AE or BADM 1400 counts as a free choice elective. If chosen, 1 less hour of free choice elective will be required in the junior or senior year.
- \*\*\***All Entrepreneurship and Social Enterprise majors must enroll in the IBE Block.** This includes the IBE Practicum (MGT 3385, MKT 3485 or CIS 3685) concurrently with the IBE sections of MGT 3315, MKT 3405 and CIS 3630. This is typically done during the fall of the junior year. Prerequisites for the IBE block include: ACCT 2101, CIS 1600, and junior standing.
- #In the General Education curriculum: SOC 1800 is recommended over PSY 1100 in Division II Area B; WS 2000 is recommended in Division II Area D; and BLAW 2750 or PHIL 2300 are recommended in Division III.
- ##Six hours of major electives are required. See the course listing in the 2013 Undergraduate Catalog for course choices.
- A 2.25 cumulative GPA is required for graduation with in this major.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

School of Technology

# FASHION: TEXTILES AND CLOTHING IN BUSINESS

## BACHELOR OF SCIENCE DEGREE

The Fashion: Textiles and Clothing in Business program at the University of Central Missouri is nationally accredited by the American Association for Family and Consumer Sciences. The program is aligned with national standards to better prepare students for a career in the fashion/textile industry. The ever-changing field offers students challenging and diverse opportunities ranging from employment with large corporations to being a self-employed entrepreneur. Graduates hold positions such as visual merchandisers, buyers, store/department retail managers, stylists, manufacturers' representatives, and fashion editors.

This program is designed to give students a well-rounded knowledge base in an applied learning environment. It includes a combination of area-specific fashion/textiles courses that are sequenced throughout the entire curriculum and include textile design, product development, sourcing and distribution, visual merchandising, wholesale markets, consumer consumption, and retail operations. Students will progress from one course to the next and apply both problem-solving and critical thinking skills. In addition to required general education courses, students may select a built-in minor in Business Administration or Marketing to support the major field.

### Professional Work Experience and Internships

Students have an opportunity to gain "hands-on" work experience outside the classroom in a specialty field of choice. Recommended by the Fashion Advisory Board, students

are required to complete Professional Work Experience at the sophomore level and an Internship at the senior level. National corporations, government agencies and small business entrepreneurs are partnered with the Fashion program to serve as external evaluators and provide feedback for improvement. Students hold jobs with companies such as Anthropologie, Buckle, Maurices, Limited Corporation, H&M, Teen Vogue, and Macy's, just to name a few. Students often advance from their internship experience into employment at the completion of their degree.

### About the Faculty

All Fashion: Textiles and Clothing in Business courses are taught by highly-qualified faculty members who have degrees in textile and apparel merchandising/management. Faculty members possess current industry experience as buyers that provide students with information necessary for school and business relationships. Some faculty also retain professional certifications in related fields. Faculty members are engaged in scholarly activities and attend professional meetings to network with education and business representatives. Faculty members advise and work one-on-one with students to assist in planning degree programs.

### Student Involvement

Students are actively involved in campus and community activities. The Fashion Business Association is a registered student organization that contributes to social needs through charity events and fundraising projects. Students gain valuable leadership skills and

networking opportunities while socializing with others.

### Field Trips and Study Tours

Fashion Group International, a widely recognized professional organization, has supported Career Day at local Chapters. Each year, students can participate in a field trip to Chicago for the purpose of gaining knowledge from industry experts and analyzing fashion trends on the Magnificent Mile. Another option is the MAGIC Show held each year in Las Vegas that focuses on the sourcing and buying markets.

### Placement

UCM's Office of Career Services helps students who seek employment in the fashion industry. The office provides students the opportunity to schedule interviews with potential employers. The Office of Career Services also invites representatives from business, government, and industry to participate in Career Expos.

### To Learn More

For more information, contact the School of Technology, Grinstead 009, UCM, Warrensburg, MO 64093 at 660-543-4439. The school's websites are [ucmo.edu/technology](http://ucmo.edu/technology) and [facebook.com/ucmsot](https://facebook.com/ucmsot).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Fashion: Textiles & Clothing in Business Major, B.S. Degree (43-118)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CFD 1010 Individual & Family Relationships	3	CHEM 1103 or 1104 Introduction to the Sciences: Chemistry	3-4
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
FAME 1400 Introduction to Fashion Merchandising	3	FAME 1450 Fundamentals of Apparel Design and Construction	3
FAME 1445 Freshman Seminar in Fashion*	1	General Education	3
General Education	6	<b>Semester Total</b>	<b>12-13</b>
<b>Semester Total</b>	<b>16</b>		
<b>Summer – After Freshman or Sophomore Year</b>	<b>Hrs.</b>		
FAME 2440 Professional Work Experience*#	3		
<b>Semester Total</b>	<b>3</b>		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ECON 1010 Principles of Macroeconomics	3	FAME 2425 Apparel Quality Analysis*	3
FAME 2442 Textile Science	3	Minor Coursework (BLAW 2720 required for both minors)**	3
FAME 2445 Sophomore Seminar in Fashion*	1	General Education	9
General Education	6	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>13</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
FAME 3415 Product Development for Consumers*	3	ACCT 2101 Principles of Financial Accounting	3
FAME 3430 Professional Image Management*	3	FAME 3435 Fashion Buying*	3
FAME 3434 Fashion History of Costume*	3	FAME 3440 Fashion Promotion and Visual Merchandising*	3
FAME 3445 Junior Seminar in Fashion*	1	IGEN 3116 Creative Problem Solving	3
Minor Coursework (MKT 3405 required for both minors)**	3	Minor Coursework**	3
General Education	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>16</b>		
<b>Summer – After Junior or Senior Year</b>	<b>Hrs.</b>		
FAME 4490 Internship in FAME*/***	3		
<b>Semester Total</b>	<b>3</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
FAME 4410 Materials for Interior Furnishings*	3	FAME 4433 International Apparel Technology*	3
FAME 4425 Fashion Entrepreneurship*	3	FAME 4440 Sustainability for Consumer Products*	3
Minor Coursework**	6	FAME 4445 Senior Seminar in FAME*	3
General Education	3	Minor Coursework**	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>12</b>

**Fashion: Textiles & Clothing in Business Major, B.S. Degree - 120 hours**

- \*This class is only offered during the semester indicated.
- #FAME 2440 Professional Work Experience is a prerequisite to FAME 4490 Internship in FAME. The two courses cannot be taken during the same summer semester.
- \*\*This major requires a minor in either Business Administration or Marketing. If the Business Administration minor is selected, take CIS 1600 (3 hours) to fulfill the technology requirement in general education. ECON 1010 required by the major will also count in both minors.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## Harmon College of Business and Professional Studies

Department of Economics, Finance, and Marketing

AACSB Accredited

# FINANCE

## BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION DEGREE

A Bachelor of Science in Business Administration with a major in finance prepares students for dynamic careers in a variety of finance positions. The finance field consists of three basic areas – Investments, Business (Corporate) Finance, Banking and Related Institutions. Students receiving a BSBA in Finance are given a broad-based knowledge of finance which they may supplement by focusing on a particular area through choice of electives in finance. Electives include topics in international finance, derivative securities, bank management, and insurance among others. This creates a number of career options, or choices for advanced education for undergraduates.

In addition to rigorous training in finance, the BSBA requirements provide an overview of all business areas. Students are required to complete courses in accounting, computer information systems, management, and marketing. This extensive training, along with the Harmon College of Business and Professional Studies' prestigious accreditation by AACSB-International, ensure students are well-prepared for a rewarding career in finance and business.

### About the Faculty

Finance classes at UCM are instructed by highly qualified faculty members with a diverse set of training and work experiences. These faculty members are actively engaged in academic research, serve as professional consultants, and are involved in numerous professional organizations. These activities, along with the accrediting standards set by the AACSB-International, guarantee students that faculty members possess cutting edge finance knowledge. Finance faculty members are committed to personalized attention for each finance major.

### Student Involvement

Students pursuing a finance major have access to a variety of campus organizations and events. The department sponsors the Student Finance Association (SFA), which regularly sponsors on-campus speakers in finance and off-campus trips to agencies such as the Federal Reserve Bank of Kansas City and the Kansas City Board of Trade. The SFA also sponsors a student chapter of the Financial Management Association International which allows qualified students to join the highly regarded Financial Management Association National Honor Society.

In addition to on-campus activities, students are encouraged to complete an internship in finance in order to gain greater practical skills and insight during the completion of the undergraduate degree.

### Special Facilities

The department's offices are housed in the Dockery Building. Classrooms, however, are located in the state-of-the-art Ward Edwards Building, which includes a large computer lab, group computer rooms, group and individual study rooms, student organization offices, and common areas for students. Classrooms are equipped with up-to-date computer hardware and software. In addition to the standard classrooms, the department maintains a statistics classroom in which each student workstation is equipped with a notebook computer, allowing for hands-on learning of the procedures available in statistical software packages. Further, students majoring in finance must complete projects utilizing extensive financial databases such as the Center for Research in Securities Prices (CRSP) stock price database and the Standard and Poor's Research Insight database of corporations' financial statements.

### Placement

Students in finance remain in high demand by employers. Graduates with a BSBA in Finance from UCM have obtained employment in financial planning, insurance, banking, corporate finance, and investment services in locations such as Kansas City, St. Louis, New York City and Chicago. Employers have ranged in size from multi-billion dollar Fortune 500 companies to single-owner entrepreneurs.

UCM's Office of Career Services assists students in finding employment by maintaining contacts with a variety of employers. Students are encouraged to register with Career Services early.

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information, contact the Department of Economics, Finance, and Marketing, UCM, Warrensburg, MO 64093 at 660-543-4246. The department's web address is [ucmo.edu/efm](http://ucmo.edu/efm).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

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**Finance Major, B.S.B.A. Degree (46-267)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CIS 1600 Business Information Management*	3	COMM 1000 Public Speaking	3
ENGL 1020 Composition I	3	ECON 1010 Principles of Macroeconomics*	3
MATH 1111 College Algebra*	3	ENGL 1030 Composition II	3
PSY 1100 Gen. Psychology or SOC 1800 Gen. Sociology	3	General Education	6
General Education	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		
AE 1400 or BADM 1400 Freshman Seminar**	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ACCT 2101 Principles of Financial Accounting*	3	ACCT 2102 Principles of Managerial Accounting*	3
ECON 1011 Principles of Microeconomics*	3	BLAW 2720 Legal Environment of Business*	3
FIN 2801 Business Statistics I*	3	General Education	9
General Education	7	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>16</b>	<b>Note: Complete all B.S.B.A. Admission requirements and apply for admission*</b>	
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
ECON 3020 Money & Banking	3	FIN 3861 Financial Management I***	3
FIN 3801 Business Statistics II	3	FIN 3881 Financial Institutions & Markets***	3
FIN 3850 Principles of Finance***	3	FIN 3891 Security Analysis***	3
MGT 3325 Business Communication	3	MGT 3315 Management of Organizations	3
Free Choice Electives	2	Finance or Business Elective#	3
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>15</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
CIS 3630 Management Information Systems	3	ACCT 4115 Financial Statement Analysis	3
ECON 3030 Intermediate Microeconomics	3	ICAP 4357 Organizational Policy & Strategy	3
MKT 3405 Marketing Policy	3	MGT 3360 Production/Operations Management	3
Finance Electives#	6	Finance Electives#	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

**Finance Major, B.S.B.A. Degree - 120 Hours**

- \*Students in this major must complete eight preadmission courses with a grade of C or higher and must obtain a 2.40 cumulative GPA and a 2.40 in these specific courses, before admission to the degree program. These courses are recommended for completion during the freshman and sophomore years.
- \*\*AE or BADM 1400 (1 hr.) is highly recommended for academic success. AE or BADM 1400 counts as a free choice elective.
- \*\*\*A minimum grade of C must be earned in FIN 3850, FIN 3861, FIN 3881, and FIN 3891 if they are to be applied toward the fulfillment of a Finance major or minor.
- #Finance electives are: FIN 3835, FIN 4803, FIN 4804, FIN 4815, FIN 4817, FIN 4820, FIN 4821, FIN 4862, FIN 4880. FIN 4830 may be available as an elective with department chair approval. Electives are not offered every semester – check with the department chairperson for course offerings.
- A 2.40 cumulative GPA is required for graduation in this major.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

School of Environmental, Physical, and Applied Sciences

# FORENSIC CHEMISTRY

## BACHELOR OF SCIENCE DEGREE

The future depends greatly on how people solve the world's problems, and problem solving is what chemists and physicists do best. From medicinal chemistry to research in superconductivity, there are abundant opportunities in the sciences. The chemistry programs offered at the University of Central Missouri prepare students for many rewarding cutting-edge careers.

The chemistry degree programs at UCM provide a balanced curriculum of classroom instruction and practical laboratory experience. Students with a major in chemistry receive extensive state of the art, hands-on experience with instrumentation, such as UV-Visible, FTIR, and FTNMR spectroscopy; chromatography (GC/MS/MS/HPLC); calorimetry; fluorometry; electrochemical analysis and others.

### About the Faculty

Active research, workshop and seminar participation keep chemistry faculty current in the ever-advancing field of science. In addition to a wide range of academic and professional experience, all faculty members in UCM's chemistry programs have earned doctorates in their fields of expertise.

The program's caring and experienced faculty provide individualized attention for their students, and the university's low student-to-faculty ratio allows for such personalized activity. Classroom learning is reinforced through practical laboratory experiences, where the use of instrumentation is emphasized.

### Facilities

The chemistry programs are located in the W. C. Morris Science Building.

The facilities include areas for general instructional use, audio-visual facilities, a library study area and modern laboratories in various areas of specialization. The programs also have modern, well-equipped computer laboratories in chemistry, as well as electronic classrooms.

### Career Opportunities

Forensic chemistry is a common and well-suited major for many of the preprofessional programs (medicine, dentistry, veterinary, pharmacy, optometry) and also qualifies graduates to work as teachers or as chemists in industry and government. Forensic chemistry students are provided very attractive financial assistance should they choose to continue their studies at the graduate level. Graduate studies in biochemistry, analytical, organic, inorganic, chemical education, petroleum and pharmaceutical chemistry are among the numerous options available.

### Student Involvement

Students are encouraged to supplement their academic programs through participation in campus organizations of special professional, service and academic interest. The American Chemical Society provides opportunities for members to have personal and informal association with the chemistry faculty outside of the classroom. The society meets regularly, sponsor lectures on contemporary science topics, and provide avenues of participation for campus activities. Students who merit academic recognition may be invited to join one or more of the honorary societies in science, such as Sigma Pi Sigma or Beta Beta Beta.

Chemistry students are considered

for employment as laboratory or program assistants after completion of a minimum amount of training and study. This opportunity provides students with valuable teaching, research and technical experience.

The chemistry programs collaborates with the Departments of Criminal Justice and Biology and Earth Science to offer a minor in forensic science. Graduates completing the minor will be able to complete DNA testing and analyze trace evidence as entry level laboratory personnel.

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information contact the School of Environmental, Physical, and Applied Sciences, HUM 225, UCM, Warrensburg, MO 64093, call 660-543-4626, or visit the program's web site at [ucmo.edu/chemphys](http://ucmo.edu/chemphys).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Forensic Chemistry Major, B.S. Degree (43-294)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
CHEM 1131 General Chemistry I	5	CHEM 1132 General Chemistry II	5
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
MATH 1151 Calculus & Analytical Geometry I	5	General Education	6
General Education	2	<b>Semester Total</b>	<b>14</b>
<b>Semester Total</b>	<b>15</b>		
AE 1400 Freshman Seminar*	1		
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
BIOL 1110 Principles of Biology	3	CHEM 3212 Quantitative Analysis	3
CHEM 3341 Organic Chemistry I***	4	CHEM 3342 Organic Chemistry II	4
PHYS 1101 or PHYS 2121 College/University Physics I	4-5	PHYS 1102 or PHYS 2122 College/University Physics II	4-5
General Education	3	General Education	3
<b>Semester Total</b>	<b>14-15</b>	<b>Semester Total</b>	<b>14-15</b>
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
BIOL 3511 Genetics	4	BIOL 2010 Human Biology	3
CHEM 3111 Intermediate Inorganic Chemistry**	4	BIOL 4013 Introduction to Experimental Design & Analysis	3
CHEM 3421 Intermediate Biochemistry	3	General Education	9
CHEM 4231 Instrumental Analysis**	4	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs.</b>
BIOL 3410 Forensic Science	3	BIOL 4514 Molecular Biology	3
CJ 1000 Introduction to Criminal Justice	3	CHEM 4531 Physical Chemistry I** or CHEM 4532 Physical Chemistry II**	4
Major Elective**#	3	CJ 4302 Criminal Evidence	3
General Education	3	General Education (IGEN/ICAP)	3
Free Choice Electives#	4	Free Choice Electives#	2-4
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>16-17</b>

**Forensic Chemistry Major, B.S. Degree - 120 hours**

- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*Upper level chemistry courses offered variably. Check school for actual offerings.
- \*\*\*A grade of C or better is required in CHEM 3341 as a prerequisite to CHEM 3421.
- #The program advisors recommend the following classes to fulfill the 3 hours of major electives and the 5-8 hours of free choice electives: CHEM 4313, 4421, 4431, 4531, 4532, 4800, and 4910.
- The number of free choice electives required to reach the minimum hours required for a degree (120) will depend on selections made in the major and general education.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Arts, Humanities, and Social Sciences

Department of Art & Design

# GRAPHIC DESIGN

BACHELOR OF FINE ARTS DEGREE

Through University of Central Missouri's Bachelor of Fine Arts (BFA) in Graphic Design program, students develop their creative talents and technical skills to become graphic designers in advertising agencies, design firms, public relations, direct mail, in-house art departments of magazines and newspapers, book publishers, retail chains, commercial printing firms, freelance and other creative venues.

Students master creative problem solving, conceptual and aesthetic judgment, and the use of computer technology as a design tool through instruction from highly experienced faculty and from hands-on experience in studios and laboratories.

### Career Opportunities

There are career opportunities available globally and for a wide range of salaries. Typical kinds of work assignments include logo/trademark design, package design, publication design, advertising design, layout, type design, web page design and motion design executed for magazines, newspapers, newsletters, annual reports, advertising, book jackets, CD covers, posters, film and television. Students are encouraged to seek professional internships and may receive course credit.

The BFA in Graphic Design keeps up with a changing industry and graduates hold fulfilling employment across the nation and in many foreign countries. Because of this, UCM's Graphic Design program continues to grow in both numbers and quality. The combination of talent, motivation, program content, and excellent instruction continues to serve our Graphic Design majors' career objectives well.

### State-of-the Art Facilities

Students use up-to-date Macintosh computers, software, scanners, printers and other peripherals that are standard in their career field as an integral part of their education. In addition, through required support courses from the School of Technology, students gain skills and knowledge of the commercial printing industry, i.e. photography, prepress, and digital imaging, as an important adjunct to their creative skill set.

### Accreditation

UCM's Department of Art & Design is accredited by the National Association of Schools of Art and Design (NASAD). UCM is the only state-supported four-year school in

Missouri with such accreditation. Of the approximately 2,000 college art programs nationwide, NASAD has approved less than 15 percent, based on proven rigor and content. UCM has held NASAD accreditation continuously since 1986.

### Community

Our students have opportunities with professional groups in Kansas City including the Ad Club and American Institute of Graphic Arts (AIGA). Locally, we have an active AIGA UCM student group. Many students choose to live in the "ARTSHIP" residence hall community for art majors. The BFA in Graphic Design program is one of the larger majors on campus and students enjoy fellowship with a diverse group of peers.

### For More Information

To learn more contact the Department of Art & Design, Art Center 120, UCM, Warrensburg, MO 64093; call 660-543-4481; or visit the department's web site at [ucmo.edu/art](http://ucmo.edu/art).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Graphic Design, B.F.A. Degree (47-324)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
ART 1110 Drawing I	3	ART 1120 Drawing II	3
ART 1315 2-D Design	3	ART 1325 Color and Design	3
ART 1800 Ideas & the Visual Arts	3	ART 2511 Painting I	3
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
General Education	3	GRAP 1010 Fundamentals of Printing Processes	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
ART 1815 Art History Survey I (fall only) or ART 1835 Survey of Non-Western Art History (spring only)	3	ART 1825 Art History Survey II	3
ART 2335 3-D Design	3	ART 2710 Printmaking I	3
ART 2610 Introduction to Graphic Design & Illustration	3	ART 3620 Logo & Trademark Design	3
ART 3610 Typography	3	ART 3660 Publication Design	3
General Education	3	General Education	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>18</b>

<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
ART 2412 Ceramics I or ART 2420 Sculpture I	3	ART 3640 Package Design	3
ART 3510 Watercolor	3	ART 4610 Interactive Design (spring) or ART 4620 Motion Design (fall)	3
ART 3630 Design for Advertising	3	ART 4850 20th Century Art & Architecture (fall) or ART 4860 Contemporary Art & Design (spring)	3
Major Electives*	6	General Education	6
General Education	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>18</b>		

<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs.</b>
ART Elective	3	ART 4020 Studio Seminar (Portfolio)	3
Major Electives*	6	ICAP 4221 Artists in Contemporary Society	3
General Education	6	General Education	9
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

**Graphic Design, B.F.A. Degree - 126 hours**

- \*This major requires 12 hours of major electives. The 12 hours of major electives should be chosen from the list provided in the Undergraduate Catalog.
- Students should meet with program area faculty for more detailed advice regarding the sequencing of required major coursework in this major.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Health, Science, and Technology

School of Technology

# GRAPHIC TECHNOLOGIES

## BACHELOR OF SCIENCE DEGREE, OPTION 1: PRINT MEDIA TECHNOLOGY MANAGEMENT

The University of Central Missouri offers the only four-year baccalaureate degree in Graphic Technologies in the State of Missouri. In addition, the department enrolls the fifth-largest number of students in graphic communications courses of any school in the nation. Central's Graphic Technologies Program is nationally recognized and accredited by the Association of Technology, Management, and Applied Engineering (ATMAE).

Graduates from the Graphic Technologies program have a consistently high placement rate in regional and national companies in the dynamic field of graphic communications. Also known as graphic arts, the graphic communications industry is the third largest in the U.S. and is constantly evolving due to exciting technological advances.

The Graphic Technologies program allows students to develop both creative and technical skills. Hands-on coursework includes instruction and practice in graphic design, digital and traditional printing processes, publishing, packaging, computer graphics, website development, digital photography, and other related areas.

Graphic Technologies students become well qualified to obtain entry-level management employment in a wide variety of graphic communications companies. A required industry internship and the opportunity to work in the Center for Print Production help make UCM graduates well prepared to manage the people, products, and processes involved in the creation and production of graphic media.

### State-of-the-Art Facilities

The Graphic Technologies laboratories at UCM are the best equipped and most comprehensive facilities in the Midwest and are among the best in the nation. More than 10,000 square feet of modern laboratory space is occupied by specialized graphic arts equipment, which provides students the opportunity for valuable hands-on experience working on graphic projects from design through printing and distribution. Our facilities include labs dedicated to offset, screen, flexography and digital printing methods, along with two dedicated computer labs with an array of design, web media and page layout software. Also available are a paper and ink testing lab and a fully equipped finishing laboratory. UCM's Graphic Technologies program benefits greatly from the generous support of the graphic communications industry through generous donations of major equipment and supplies.

### About the Faculty

Students learn from highly experienced full-time faculty members who provide individualized student program advisement. The university's modest student-faculty ratio allows students to benefit from personalized attention. Faculty members are active in technical research and professional memberships, and they participate in workshops and seminars to stay current in their field.

### Student Involvement

Students are encouraged to supplement their academic program through participation in campus organizations of special professional,

service and academic interest. Graphic technologies students are eligible for membership in the internationally affiliated Technical Association of Graphic Arts and the Print and Graphics Student Association, both of which promote the field of graphic technologies. Students can also become members in the Printing Industries of America Association and can participate in a variety of professional organizations.

### Scholarships

In addition to more than \$7 million in merit-based scholarships and awards offered each year by the university, the Print and Graphics Scholarship Foundation offers scholarships for students who display aptitude in graphic technologies. Other scholarships are provided by the Printing and Imaging Association of MidAmerica, the Foundation of Flexographic Technical Association, the Electronic Document Systems Foundation, and the Tag and Label Manufacturers Institute. Students may also compete for the Jones, Kohler, Sarantakos, Brahney, and Grinstead scholarships.

### To Learn More

For more information contact the School of Technology, Grinstead 9, UCM, Warrensburg, MO 64093; call 660-543-4439; or visit the school's web site at [ucmo.edu/technology](http://ucmo.edu/technology) and [facebook.com/UCMSOT](https://www.facebook.com/UCMSOT).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Graphic Technologies Major, B.S. Degree, Option 1: Print Media Technology Management (43-01599)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
GRAP 1000 Orientation to Graphic Technologies*	1	GRAP 2030 Pre-Media Applications - Adobe Illustrator	3
GRAP 1010 Fundamentals of Graphic Processes	3	GRAP 2031 Pre-Media Applications - Adobe Photoshop	3
General Education	8	General Education	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
GRAP 2032 Pre-Media Applications - Adobe InDesign	3	ART 2610 Introduction to Graphic Design & Illustration	3
GRAP 3034 Lithographic Processes*	3	GRAP 2610 Principles of Web Media*	3
PHOT 1203 Introduction to Photography or PHOT 1210 Found. of Prof. Phot. AND PHOT 1211 Image Crit.	3-4	GRAP 3045 Materials and Methods in Graphic Technologies* Major Emphasis Area Elective**	3 3
General Education	6	General Education	4
<b>Semester Total</b>	<b>15-16</b>	<b>Semester Total</b>	<b>16</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
GRAP 3024 Flexographic Processes*	3	ART 3610 Typography	3
Major Emphasis Area Elective**	3	GRAP 3030 Digital Output Technologies*	3
General Education	9	GRAP 3043 Finishing & Distribution*	3
<b>Semester Total</b>	<b>15</b>	MGT 3325 Business Communication	3
		General Education	3
		<b>Semester Total</b>	<b>15</b>
<b>Between Junior &amp; Senior Year - Summer Semester</b>	<b>Hrs.</b>		
GRAP 3016 Experiences in Graphic Production***	1		
SOT 3022 Internship in Technology*** (take for 2 hours if PHOT 1203 was chosen above)	1-2		
<b>Semester Total</b>	<b>2-3</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
GRAP 3057 Quality Control for Print Media*	3	GRAP 3051 Graphic Technologies Management*	3
GRAP 4038 Color Science*	3	GRAP 4051 Print Production*	3
GRAP 4040 Applied Color Management	1	GRAP 4055 Estimating & Costing for Print Media*#	3
GRAP 4053 Production Analysis*	3	General Education	3
GRAP 4095 Senior Seminar in Graphic Technologies*	1	Free Choice Electives##	0-5
General Education	3	<b>Semester Total</b>	<b>12-17</b>
<b>Semester Total</b>	<b>14</b>		

**Graphic Technologies Major, B.S. Degree, Option 1: Print Media Technology Management - 120 hours**

- \*This class is only offered during the semester indicated.
- \*\*See the 2013 Undergraduate Catalog for the list of approved major option electives. Some of the major electives can be used to work towards a minor in Business Administration or Marketing, if elected.
- \*\*\*GRAP 3016 Experiences in Graphic Production and SOT 3022 Internship in Technology may be in a Summer, Fall or Spring Semester. They are optional Sophomore/Junior year. Students who choose PHOT 1203 in the major will be required to complete 2 hours of SOT 3022. Students who choose PHOT 1210/1211 will be required to complete 1 hour of SOT 3022.
- #It is recommended that students enroll in GRAP 4055, Estimating & Costing for Print Media, during the spring semester immediately prior to graduation.
- ##If CIS 1600 and ECON 1010 are chosen as the 6 hours of major option 1 electives, those hours will overlap with general education and 5 hours of free choice electives will be needed to meet 120 hours.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

School of Technology

# GRAPHIC TECHNOLOGIES

## BACHELOR OF SCIENCE DEGREE, OPTION 2: GRAPHIC DESIGN TECHNOLOGY

The University of Central Missouri offers the only four-year baccalaureate degree in Graphic Technologies in the State of Missouri. In addition, the department enrolls the fifth-largest number of students in graphic communications courses of any school in the nation. Central's Graphic Technologies Program is nationally recognized and accredited by the Association of Technology, Management, and Applied Engineering (ATMAE).

Graduates from the Graphic Technologies program have a consistently high placement rate in regional and national companies in the dynamic field of graphic communications. Also known as graphic arts, the graphic communications industry is the third largest in the U.S. and is constantly evolving due to exciting technological advances.

The Graphic Technologies program allows students to develop both creative and technical skills. Hands-on coursework includes instruction and practice in graphic design, digital and traditional printing processes, publishing, packaging, computer graphics, website development, digital photography, and other related areas.

Graphic Technologies students become well qualified to obtain entry-level management employment in a wide variety of graphic communications companies. A required industry internship and the opportunity to work in the Center for Print Production help make UCM graduates well prepared to manage the people, products, and processes involved in the creation and production of graphic media.

### State-of-the-Art Facilities

The Graphic Technologies laboratories at UCM are the best equipped and most comprehensive facilities in the Midwest and are among the best in the nation. More than 10,000 square feet of modern laboratory space is occupied by specialized graphic arts equipment, which provides students the opportunity for valuable hands-on experience working on graphic projects from design through printing and distribution. Our facilities include labs dedicated to offset, screen, flexography and digital printing methods, along with two dedicated computer labs with an array of design, web media and page layout software. Also available are a paper and ink testing lab and a fully equipped finishing laboratory. UCM's Graphic Technologies program benefits greatly from the generous support of the graphic communications industry through generous donations of major equipment and supplies.

### About the Faculty

Students learn from highly experienced full-time faculty members who provide individualized student program advisement. The university's modest student-faculty ratio allows students to benefit from personalized attention. Faculty members are active in technical research and professional memberships, and they participate in workshops and seminars to stay current in their field.

### Student Involvement

Students are encouraged to supplement their academic program through participation in campus organizations of special professional, service and academic interest.

Graphic technologies students are eligible for membership in the internationally affiliated Technical Association of Graphic Arts and the Print and Graphics Student Association, both of which promote the field of graphic technologies. Students can also become members in the Printing Industries of America Association and can participate in a variety of professional organizations.

### Scholarships

In addition to more than \$7 million in merit-based scholarships and awards offered each year by the university, the Print and Graphics Scholarship Foundation offers scholarships for students who display aptitude in graphic technologies. Other scholarships are provided by the Printing and Imaging Association of MidAmerica, the Foundation of Flexographic Technical Association, the Electronic Document Systems Foundation, and the Tag and Label Manufacturers Institute. Students may also compete for the Jones, Kohler, Sarantakos, Brahney, and Grinstead scholarships.

### To Learn More

For more information contact the School of Technology, Grinstead 9, UCM, Warrensburg, MO 64093; call 660-543-4439; or visit the school's web site at [ucmo.edu/technology](http://ucmo.edu/technology) and [facebook.com/UCMSOT](https://facebook.com/UCMSOT).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Graphic Technologies Major, B.S. Degree, Option 2: Graphic Design Technology (43-02599)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
GRAP 1000 Orientation to Graphic Technologies*	1	GRAP 2030 Pre-Media Applications - Adobe Illustrator	3
GRAP 1010 Fundamentals of Graphic Processes	3	GRAP 2031 Pre-Media Applications - Adobe Photoshop	3
General Education	8	General Education	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
ART 2610 Introduction to Graphic Design & Illustration	3	ART 3610 Typography	3
GRAP 2032 Pre-Media Applications - Adobe InDesign	3	GRAP 2610 Principles of Web Media*	3
GRAP 3034 Lithographic Processes*	3	GRAP 3045 Materials and Methods in Graphic Technologies*	3
PHOT 1203 Introduction to Photography or PHOT 1210 Found. of Prof. Phot. AND PHOT 1211 Image Crit.	3-4	Major Emphasis Area Elective**	3
General Education	3	General Education	4
<b>Semester Total</b>	<b>15-16</b>	<b>Semester Total</b>	<b>16</b>
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
GRAP 3024 Flexographic Processes*	3	GRAP 3030 Digital Output Technologies*	3
Major Emphasis Area Elective**	3	GRAP 3043 Finishing & Distribution*	3
General Education	9	Major Emphasis Area Elective**	6
<b>Semester Total</b>	<b>15</b>	General Education	3
		<b>Semester Total</b>	<b>15</b>
<b>Between Junior &amp; Senior Year - Summer Semester</b>	<b>Hrs.</b>		
GRAP 3016 Experiences in Graphic Production***	1		
SOT 3022 Internship in Technology*** (take for 2 hours if PHOT 1203 was chosen above)	1-2		
<b>Semester Total</b>	<b>2-3</b>		
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs.</b>
GRAP 4038 Color Science*	3	Major Emphasis Area Elective**	6
GRAP 4040 Applied Color Management*	1	General Education	6
GRAP 4053 Production Analysis*	3	<b>Semester Total</b>	<b>12</b>
GRAP 4095 Senior Seminar in Graphic Technologies*	1		
Major Emphasis Area Elective**	3		
General Education	3		
<b>Semester Total</b>	<b>14</b>		

**Graphic Technologies Major, B.S. Degree, Option 2: Graphic Design Technology - 120 hours**

- \*This class is only offered during the semester indicated.
- \*\*See the 2013 Undergraduate Catalog for the list of approved major option electives.
- \*\*\*GRAP 3016 Experiences in Graphic Production and SOT 3022 Internship in Technology may be in a Summer, Fall or Spring Semester. They are optional Sophomore/Junior year. Students who choose PHOT 1203 in the major will be required to complete 2 hours of SOT 3022. Students who choose PHOT 1210/1211 will be required to complete 1 hour of SOT 3022.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

School of Technology

# GRAPHIC TECHNOLOGIES

BACHELOR OF SCIENCE DEGREE, OPTION 3: WEB MEDIA TECHNOLOGY

The University of Central Missouri offers the only four-year baccalaureate degree in Graphic Technologies in the State of Missouri. In addition, the department enrolls the fifth-largest number of students in graphic communications courses of any school in the nation. Central's Graphic Technologies Program is nationally recognized and accredited by the Association of Technology, Management, and Applied Engineering (ATMAE).

Graduates from the Graphic Technologies program have a consistently high placement rate in regional and national companies in the dynamic field of graphic communications. Also known as graphic arts, the graphic communications industry is the third largest in the U.S. and is constantly evolving due to exciting technological advances.

The Graphic Technologies program allows students to develop both creative and technical skills. Hands-on coursework includes instruction and practice in graphic design, digital and traditional printing processes, publishing, packaging, computer graphics, website development, digital photography, and other related areas. Graphic Technologies students become well qualified to obtain entry-level management employment in a wide variety of graphic communications companies. A required industry internship and the opportunity to work in the Center for Print Production help make UCM graduates well prepared to manage the people, products, and processes involved in the creation and production of graphic media.

### State-of-the-Art Facilities

The Graphic Technologies laboratories at UCM are the best equipped and most comprehensive facilities in the Midwest and are among the best in the nation. More than 10,000 square feet of modern laboratory space is occupied by specialized graphic arts equipment, which provides students the opportunity for valuable hands-on experience working on graphic projects from design through printing and distribution. Our facilities include labs dedicated to offset, screen, flexography and digital printing methods, along with two dedicated computer labs with an array of design, web media and page layout software. Also available are a paper and ink testing lab and a fully equipped finishing laboratory. UCM's Graphic Technologies program benefits greatly from the generous support of the graphic communications industry through generous donations of major equipment and supplies.

### About the Faculty

Students learn from highly experienced full-time faculty members who provide individualized student program advisement. The university's modest student-faculty ratio allows students to benefit from personalized attention. Faculty members are active in technical research and professional memberships, and they participate in workshops and seminars to stay current in their field.

### Student Involvement

Students are encouraged to supplement their academic program through participation in campus organizations of special professional, service and academic interest.

Graphic technologies students are eligible for membership in the internationally affiliated Technical Association of Graphic Arts and the Print and Graphics Student Association, both of which promote the field of graphic technologies. Students can also become members in the Printing Industries of America Association and can participate in a variety of professional organizations.

### Scholarships

In addition to more than \$7 million in merit-based scholarships and awards offered each year by the university, the Print and Graphics Scholarship Foundation offers scholarships for students who display aptitude in graphic technologies. Other scholarships are provided by the Printing and Imaging Association of MidAmerica, the Foundation of Flexographic Technical Association, the Electronic Document Systems Foundation, and the Tag and Label Manufacturers Institute. Students may also compete for the Jones, Kohler, Sarantakos, Brahney, and Grinstead scholarships.

### To Learn More

For more information contact the School of Technology, Grinstead 9, UCM, Warrensburg, MO 64093; call 660-543-4439; or visit the school's web site at [ucmo.edu/technology](http://ucmo.edu/technology) and [facebook.com/UCMSOT](https://facebook.com/UCMSOT).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).



**Graphic Technologies Major, B.S. Degree, Option 3: Web Media Technology (43-03599)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
GRAP 1000 Orientation to Graphic Technologies	1	GRAP 2030 Pre-Media Applications - Adobe Illustrator	3
GRAP 1010 Fundamentals of Graphic Processes	3	GRAP 2031 Pre-Media Applications - Adobe Photoshop	3
General Education	8	General Education	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
GRAP 2032 Pre-Media Applications - Adobe InDesign	3	ART 2610 Introduction to Graphic Design & Illustration	3
GRAP 3034 Lithographic Processes*	3	GRAP 2610 Principles of Web Media	3
PHOT 1203 Introduction to Photography or PHOT 1210 Found. of Prof. Phot. AND PHOT 1211 Image Crit.	3-4	GRAP 3045 Materials and Methods in Graphic Technologies*	3
Major Emphasis Area Elective**	3	General Education	4
General Education	3	<b>Semester Total</b>	<b>16</b>
<b>Semester Total</b>	<b>15-16</b>		
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
GRAP 2620 Web Media Applications	3	ART 3610 Typography	3
GRAP 3024 Flexographic Processes*	3	GRAP 2630 Web Authoring	3
General Education	9	GRAP 3030 Digital Output Technologies	3
<b>Semester Total</b>	<b>15</b>	GRAP 3043 Finishing & Distribution*	3
		General Education	3
		<b>Semester Total</b>	<b>15</b>
<b>Between Junior &amp; Senior Year - Summer Semester</b>	<b>Hrs.</b>		
GRAP 3016 Experiences in Graphic Production***	1		
SOT 3022 Internship in Technology*** (take for 2 hours if PHOT 1203 was chosen above)	1-2		
<b>Semester Total</b>	<b>2-3</b>		
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs.</b>
GRAP 2670 Web Media Animation	3	Major Emphasis Area Elective**	6
GRAP 4038 Color Science*	3	General Education	6
GRAP 4040 Applied Color Management	1	<b>Semester Total</b>	<b>12</b>
GRAP 4053 Production Analysis*	3		
GRAP 4095 Senior Seminar in Graphic Technologies*	1		
General Education	3		
<b>Semester Total</b>	<b>14</b>		

**Graphic Technologies Major, B.S. Degree, Option 3: Web Media Technology - 120 hours**

- \*This class is only offered during the semester indicated.
- \*\*See the 2013 Undergraduate Catalog for the list of approved major option electives.
- \*\*\*GRAP 3016 Experiences in Graphic Production and SOT 3022 Internship in Technology may be in a Summer, Fall or Spring Semester. They are optional Sophomore/Junior year. Students who choose PHOT 1203 in the major will be required to complete 2 hours of SOT 3022. Students who choose PHOT 1210/1211 will be required to complete 1 hour of SOT 3022.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Health, Science, and Technology

School of Technology

# GRAPHIC TECHNOLOGIES

## BACHELOR OF SCIENCE DEGREE, OPTION 4: PACKAGING TECHNOLOGY

The University of Central Missouri offers the only four-year baccalaureate degree in Graphic Technologies in the State of Missouri. In addition, the department enrolls the fifth-largest number of students in graphic communications courses of any school in the nation. Central's Graphic Technologies Program is nationally recognized and accredited by the Association of Technology, Management, and Applied Engineering (ATMAE).

Graduates from the Graphic Technologies program have a consistently high placement rate in regional and national companies in the dynamic field of graphic communications. Also known as graphic arts, the graphic communications industry is the third largest in the U.S. and is constantly evolving due to exciting technological advances.

The Graphic Technologies program allows students to develop both creative and technical skills. Hands-on coursework includes instruction and practice in graphic design, digital and traditional printing processes, publishing, packaging, computer graphics, website development, digital photography, and other related areas.

Graphic Technologies students become well qualified to obtain entry-level management employment in a wide variety of graphic communications companies. A required industry internship and the opportunity to work in the Center for Print Production help make UCM graduates well prepared to manage the people, products, and processes involved in the creation and production of graphic media.

### State-of-the-Art Facilities

The Graphic Technologies laboratories at UCM are the best equipped and most comprehensive facilities in the Midwest and are among the best in the nation. More than 10,000 square feet of modern laboratory space is occupied by specialized graphic arts equipment, which provides students the opportunity for valuable hands-on experience working on graphic projects from design through printing and distribution. Our facilities include labs dedicated to offset, screen, flexography and digital printing methods, along with two dedicated computer labs with an array of design, web media and page layout software. Also available are a paper and ink testing lab and a fully equipped finishing laboratory. UCM's Graphic Technologies program benefits greatly from the generous support of the graphic communications industry through generous donations of major equipment and supplies.

### About the Faculty

Students learn from highly experienced full-time faculty members who provide individualized student program advisement. The university's modest student-faculty ratio allows students to benefit from personalized attention. Faculty members are active in technical research and professional memberships, and they participate in workshops and seminars to stay current in their field.

### Student Involvement

Students are encouraged to supplement their academic program through participation in campus organizations of special professional,

service and academic interest. Graphic technologies students are eligible for membership in the internationally affiliated Technical Association of Graphic Arts and the Print and Graphics Student Association, both of which promote the field of graphic technologies. Students can also become members in the Printing Industries of America Association and can participate in a variety of professional organizations.

### Scholarships

In addition to more than \$7 million in merit-based scholarships and awards offered each year by the university, the Print and Graphics Scholarship Foundation offers scholarships for students who display aptitude in graphic technologies. Other scholarships are provided by the Printing and Imaging Association of MidAmerica, the Foundation of Flexographic Technical Association, the Electronic Document Systems Foundation, and the Tag and Label Manufacturers Institute. Students may also compete for the Jones, Kohler, Sarantakos, Brahney, and Grinstead scholarships.

### To Learn More

For more information contact the School of Technology, Grinstead 9, UCM, Warrensburg, MO 64093; call 660-543-4439; or visit the school's web site at [ucmo.edu/technology](http://ucmo.edu/technology) and [facebook.com/UCMSOT](https://www.facebook.com/UCMSOT).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Graphic Technologies Major, B.S. Degree, Option 4: Packaging Technology (43-01599)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
GRAP 1000 Orientation to Graphic Technologies	1	GRAP 2030 Pre-Media Applications - Adobe Illustrator	3
GRAP 1010 Fundamentals of Graphic Processes	3	GRAP 2031 Pre-Media Applications - Adobe Photoshop	3
General Education	9	General Education	6
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>15</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
CADD 1105 Basic AutoCAD	1	ART 2610 Introduction to Graphic Design & Illustration	3
CADD 1110 Fundamentals of Drafting	2	GRAP 1700 Introduction to Packaging	3
ENGT 1012 Global Production Technology	2	GRAP 2610 Principles of Web Media	3
GRAP 2032 Pre-Media Applications - Adobe InDesign	3	GRAP 3045 Materials and Methods in Graphic Technologies*	3
GRAP 3034 Lithographic Processes*	3	General Education	4
PHOT 1203 Introduction to Photography or PHOT 1210 Found. of Prof. Phot. AND PHOT 1211 Image Crit.	3-4	<b>Semester Total</b>	<b>16</b>
<b>Semester Total</b>	<b>14-15</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
GRAP 3024 Flexographic Processes*	3	ART 3610 Typography	3
Major Option Elective**	4	GRAP 3030 Digital Output Technologies	3
General Education	6	GRAP 3043 Finishing & Distribution*	3
<b>Semester Total</b>	<b>13</b>	General Education	6
		<b>Semester Total</b>	<b>15</b>
<b>Between Junior &amp; Senior Year - Summer Semester</b>	<b>Hrs.</b>		
GRAP 3016 Experiences in Graphic Production***	1		
SOT 3022 Internship in Technology*** (take for 2 hours if PHOT 1203 was chosen above)	1-2		
<b>Semester Total</b>	<b>2-3</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
GRAP 4038 Color Science*	3	Major Option Elective**	6
GRAP 4040 Applied Color Management	1	General Education	6
GRAP 4051 Print Production	3	Free Choice Electives	2
GRAP 4053 Production Analysis*	3	<b>Semester Total</b>	<b>14</b>
GRAP 4095 Senior Seminar in Graphic Technologies*	1		
General Education	3		
<b>Semester Total</b>	<b>14</b>		

**Graphic Technologies Major, B.S. Degree, Option 4: Packaging Technology - 120 hours**

- \*This class is only offered during the semester indicated.
- \*\*See the 2013 Undergraduate Catalog for the list of approved major option electives.
- \*\*\*GRAP 3016 Experiences in Graphic Production and SOT 3022 Internship in Technology may be in a Summer, Fall or Spring Semester. They are optional Sophomore/Junior year. Students who choose PHOT 1203 in the major will be required to complete 2 hours of SOT 3022. Students who choose PHOT 1210/1211 will be required to complete 1 hour of SOT 3022.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

School of Technology

# GRAPHIC TECHNOLOGIES

BACHELOR OF SCIENCE DEGREE, OPTION 5: PHOTOGRAPHY

The University of Central Missouri offers the only four-year baccalaureate degree in Graphic Technologies in the State of Missouri. In addition, the department enrolls the fifth-largest number of students in graphic communications courses of any school in the nation. Central's Graphic Technologies Program is nationally recognized and accredited by the Association of Technology, Management, and Applied Engineering (ATMAE).

Graduates from the Graphic Technologies program have a consistently high placement rate in regional and national companies in the dynamic field of graphic communications. Also known as graphic arts, the graphic communications industry is the third largest in the U.S. and is constantly evolving due to exciting technological advances.

The Graphic Technologies program allows students to develop both creative and technical skills. Hands-on coursework includes instruction and practice in graphic design, digital and traditional printing processes, publishing, packaging, computer graphics, website development, digital photography, and other related areas.

Graphic Technologies students become well qualified to obtain entry-level management employment in a wide variety of graphic communications companies. A required industry internship and the opportunity to work in the Center for Print Production help make UCM graduates well prepared to manage the people, products, and processes involved in the creation and production of graphic media.

### State-of-the-Art Facilities

The Graphic Technologies laboratories at UCM are the best equipped and most comprehensive facilities in the Midwest and are among the best in the nation. More than 10,000 square feet of modern laboratory space is occupied by specialized graphic arts equipment, which provides students the opportunity for valuable hands-on experience working on graphic projects from design through printing and distribution. Our facilities include labs dedicated to offset, screen, flexography and digital printing methods, along with two dedicated computer labs with an array of design, web media and page layout software. Also available are a paper and ink testing lab and a fully equipped finishing laboratory. UCM's Graphic Technologies program benefits greatly from the generous support of the graphic communications industry through generous donations of major equipment and supplies.

### About the Faculty

Students learn from highly experienced full-time faculty members who provide individualized student program advisement. The university's modest student-faculty ratio allows students to benefit from personalized attention. Faculty members are active in technical research and professional memberships, and they participate in workshops and seminars to stay current in their field.

### Student Involvement

Students are encouraged to supplement their academic program through participation in campus organizations of special professional,

service and academic interest. Graphic technologies students are eligible for membership in the internationally affiliated Technical Association of Graphic Arts and the Print and Graphics Student Association, both of which promote the field of graphic technologies. Students can also become members in the Printing Industries of America Association and can participate in a variety of professional organizations.

### Scholarships

In addition to more than \$7 million in merit-based scholarships and awards offered each year by the university, the Print and Graphics Scholarship Foundation offers scholarships for students who display aptitude in graphic technologies. Other scholarships are provided by the Printing and Imaging Association of MidAmerica, the Foundation of Flexographic Technical Association, the Electronic Document Systems Foundation, and the Tag and Label Manufacturers Institute. Students may also compete for the Jones, Kohler, Sarantakos, Brahney, and Grinstead scholarships.

### To Learn More

For more information contact the School of Technology, Grinstead 9, UCM, Warrensburg, MO 64093; call 660-543-4439; or visit the school's web site at [ucmo.edu/technology](http://ucmo.edu/technology) and [facebook.com/UCMSOT](https://facebook.com/UCMSOT).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Graphic Technologies Major, B.S. Degree, Option 5: Photography (43-05599)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
GRAP 1000 Orientation to Graphic Technologies	1	GRAP 2030 Pre-Media Applications - Adobe Illustrator	3
GRAP 1010 Fundamentals of Graphic Processes	3	GRAP 2031 Pre-Media Applications - Adobe Photoshop	3
General Education	8	General Education	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
GRAP 2032 Pre-Media Applications - Adobe InDesign	3	ART 2610 Introduction to Graphic Design & Illustration	3
GRAP 3034 Lithographic Processes*	3	GRAP 2610 Principles of Web Media	3
PHOT 1210 Foundations of Professional Photography	3	GRAP 3045 Materials and Methods in Graphic Technologies*	3
PHOT 1211 Image Critique	1	PHOT Major Option Elective**	3
PHOT Major Option Elective**	3	General Education	4
General Education	3	<b>Semester Total</b>	<b>16</b>
<b>Semester Total</b>	<b>16</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
GRAP 3024 Flexographic Processes*	3	ART 3610 Typography	3
PHOT Major Option Elective**	3	GRAP 3030 Digital Output Technologies	3
General Education	9	GRAP 3043 Finishing & Distribution*	3
<b>Semester Total</b>	<b>15</b>	PHOT Major Option Elective**	3
		General Education	3
		<b>Semester Total</b>	<b>15</b>
<b>Between Junior &amp; Senior Year - Summer Semester</b>	<b>Hrs.</b>		
GRAP 3016 Experiences in Graphic Production***	1		
SOT 3022 Internship in Technology***	1		
<b>Semester Total</b>	<b>2</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
GRAP 4038 Color Science*	3	PHOT Major Option Elective**	6
GRAP 4040 Applied Color Management	1	General Education	6
GRAP 4053 Production Analysis*	3	<b>Semester Total</b>	<b>12</b>
GRAP 4095 Senior Seminar in Graphic Technologies*	1		
PHOT Major Option Elective**	3		
General Education	3		
<b>Semester Total</b>	<b>14</b>		

**Graphic Technologies Major, B.S. Degree, Option 5: Photography - 120 hours**

- \*This class is only offered during the semester indicated.
- \*\*See your faculty mentor for advice on selecting the 21 hours of PHOT major option electives. Choose PHOT 2210 and 2250 for 6 of the 21 major option electives to complete a minor in Photography.
- \*\*\*GRAP 3016 Experiences in Graphic Production and SOT 3022 Internship in Technology may be in a Summer, Fall or Spring Semester. They are optional Sophomore/Junior year.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

Department of Nutrition and Kinesiology

# HEALTH STUDIES

## BACHELOR OF SCIENCE DEGREE - OPTION 1 PRE-PHYSICAL THERAPY/PRE-OCCUPATIONAL THERAPY

Today's health professionals face a wealth of challenges. Chronic conditions such as cardiovascular disease, obesity, cancer and diabetes, as well as bioterrorism, drug-resistant disease and transmission of disease by global travel pose tremendous health risks. Students preparing to enter the health care field require state-of-the-art training to meet these increasing threats to the public.

The health studies baccalaureate allows students to select from one of two major option areas: pre-physical therapy/pre-occupational therapy or community health.

### **Pre-Physical Therapy / Pre-Occupational Therapy**

Employment of physical therapists is expected to grow by 25 percent from 2009 to 2016, much faster than the average for all occupations. The long-term demand for physical therapists should continue to rise as new treatments and techniques expand the scope of physical therapy practices. In this area, students will gain the training to be accepted into professional education programs in physical therapy or occupational therapy.

### **Newly Renovated Facility**

The health studies program is housed in the new, state-of-the-art Morrow-Garrison complex. The facility features comfortable classrooms and modern labs, along with well-equipped rehabilitation and training rooms.

Pre-Physical Therapy/Pre-Occupational Therapy students benefit from the human performance laboratory located in Morrow 151. The lab is utilized for specific classes in several of the department's curricula. Students have the opportunity to assist with many of the research projects conducted in the facility. The lab is equipped with a ParvoMedics diagnostic metabolic system, Peak Motus video digitizing system, Kistler mobile force platform, a Life Measurement BOD POD, 12-lead ECG monitoring system, research grade treadmill, mechanical and electromechanically braked cycle ergometers, spirometer for pulmonary function assessment, pulse oximeter, bone densitometer, lactate analyzer, and various flexibility and muscle strength assessment devices.

### **Career Opportunities**

The pre-physical therapy/pre-occupational therapy program will prepare students for graduate or professional training in the areas of physical therapy, occupational

therapy, physician's assisting, medicine, osteopathic medicine, dentistry, chiropractic medicine, research and more.

### **Scholarships & Financial Aid**

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### **For More Information**

To learn more about majoring in Health Studies, contact the Department of Nutrition and Kinesiology at 660-543-4256, visit the web page at [ucmo.edu/nutrition](http://ucmo.edu/nutrition), or stop by our offices in Morrow 125.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Health Studies Major - Option 1 Pre-PT/Pre-OT, B.S. Degree (43-02330)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	CHEM 1131 General Chemistry I**	5
MATH 1111 College Algebra	3	ENGL 1030 Composition II	3
SOC 1800 General Sociology	3	PE 1800 Functional Anatomy	3
General Education	6	PSY 1100 General Psychology	3
<b>Semester Total</b>	<b>15</b>	General Education	2
AE 1400 Freshman Seminar*	1	<b>Semester Total</b>	<b>16</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
BIOL 3401 Human Anatomy	3	BIOL 3402 Human Physiology	5
CHEM 1604 Elementary Organic and Biochemistry or CHEM 1132 General Chemistry II	4-5	PE 2850 Foundations of Exercise Physiology	3
PE 2800 Biomechanics	3	PHIL 2300 Ethics	3
General Education	6	General Education	3
<b>Semester Total</b>	<b>16-17</b>	<b>Semester Total</b>	<b>14</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
AT 2640 Introduction to Therapeutic Exercise	1	AT 2630 Therapeutic Modalities	2
HED 4370 Human Diseases	3	AT 2631 Therapeutic Modalities Lab	1
PHYS 1101 College Physics I	4	BIOL 2510 Basic Genetics	3
PSY 3220 Life-Span Development	3	PHYS 1102 College Physics II	4
General Education	3	PSY 4440 Abnormal Psychology	3
<b>Semester Total</b>	<b>14</b>	Free Choice Electives***	2
		<b>Semester Total</b>	<b>15</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
BIOL 3215 Medical Terminology	3	ICAP 4111 Socio-Economic Factors Impacting Health	3
HED 4330 First Aid & CPR for Educators	1	PE 4341 Physical Activity and Special Populations	3
PE 4850 Assessment and Evaluation of Fitness/Wellness	3	PE 4765 Internship	2-4
PSY 4520 Statistics for the Behavioral Sciences	3	PE 4870 Clinical Exercise Physiology	3
Free Choice Electives***	5	Free Choice Electives***	1-4
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>14-15</b>

**Health Studies Major - Option 1 Pre-PT/Pre-OT, B.S. Degree - 120 hours**

- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*Enrollment in CHEM 1131 requires a score of 21 on the mathematics section of the ACT, a score of 550 on the mathematics section of the SAT, a passing score on a mathematics examination approved by the School of Environmental, Physical, and Applied Sciences, or a grade of C or better in MATH 1111.
- \*\*\*The number of free choice electives required will vary between 8-11 hours depending on the second CHEM course and internship hours chosen.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Health, Science, and Technology

Department of Nutrition and Kinesiology

# HEALTH STUDIES

## BACHELOR OF SCIENCE DEGREE - OPTION 2 COMMUNITY HEALTH

Today's health professionals face a wealth of challenges. Chronic conditions such as cardiovascular disease, obesity, cancer and diabetes, as well as bioterrorism, drug-resistant disease and transmission of disease by global travel pose tremendous health risks. Students preparing to enter the health care field require state-of-the-art training to meet these increasing threats to the public.

The health studies baccalaureate allows students to select from one of two major option areas: pre-physical therapy/pre-occupational therapy or community health.

### Community Health

The community health program prepares students to specialize in the prevention of disease and promotion of appropriate wellness lifestyles. With this program, students will develop skills needed to:

- Educate the public on the importance of clean water and air;
- Guide the proper vaccination of children and adults;
- Encourage safe and appropriate use of prescription drugs;
- Protect the health and safety of all workers;
- Conduct campaigns and education programs to reduce morbidity and mortality from chronic diseases;
- Develop school and community nutrition programs
- Conduct research on processes and aging diseases, such as Alzheimer's, dementia or osteoporosis;
- Analyze issues related to older persons, such as retirement, income

maintenance, the health care system and housing alternatives;

- Plan, administer and evaluate community-based services and service delivery systems.
- Prepare for careers in health policy and/or research

### Pre-Physical Therapy / Pre-Occupational Therapy

Employment of physical therapists is expected to grow by 25 percent from 2009 to 2016, much faster than the average for all occupations. The long-term demand for physical therapists should continue to rise as new treatments and techniques expand the scope of physical therapy practices. In this area, students will gain the training to be accepted into professional education programs in physical therapy or occupational therapy.

### Newly Renovated Facility

The health studies program is housed in the new, state-of-the-art Morrow-Garrison complex. The facility features comfortable classrooms and modern labs, along with well-equipped rehabilitation and training rooms.

### Career Opportunities

Upon graduating from the health studies program, students will be prepared for a variety of careers focusing on health, nutrition and wellness. Some career opportunities include: health administrator, health researcher, health insurance caseworker, epidemiologist, public health

scientist/analyst, and many more.

The health studies program will also prepare students for graduate or professional training in the areas of physical therapy, occupational therapy, physician's assisting, medicine, osteopathic medicine, dentistry, chiropractic medicine, research and more.

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### For More Information

To learn more about majoring in Health Studies, contact the Department of Nutrition and Kinesiology at 660-543-4256, visit the web page at [ucmo.edu/nutrition](http://ucmo.edu/nutrition), or stop by our offices in Morrow 125.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Health Studies Major - Option 2 Community Health, B.S. Degree (43-02330)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
CHEM 1104 Introduction to the Sciences: Chemistry	4	ENGL 1030 Composition II	3
ENGL 1020 Composition I	3	HED 1100 Personal Health	3
HED 1010 Introduction to Health Studies	1	MATH 1111 College Algebra	3
PHIL 2300 Ethics	3	PSY 1100 General Psychology	3
SOC 1800 General Sociology	3	General Education	3
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>15</b>
AE 1400 Freshman Seminar*	1		
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
BIOL 3401 Human Anatomy	3	BIOL 3402 Human Physiology	5
D&N 3340 Nutrition	3	BIOL 3215 Medical Terminology	3
General Education	8	D&N 3350 Community Nutrition (Spring only)	3
<b>Semester Total</b>	<b>14</b>	General Education	6
		<b>Semester Total</b>	<b>17</b>
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
COMM 3010 Interpersonal Communication	3	HED 4390 Community Health Education	3
HED 4310 Drugs & Youth	3	PSY 4440 Abnormal Psychology	3
HED 4370 Human Diseases	3	Free Choice Electives***	10
PSY 3220 Life-Span Development	3	<b>Semester Total</b>	<b>16</b>
General Education	3		
<b>Semester Total</b>	<b>15</b>		
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs.</b>
HED 4400 Health Program Planning and Evaluation	3	NUR 4030 Human Sexuality	2
ICAP 4111 Socio-Economic Factors Impacting Health	3	PE 4765 Internship	2-4
SOC 4894 Sociology of Aging	3	PSY 4520 Statistics for the Behavioral Sciences	3
Free Choice Electives***	6	SOC 4875 Medical Sociology	3
<b>Semester Total</b>	<b>15</b>	Free Choice Electives***	2-4
		<b>Semester Total</b>	<b>14</b>

**Health Studies Major - Option 2 Community Health, B.S. Degree - 120 hours**

- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*\*The number of free choice electives required will vary between 18 and 20 hours depending on the number of internship hours chosen.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Arts, Humanities, and Social Sciences

Department of History and Anthropology

# HISTORY

## BACHELOR OF ARTS DEGREE

The Bachelor of Arts degree in History at the University of Central Missouri provides wonderful opportunities for students to study the wealth of human experience, diverse cultures, and world civilizations.

In an age when the capacity for exceptional critical thinking skills is imperative, the history degree seeks to achieve that goal. The traditional history degree sharpens reading, communication, and analytical abilities while fashioning students into active, lifelong learners. The degree also uses history as a backdrop toward a better understanding of the complex world around us today.

The history degree prepares graduates for a wide variety of careers. These include teaching, law, government service, the diplomatic corps, journalism, politics, business, tourism, museum and archival work, and managing historical sites.

### About the Faculty

Our faculty has a distinguished reputation and is dedicated to the growth and professional development of its students, in addition to being actively involved in research, writing, and public service. Faculty members have published many books and scholarly articles, participated in regional, national, and international conferences, and received numerous grants and awards for study and research. In addition to their wide range of academic and professional experience, all faculty members have earned doctorates in their fields of expertise.

The department offers expertise in both American and World history, including but not limited to the entire range of American history from the colonial period to today, Asian history, Middle Eastern history, Latin American

history, and the history of Europe from the middle ages to the present.

### Anthropology

The department also offers an individualized major and a minor in anthropology. These degrees open additional doors of study to students. While some perceptions place anthropologists in ancient ruins of remote lands, much more frequently they find careers working alongside business people, medical doctors and researchers, health care specialists, and politicians.

### Student Involvement

We encourage students to supplement their academic programs through international study and participation in campus organizations of special professional, service, and academic interest. The History and Anthropology Clubs provide opportunities for students to have personal and informal association with the faculty and other history and anthropology students outside of the classroom. Recent club activities have included an anthropology film series and field trips to historic sites in the region. Qualified students may also seek membership in Phi Alpha Theta, the national history honor society, which encourages excellence in the study of history.

### Special Facilities

UCM houses some extraordinary collections. History and anthropology faculty members are dedicated curators of the university's archives and museum, located in the James C. Kirkpatrick Library. In addition to the museum's many collections, including the distinguished Paul Nance Middle East Collection, and other historical

items on display, various exhibits are featured throughout the year for public viewing.

Students may also enhance their education through learning experiences at local facilities, such as Blind Boone Park, the Howard School, and Pertle Springs, and through international opportunities.

### Internships

Students have the opportunity to pursue internships that will enhance their knowledge and skills and provide real world experience. The department has placed interns at the Truman Library, the Midwest Center for Holocaust Education, Whiteman Air Force Base, the National Archives in Kansas City, Pioneer Bluffs Historical Site, and at archives and museums in Jefferson City, Johnson County and Henry County, to name just a few.

### Scholarships

The Department of History and Anthropology presents semester Achievement Awards to students who excel academically. Other available scholarships include the Demand Scholarship in history, A. E. Twomey Scholarship in history, and A. F. McClure Scholarship in archives.

### To Learn More

For more information about this exciting program and others within the department, visit the department's home page: [ucmo.edu/history](http://ucmo.edu/history).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**History Major, B.A. Degree (42-420)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> -Spring Semester	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
HIST 1350 History of the United States to 1877	3	HIST 1351 History of the United States from 1877	3
Modern Language Requirement*	3	HIST 2402 History of Modern World	3
General Education	6	Modern Language Requirement*	3
<b>Semester Total</b>	<b>15</b>	General Education	3
AE 1400 Freshman Seminar**	1	<b>Semester Total</b>	<b>15</b>
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
HIST 2400 History of the Early World	3	HIST 2401 History of the Early Modern World	3
General Education	9	General Education	12
Modern Language Requirement*	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
SOSC 3010 Writing in the Social Sciences	3	Upper-Level Elective in American History	3
Upper-Level Elective in American History	3	Upper-Level Elective in World History***	3
Free Choice Electives	9	Free Choice Electives	9
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs.</b>
Upper-Level Elective in World History***	6	IGEN 4231 Myth, Memories, & Realities	3
Upper-Level Elective in History	3	Free Choice Electives	12
Free Choice Electives	6	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		

**History Major, B.A. Degree - 120 hours**

- \*Refer to the Bachelor's Degree Requirements section of the Undergraduate Catalog for the B.A. Modern Language requirements. This plan is based on 9 hours of Modern Language.
- \*\*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*\*A minimum of three hours of world history must be non-western history, or HIST 4452 or HIST 4453.
- This major does not build in the minimum number (30) of upper-level credit hours required for graduation. Be sure to include upper-level choices (3000/4000) in your major electives, general education, and/or free choice electives.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Arts, Humanities, and Social Sciences

Department of History and Anthropology

# HISTORY

## BACHELOR OF SCIENCE DEGREE

The Bachelor of Science degree in History at the University of Central Missouri provides wonderful opportunities for students to study the wealth of human experience, diverse cultures, and world civilizations.

In an age when the capacity for exceptional critical thinking skills is imperative, the history degree seeks to achieve that goal. The traditional history degree sharpens reading, communication, and analytical abilities while fashioning students into active, lifelong learners. The degree also uses history as a backdrop toward a better understanding of the complex world around us today.

The history degree prepares graduates for a wide variety of careers. These include teaching, law, government service, the diplomatic corps, journalism, politics, business, tourism, museum and archival work, and managing historical sites.

### About the Faculty

Our faculty has a distinguished reputation and is dedicated to the growth and professional development of its students, in addition to being actively involved in research, writing, and public service. Faculty members have published many books and scholarly articles, participated in regional, national, and international conferences, and received numerous grants and awards for study and research. In addition to their wide range of academic and professional experience, all faculty members have earned doctorates in their fields of expertise.

The department offers expertise in both American and World history, including but not limited to the entire range of American history from the colonial period to today, Asian history,

Middle Eastern history, Latin American history, and the history of Europe from the middle ages to the present.

### Anthropology

The department also offers an individualized major and a minor in anthropology. These degrees open additional doors of study to students. While some perceptions place anthropologists in ancient ruins of remote lands, much more frequently they find careers working alongside business people, medical doctors and researchers, health care specialists, and politicians.

### Student Involvement

We encourage students to supplement their academic programs through international study and participation in campus organizations of special professional, service, and academic interest. The History and Anthropology Clubs provide opportunities for students to have personal and informal association with the faculty and other history and anthropology students outside of the classroom. Recent club activities have included an anthropology film series and field trips to historic sites in the region. Qualified students may also seek membership in Phi Alpha Theta, the national history honor society, which encourages excellence in the study of history.

### Special Facilities

UCM houses some extraordinary collections. History and anthropology faculty members are dedicated curators of the university's archives and museum, located in the James C. Kirkpatrick Library. In addition to the museum's many collections, including the distinguished Paul Nance Middle

East Collection, and other historical items on display, various exhibits are featured throughout the year for public viewing.

Students may also enhance their education through learning experiences at local facilities, such as Blind Boone Park, the Howard School, and Pertle Springs, and through international opportunities.

### Internships

Students have the opportunity to pursue internships that will enhance their knowledge and skills and provide real world experience. The department has placed interns at the Truman Library, the Midwest Center for Holocaust Education, Whiteman Air Force Base, the National Archives in Kansas City, Pioneer Bluffs Historical Site, and at archives and museums in Jefferson City, Johnson County and Henry County, to name just a few.

### Scholarships

The Department of History and Anthropology presents semester Achievement Awards to students who excel academically. Other available scholarships include the Demand Scholarship in history, A. E. Twomey Scholarship in history, and A. F. McClure Scholarship in archives.

For more information about this exciting program and others within the department, visit the department's home page: [ucmo.edu/history](http://ucmo.edu/history).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**History Major, B.S. Degree (43-421)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
HIST 1350 History of the United States to 1877	3	HIST 1351 History of the United States from 1877	3
General Education	9	HIST 2402 History of Modern World	3
<b>Semester Total</b>	<b>15</b>	General Education	6
AE 1400 Freshman Seminar*	1	<b>Semester Total</b>	<b>15</b>
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
HIST 2400 History of the Early World	3	HIST 2401 History of the Early Modern World	3
General Education	12	General Education	6
<b>Semester Total</b>	<b>15</b>	Free Choice Electives	6
		<b>Semester Total</b>	<b>15</b>
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
SOSC 3010 Writing in the Social Sciences	3	Upper-Level Elective in American History	3
Upper-Level Elective in American History	3	Upper-Level Elective in World History**	3
Free Choice Electives	9	Free Choice Electives	9
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs.</b>
Upper-Level Elective in World History**	6	IGEN 4231 Myth, Memories, & Realities	3
Upper-Level Elective in History	3	Free Choice Electives	12
Free Choice Electives	6	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		

**History Major, B.S. Degree - 120 hours**

- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*A minimum of three hours of world history must be non-western history, or HIST 4452 or HIST 4453.
- This major does not build in the minimum number (30) of upper-level credit hours required for graduation. Be sure to include upper-level choices (3000/4000) in your major electives, general education, and/or free choice electives.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## Harmon College of Business and Professional Studies

Department of Management

AACSB Accredited

# HOSPITALITY MANAGEMENT

## BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION DEGREE

The Department of Management in the Harmon College of Business and Professional Studies (HCBPS) at UCM offers students educational experiences that will help them address the challenges of business in a wide variety of careers.

The Management Department offers a Bachelor of Science in Business Administration (BSBA) with a major in Hospitality Management.

In the BSBA in Hospitality Management major, our students will be given the opportunity to:

- Become more effective decision makers
- Organize activities to implement decisions
- Deliver effective oral presentations and written communications
- Lead others effectively
- Develop skills and attitudes required for life-long learning and serving others

### Qualified, Committed Faculty

We have highly qualified faculty with Ph.D.s and real business experience. Faculty are very committed to working with students to ensure their success. See our "How Your Management & Business Communication Faculty Can Help You" link [ucmo.edu/management](http://ucmo.edu/management).

### Team-Based, Experiential Learning Style of Instruction.

The courses in the BSBA in Hospitality Management major utilize a team-based experiential learning approach, rather than lecture, to help students understand both the theory and practice of management. Faculty members prepare students to work effectively and efficiently in team environments.

### The Integrative Business Experience (IBE)

(<http://ibe.ucmo.edu>)

The BSBA in Hospitality Management requires the IBE. IBE classes create, operate, and execute start-up businesses (based on bank loans of up to \$5,000 per business) and manage hands-on service projects for non-profit organizations. In the last 7 years, IBE teams have donated more than \$200,000 in profits to non-profit organizations and have completed service projects involving more than 7,000 hours for the community.

### Real-World Business Experience Internship Programs

Business majors participate in paid internships. The HCBPS Business Internship Center information is at <http://ucmo.edu/intern>.

### Student Organizations

Students are encouraged to join the Hospitality Management Association. Many campus, professional, and community-focused activities involve our students, either through classes or attendance at major conferences and trade shows. For example, 10 students typically attend the International Hotel/Motel and Restaurant Show in New York City that includes a tour/reception of the Waldorf-Astoria Hotel, a tour of the Statue of Liberty, a Broadway experience and other New York City experiential opportunities. Students also attend a hospitality symposium in April at Missouri State University and the National Restaurant Association Trade Show in Chicago.

### AACSB Accredited Degree

All UCM business programs are accredited by the AACSB International ([aacsb.edu](http://aacsb.edu)).

### Employer Interest in Hospitality Management Majors

Management continues to be among the top 10 undergraduate majors targeted in the Midwest for college recruiting according to statistics from the National Association of Colleges and Employers (NACE) Job Outlook.

### Career Opportunities

Students begin their career after graduation as front office assistant managers, restaurant managers, sales managers, food and beverage assistant managers, bar managers, executive housekeepers, human resource personnel, accounting personnel and resort development personnel.

### Online Information

Learn more about the hospitality management major on the departmental website at [ucmo.edu/management](http://ucmo.edu/management).

### To Learn More

For more information contact the Harmon College of Business and Professional Studies, UCM, Warrensburg, MO 64093; call the Department of Management at 660-543-4026 or HCBPS at 660-543-4560.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

### Hospitality Management Major, B.S.B.A. Degree (46-613)

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CIS 1600 Business Information Management*	3	COMM 1000 Public Speaking	3
ENGL 1020 Composition I	3	ECON 1010 Principles of Macroeconomics*	3
HM 1800 Introduction to Hospitality (fall only)	3	ENGL 1030 Composition II	3
MATH 1111 College Algebra*	3	HIST 1350 or 1351 History of the United States	3
General Education	3	General Education	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
AE 1400 or BADM 1400 Freshman Seminar**	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ACCT 2101 Principles of Financial Accounting*	3	ACCT 2102 Principles of Managerial Accounting*	3
ECON 1011 Principles of Microeconomics*	3	BLAW 2720 Legal Environment of Business*	3
FIN 2801 Business Statistics I*	3	HM 2830 Hospitality Case Analysis	1
GEOG 2212 World Geography	3	General Education	9
General Education (science with a laboratory)	4	<b>Semester Total</b>	<b>16</b>
<b>Semester Total</b>	<b>16</b>	<b>Note: Complete all BSBA Admission requirements and apply for admission.*</b>	
<b>Summer Semester</b>	<b>Hrs.</b>		
HM 3880 Internship (typically completed during the summer after 2nd or 3rd year - may be done during a regular semester.)	3		
<b>Semester Total</b>	<b>3</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
FIN 3801 Business Statistics II	3	HM 3844 Restaurant Operations	3
FIN 3850 Principles of Finance	3	<b>(IBE Block-below)***</b>	
HM 2830 Hospitality Case Analysis	1	CIS 3630 Management Information Systems***	3
HM 3800 Lodging Management	3	MGT 3315 Management of Organizations***	3
MGT 3325 Business Communications	3	MKT 3405 Marketing Policy***	3
MGT 3360 Production/Operations Management	3	IBE Practicum (CIS 3685/MKT 3485/MGT 3385)***	3
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>15</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
GEOG 3201 The Cultural Landscape	3	HM 4830 Tourism Marketing	3
HM 4820 Sustainability & Operations Management	3	HM 4845 Senior Seminar	3
HRM 3920 Human Resource Management	3	ICAP 4357 Organizational Policy & Strategy	3
MGT 3320 System, Teams, & Organizational Behavior	3	MGT 3345 International Management	1
<b>Semester Total</b>	<b>12</b>	Free Choice Electives**	2
		<b>Semester Total</b>	<b>12</b>

### Hospitality Management Major, B.S.B.A. Degree - 120 Hours

- \*Students in this major must complete eight preadmission courses with a grade of C or higher and must obtain a 2.25 cumulative GPA and a 2.25 in these specific courses, for admission to the degree program. These courses are recommended for completion during the freshman and sophomore years. These courses are indicated with an (\*).
- \*\*AE or BADM 1400 (1 hr.) is highly recommended for academic success. AE or BADM 1400 counts as a free choice elective. If AE or BADM 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*\***All Hospitality Management majors must enroll in the IBE Block.** This includes the IBE Practicum (MGT 3385, MKT 3485 or CIS 3685) concurrently with the IBE sections of MGT 3315, MKT 3405 and CIS 3630. This is typically done during the fall of the junior year. Prerequisites for the IBE block include: ACCT 2101, CIS 1600, and junior standing.
- A 2.25 cumulative GPA is required for graduation with in this major.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## Harmon College of Business and Professional Studies

Department of Management

# HOTEL AND RESTAURANT ADMINISTRATION

## BACHELOR OF SCIENCE DEGREE

University of Central Missouri's liberal arts tradition of broadly educating students for a global environment instills character and values required for responsible decision-making in personal and professional activities. The liberal arts core develops skills in communication, critical thinking, ethics, interpersonal relationships, leadership, and technology that are applied in the hospitality professional courses leading to the Bachelor of Science degree in hotel and restaurant administration.

This program is dedicated to providing a current and high quality education in preparing students for careers in the world's interdependent lodging, food service and related industries. The professional curriculum and co-curricular activities of the Harmon College of Business and Professional Studies support this objective by integrating technology, leadership, and practical experiences within the scope of its educational mission. The college also strives to obtain the resources necessary to maintain a leadership role in integrating technology across the curriculum.

The hospitality industry is the largest in the world and the first, second or third largest employer in more than 30 states. Government employment projections predict that over the next 10 years management positions in lodging, food service, tourism, and recreation and sports will grow by twice the overall rate of employment growth in the economy.

### Internships

All students must complete at least 20 credit hours of coursework and attend a career planning seminar

before completing the three credit hour approved industry internship experience. The additional five credit hour internship is usually completed after the junior year. Our placement rate is 100 percent with about 95 percent of our students working in their major. Major companies recruit on campus.

Our students have completed internships mainly in the summer semester in many states and some foreign countries. Students gain experience in such diverse areas as convention centers, sports arenas, travel companies, international hotel management companies, food and beverage management in all kinds of settings, events and meeting planning, accounting, human resource management, car rental management, resort management, convention and visitors bureaus, hotel and restaurant development/ownership, and casino management. Major employers include Hyatt, Marriott, Drury Inn, Holiday Inn, Hilton, Fairmont, Disney, Applebee's, Chili's, Country Kitchen, Red Lobster, and Aramark.

### Special Facilities

Our kitchen laboratory allows students to gain culinary management skills that are important in food and beverage management. Research opportunities exist in both the Quantity Foods Lab and Hospitality and Travel Marketing courses.

### Student Organizations

Students are encouraged to join the Hospitality Management Association. Many campus, professional, and community-focused activities involve our students, either through classes or attendance at major conferences and trade shows. For example,

10 students typically attend the International Hotel/Motel and Restaurant Show in New York City that includes a tour/reception of the Waldorf-Astoria Hotel, a tour of the Statue of Liberty, a Broadway experience and other New York City experiential opportunities. Students also attend a hospitality symposium in April at Missouri State University and the National Restaurant Association Trade Show in Chicago.

### Career Opportunities

Students begin their career after graduation as front office assistant managers, restaurant managers, sales managers, food and beverage assistant managers, bar managers, executive housekeepers, human resource personnel, accounting personnel and resort development personnel.

### Department Scholarships

The department offers the Hospitality Management Association Undergraduate Scholarship. Various additional scholarship opportunities are available to our hospitality students based on need, academic achievement, and career aspirations.

### To Learn More

To learn more about majoring in Hotel and Restaurant Administration, contact the Department of Management at 660-543-4026, or visit our web page at [ucmo.edu/management](http://ucmo.edu/management) or stop by our office in Dockery 400.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Hotel and Restaurant Administration Major, B.S. Degree (43-275)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	BTE 1210 Essentials of Managing Information or CIS 1600 Business Information Management	2-3
HM 1800 Introduction to Hospitality (Fall only)	3	CHEM 1104 Introduction to the Sciences: Chemistry	4
General Education	9	ECON 1010 Principles of Macroeconomics	3
<b>Semester Total</b>	<b>15</b>	ENGL 1030 Composition II	3
AE 1400 Freshman Seminar*	1	General Education	3
		<b>Semester Total</b>	<b>15-16</b>
<b>Summer Semester Following Freshman or Sophomore Year</b>	<b>Hrs.</b>		
HM 3810 Internship**	3		
<b>Semester Total</b>	<b>3</b>		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ACCT 2101 Principles of Financial Accounting	3	FOOD 3332 Quantity Food Production & Service	3
FOOD 2322 Food Preparation	3	GEOG 2212 World Geography	3
HM 2830 Hospitality Management Case Analysis***	1	HM 3844 Restaurant Operations	3
General Education	9	General Education	6
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>15</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
FOOD 3333 Food Systems Management (Fall only)	3	HM 2830 Hospitality Management Case Analysis***	1
HM 3800 Lodging Management (Fall only)	3	HRM 3920 Human Resource Management	3
MGT 3325 Business Communication	3	MGT 3320 Systems, Teams, & Organizational Behavior	3
Free Choice Electives**	3	TOUR 4730 Tourism Marketing (Spring only)	3
<b>Semester Total</b>	<b>12</b>	Free Choice Electives	3
		<b>Semester Total</b>	<b>13</b>
<b>Summer Semester Following Junior Year</b>	<b>Hrs.</b>		
HM 4810 Internship	5		
<b>Semester Total</b>	<b>5</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
HM 4820 Sustainability & Operations Management	3	HM 2830 Hospitality Management Case Analysis***	1
HM 4850 Hospitality Operations Analysis (Fall only)	3	HM 4840 Legal Aspects of Hotel & Rest. Mgmt. (Spring only)	3
General Education (IGEN/ICAP)	3	HM 4845 Senior Seminar (Spring only)	3
Free Choice Electives	3-4	Free Choice Electives	6
<b>Semester Total</b>	<b>12-13</b>	<b>Semester Total</b>	<b>13</b>

**Hotel and Restaurant Administration Major, B.S. Degree - 120 hours**

- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*This major requires 8 hours of internship (HM 3810 and HM 4810).
- \*\*\*HM 2830 Hospitality Management Case Analysis is a one credit hour course that must be taken three times.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

School of Technology

# INNOVATIVE TECHNOLOGIES

## BACHELOR OF SCIENCE DEGREE, OPTION 1: PRODUCTION MANAGEMENT

The Innovative Technologies program at the University of Central Missouri prepares students for professional careers in business. It is intended for students who do not have an associate in science or an associate in applied science degree. By combining carefully selected technical courses in production management, product research and development, or robotics and automation, the program prepares students to function in technical and decision-making situations. Employers hire technology graduates because they are productive problem solvers and decision-makers. Starting salaries for technology graduates with industry experience are among the highest for all majors at UCM.

### Student Involvement

Student Organization of Construction Managers (SOCM), and the Society of Manufacturing Engineers (SME) relate to this degree program.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide assistance with writing cover letters and resumes and offer a career library, mock interviews, and career counseling. The office also serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students/](http://ucmo.edu/career/students/).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. In addition, various industry

scholarships are available, such as from the Society of Manufacturing Engineers Foundation. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information, contact the School of Technology, Grinstead 9, UCM, Warrensburg, MO 64093, or call 660-543-4439. The school's web address is [ucmo.edu/technology](http://ucmo.edu/technology) and [facebook.com/ucmsot](https://facebook.com/ucmsot).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Innovative Technologies, B.S. Degree (Option 1: Production Management) (43-01588)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
COMM 1000 Public Speaking	3	CADD 1105 Basic AutoCAD	1
ENGL 1020 Composition I	3	CADD 1110 Fundamentals of Drafting	2
ET 1010 Applied Electricity*	4	ECON 1010 Principles of Macroeconomics	3
MATH 1111 College Algebra	3	ENGL 1030 Composition II	3
General Education	3	ENGT 1012 Global Production Technology	2
<b>Semester Total</b>	<b>16</b>	General Education	3
		<b>Semester Total</b>	<b>14</b>
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
ACCT 2101 Principles of Financial Accounting	3	CADD 2170 Introduction to Computer-Aided Drafting	2
CADD 1120 Machine Drafting**	3	ENGT 2040 Engineering Material Science	4
CHEM 1103 Introduction to the Sciences: Chemistry	3	PHYS 1104 Introduction to the Sciences: Physics	4
ENGT 2530 Machine Tool Technology	3	General Education	6
General Education	3	<b>Semester Total</b>	<b>16</b>
<b>Semester Total</b>	<b>15</b>		
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
CADD 4171 Production Design Drafting***	3	CADD 4124 Geometric Dimen. & Toler. Principles for ENGT 2	2
CTE 3060 Technical Writing	3	ENGT 3530 Inspection and Quality Control*	3
ENGT 3520 Engineering Economy	3	ENGT 3562 Computer Numerical Control (CNC)*	3
GEOG 3201 The Cultural Landscape	3	INDM 4260 Organizational Dynamics	3
SAFE 3070 Safety Leadership	3	General Education	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>14</b>
<b>Junior-to-Senior Year - Summer Semester</b>	<b>Hrs.</b>		
SOT 3022 Internship in Technology	3		
<b>Semester Total</b>	<b>3</b>		
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs.</b>
ATM 4032 Hydraulics & Pneumatics	3	ENGT 4580 Quality Systems Engineering	3
ENGT 4520 Robotics and Automation	3	ICAP 4110 Engineering Technology Problem Solving	3
INDM 4210 Industrial Management	3	INDM 4015 Legal Aspects of Industry*	3
INDM 4240 Facilities Engineering	3	INDM 4220 Human Factors Engineering	3
INDM 4250 Project Management	3	<b>Semester Total</b>	<b>12</b>
<b>Semester Total</b>	<b>15</b>		

**Innovative Technologies, B.S. Degree (Option 1: Production Management) - 120 hours**

- \*This course is only offered during the semester indicated.
- \*\*A grade of C or higher is required in this course as a prerequisite to CADD 4171.
- \*\*\*Students will need permission to enroll in CADD 4171 because the prerequisite of a C or higher in CADD 4170 is not required by this major.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Health, Science, and Technology

School of Technology

# INNOVATIVE TECHNOLOGIES

## BACHELOR OF SCIENCE DEGREE, OPTION 2: PRODUCT RESEARCH AND DEVELOPMENT

The Innovative Technologies program at the University of Central Missouri prepares students for professional careers in business. It is intended for students who do not have an associate in science or an associate in applied science degree. By combining carefully selected technical courses in production management, product research and development, or robotics and automation, the program prepares students to function in technical and decision-making situations. Employers hire technology graduates because they are productive problem solvers and decision-makers. Starting salaries for technology graduates with industry experience are among the highest for all majors at UCM.

### Student Involvement

Student Organization of Construction Managers (SOCM), and the Society of Manufacturing Engineers (SME) relate to this degree program.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide assistance with writing cover letters and resumes and offer a career library, mock interviews, and career counseling. The office also serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students/](http://ucmo.edu/career/students/).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. In addition, various industry

scholarships are available, such as from the Society of Manufacturing Engineers Foundation. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information, contact the School of Technology, Grinstead 9, UCM, Warrensburg, MO 64093, or call 660-543-4439. The school's web address is [ucmo.edu/technology](http://ucmo.edu/technology) and [facebook.com/ucmsot](https://facebook.com/ucmsot).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Innovative Technologies, B.S. Degree (Option 2: Product Research and Development) (43-02588)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
COMM 1000 Public Speaking	3	CADD 1105 Basic AutoCAD	1
ENGL 1020 Composition I	3	CADD 1110 Fundamentals of Drafting	2
MATH 1111 College Algebra	3	ECON 1010 Principles of Macroeconomics	3
PSY 1100 General Psychology	3	ENGL 1030 Composition II	3
General Education	3	ENGT 1012 Global Production Technology	2
<b>Semester Total</b>	<b>15</b>	General Education	3
		<b>Semester Total</b>	<b>14</b>
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
ACCT 2101 Principles of Financial Accounting	3	ENGT 2040 Engineering Material Science	4
CADD 1120 Machine Drafting*	3	CADD 2170 Introduction to Computer-Aided Drafting	2
CHEM 1103 Introduction to the Sciences: Chemistry	3	PHYS 1104 Introduction to the Sciences: Physics	4
ENGT 2530 Machine Tool Technology	3	PSY 2110 Research and Design Analysis I	4
General Education	3	<b>Semester Total</b>	<b>14</b>
<b>Semester Total</b>	<b>15</b>		
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
CADD 4171 Production Design Drafting**	3	ENT 4315 Entrepreneurial Business Planning	3
CTE 3060 Technical Writing	3	INDM 4230 Lean and Quality Management	3
GEOG 3201 The Cultural Landscape	3	INDM 4260 Organizational Dynamics	3
PSY 2120 Research and Design Analysis II	4	General Education	6
SAFE 3070 Safety Leadership	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>16</b>		
<b>Junior-to-Senior Year - Summer Semester</b>	<b>Hrs.</b>		
INDM 4280 Industrial Statistics	3		
SOT 3022 Internship in Technology	3		
<b>Semester Total</b>	<b>6</b>		
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs.</b>
INDM 4210 Industrial Management	3	ENGT 4580 Quality Systems Engineering	3
INDM 4250 Project Management	3	ICAP 4110 Engineering Technology Problem Solving	3
SOT 4000 Special Projects in Technology	3	INDM 4220 Human Factors Engineering	3
General Education	3	Free Choice Elective	4
<b>Semester Total</b>	<b>12</b>	<b>Semester Total</b>	<b>13</b>

**Innovative Technologies, B.S. Degree (Option 2: Product Research and Development) - 120 hours**

- \*A grade of C or higher is required in this course as a prerequisite to CADD 4171.
- \*\*Students will need permission to enroll in CADD 4171 because the prerequisite of a C or higher in CADD 4170 is not required by this major.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

School of Technology

# INNOVATIVE TECHNOLOGIES

## BACHELOR OF SCIENCE DEGREE, OPTION 3: ROBOTICS AND AUTOMATION

The Innovative Technologies program at the University of Central Missouri prepares students for professional careers in business. It is intended for students who do not have an associate in science or an associate in applied science degree. By combining carefully selected technical courses in production management, product research and development, or robotics and automation, the program prepares students to function in technical and decision-making situations. Employers hire technology graduates because they are productive problem solvers and decision-makers. Starting salaries for technology graduates with industry experience are among the highest for all majors at UCM.

### Student Involvement

Student Organization of Construction Managers (SOCM), and the Society of Manufacturing Engineers (SME) relate to this degree program.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide assistance with writing cover letters and resumes and offer a career library, mock interviews, and career counseling. The office also serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students/](http://ucmo.edu/career/students/).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. In addition, various industry

scholarships are available, such as from the Society of Manufacturing Engineers Foundation. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information, contact the School of Technology, Grinstead 9, UCM, Warrensburg, MO 64093, or call 660-543-4439. The school's web address is [ucmo.edu/technology](http://ucmo.edu/technology) and [facebook.com/ucmsot](https://facebook.com/ucmsot).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Innovative Technologies, B.S. Degree (Option 3: Robotics and Automation) (43-03588)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
COMM 1000 Public Speaking	3	CADD 1105 Basic AutoCAD	1
ENGL 1020 Composition I	3	CADD 1110 Fundamentals of Drafting	2
ET 1010 Applied Electricity*	4	ECON 1010 Principles of Macroeconomics	3
MATH 1111 College Algebra	3	ENGL 1030 Composition II	3
General Education	3	ENGT 1012 Global Production Technology	2
<b>Semester Total</b>	<b>16</b>	General Education	3
		<b>Semester Total</b>	<b>14</b>
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
ACCT 2101 Principles of Financial Accounting	3	CADD 2170 Introduction to Computer-Aided Drafting	2
CHEM 1103 Introduction to the Sciences: Chemistry	3	PHYS 1104 Introduction to the Sciences: Physics	4
ET 1050 Digital Principles & Applications*	4	General Education	6
General Education	6	<b>Semester Total</b>	<b>12</b>
<b>Semester Total</b>	<b>16</b>		
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
CTE 3060 Technical Writing	3	ENGT 3562 Computer Numerical Control (CNC)*	3
ET 3017 Industrial Electronics	4	INDM 4260 Organizational Dynamics	3
GEOG 3201 The Cultural Landscape	3	Free Choice Electives	9
SAFE 3070 Safety Leadership	3	<b>Semester Total</b>	<b>15</b>
Free Choice Electives	3		
<b>Semester Total</b>	<b>16</b>		
<b>Junior-to-Senior Year - Summer Semester</b>	<b>Hrs.</b>		
SOT 3022 Internship in Technology	3		
<b>Semester Total</b>	<b>3</b>		
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs.</b>
ENGT 4520 Robotics and Automation	3	ENGT 4580 Quality Systems Engineering	3
INDM 4210 Industrial Management	3	ICAP 4110 Engineering Technology Problem Solving	3
INDM 4250 Project Management	3	Free Choice Electives	7
Free Choice Electives	6	<b>Semester Total</b>	<b>13</b>
<b>Semester Total</b>	<b>15</b>		

**Innovative Technologies, B.S. Degree (Option 3: Robotics and Automation) - 120 hours**

- \*This course is only offered during the semester indicated.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

**College of Arts, Humanities, and Social Sciences**  
*Department of Art & Design*

# INTERIOR DESIGN

## BACHELOR OF FINE ARTS DEGREE

Interior design students at the University of Central Missouri learn and experience design from a creative faculty that is attuned to the contemporary issues within this broad field. Both aesthetic and technical experiences are studied in order to solve problems related to the function of interior environments and to enhance the health, safety, and welfare of the public.

Through a series of course assignments, the students will experience projects that will sharpen their visual, oral, and written skills in order to fulfill the design objectives as presented within each project.

Ultimately, the interior designer transforms spaces into unique living and working environments. Students in interior design will develop the basics of two- and three-dimensional design, color theory, drawing, drafting and computer-aided design. The interior design courses provide knowledge and skills in both residential and non-residential interiors. Additional courses in art and design history add historical significance to the evolution of design in contemporary society. In addition, areas of experience include universal design, sustainability, human behavior, furniture design, and business practices.

Through a partnership with the School of Technology, our students gain additional development in technical skills such as architectural drafting, building construction and computer-aided design. These areas of study, combined with the interior design and fine art curricula, allow the students to develop the necessary skills to enter the field with a well-prepared portfolio in order to achieve a successful career in interior design.

### **About the Faculty**

Faculty members in the interior design program are committed

to each student's success. Faculty members offer expertise and professional experience in lighting design, presentation styles, and residential and non-residential interior design. Students who are interested in special projects often work very closely and individually with members of the faculty to develop knowledge in specific areas of interior design.

### **Student Involvement**

In addition to the course of study, professional involvement and interaction is pursued through guest speakers, field trips and exposure to professional interior design organizations. The interior design majors have created an organization called UCM Interior Design Student Association (IDSA). Through the IDSA group, students are encouraged to join and participate in the professional associations most related to the practice of interior design (American Society of Interior Designers – ASID and the International Interior Design Association – IIDA). This student led group provides the students with a venue for creating their own social, service and educational activities outside of the classroom. Some of the highlights of this organization are: The annual speaker's symposium, field trips, social events, participation in national design competitions, and participation in industry sponsored events in nearby Kansas City.

Kansas City, only an hour's drive from campus, offers many resources for interior design students. Many interior design firms and suppliers welcome our students to tour, learn and gather resources, in an effort to mentor our students into the interior design field. Interior design internships are encouraged for upperclassmen and many times these internships result in permanent positions.

### **Career Opportunities**

Students who graduate from the program can look forward to several career options. Many of our students enter the field to become either residential or non-residential interior designers. Other areas of possible employment are hospitality design, showroom design, ecclesiastical design and health care design. Entrepreneurial students may even consult as interior designers and start their own firms. In related industries, a student could have a career as a manufacturer's sales representative or be employed in product design and development. With so much media attention (network television, magazines, blogs and social media) devoted to interior design, the field and opportunities for employment, continue to grow.

### **Accreditation**

UCM's Department of Art & Design is accredited by the National Association of Schools of Art and Design (NASAD). UCM is the only state-supported school in Missouri with such accreditation. Of the approximately 2,000 college art programs nationwide, NASAD has approved less than 15 percent, based on proven rigor and content.

### **For More Information**

To learn more, contact the Department of Art & Design, Art Center 120, UCM, Warrensburg, MO 64093; call 660-543-4481; or visit the department's web site at [ucmo.edu/art](http://ucmo.edu/art).

For admission information, call toll free 877-SAY-UCMO (877-729-8266). Central Missouri's home page address is [ucmo.edu](http://ucmo.edu).

**Interior Design Major, B.F.A. Degree (47-261)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
ART 1110 Drawing I	3	ART 1120 Drawing II	3
ART 1315 2-D Design	3	ART 1800 Ideas & the Visual Arts	3
ENGL 1020 Composition I	3	ART 2310 Interior Design Studio I	3
CADD 1105 Basic AutoCAD	1	ART 2335 3-D Design	3
CADD 1110 Fundamentals of Drafting	2	ENGL 1030 Composition II	3
General Education	3	CADD 2170 Introduction to Computer Aided Drafting	2
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>17</b>
AE 1400 Freshman Seminar*	1		
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
ART 1325 Color and Design	3	ART 1825 Art History Survey II	3
ART 1815 Art History Survey I (fall) or ART 1835 Survey of Non-West Art (spring)	3	ART 2340 Materials, Methods, and Specifications	3
ART 2320 Building Systems & Sustainability	3	ART 3310 Interior Design Studio II	3
ART 2511 Painting I or ART 3510 Watercolor	3	FAME 2442 Textiles	3
ART 3305 Interior Design Presentation Techniques	3	Major Elective**	3
General Education	3	General Education	3
<b>Semester Total</b>	<b>18</b>	<b>Semester Total</b>	<b>18</b>
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
ART 2412 Ceramics I or ART 2420 Sculpture I	3	ART 4340 Interior Design Studio IV	3
ART 3330 Interior Design Studio III	3	ART 4850 20th Century Art & Architecture or ART 4860 Contemporary Art & Design	3
ART 3340 Interior Detailing & Furniture Design	3	Major Elective**	3
ART 3800 History of Furniture & Interiors	3	General Education	6
General Education	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs.</b>
ART 4350 Interior Design Thesis I	3	ART 3320 Professional Practice for Interior Designers***	3
ICAP 4221 Artists in Contemporary Society	3	ART 4360 Interior Design Thesis II	3
General Education	9	General Education	9
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

**Interior Design Major, B.F.A. Degree - 128 hours**

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives.
- \*\*Choose 6 hours of major electives from list of courses in the 2013 Undergraduate Catalog.
- \*\*\*ART 3320 Professional Practice for Interior Designers is only offered Spring semester of even numbered years (2010, 2012, etc.). Students planning to graduate in the Spring or Fall of odd numbered years should take ART 3320 during their Junior year and adjust their enrollment in general education classes to compensate.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Arts, Humanities and Social Sciences

Department of Government, International Studies, and Languages

# INTERNATIONAL STUDIES

## BACHELOR OF ARTS DEGREE

The International Studies major in University of Central Missouri's Department of Government, International Studies, and Languages offers students a variety of career opportunities in governmental and non-governmental organizations, including the fields of business, law, communications, and tourism. The International Studies curriculum helps to create and reinforce a cross-cultural lens through which students are able to view and analyze the increasingly global community where we live and work. Additionally, courses provide students with the necessary tools to assess and follow global political, economic, and social trends that arise often in the midst of the complex intersection of historical events and cultural dynamics. The major offers a curriculum recognized by employers increasingly seeking candidates with strong analytical skills and the ability to evaluate and understand the impact of globalization on individuals and societies.

The graduate with a Bachelor of Arts degree in International Studies will use the knowledge and skills obtained in the program to:

- Develop an awareness of how the world's systems are interdependent and how local economic and social patterns have a global impact beyond their effect on individual lives.
- Understand and be able to analyze the critical topics in international affairs and global issues.
- Demonstrate knowledge of various social movements and organizations that have created and are creating goals and values that transcend national cultures and ideologies.

- Communicate program-specific knowledge effectively both verbally and in writing.
- Demonstrate the ability to communicate effectively at the intermediate level in a foreign language.
- Employ the discipline's theories, approaches, and methods in order to examine and understand past, present, and possible future international interactions.

### About the Faculty

International Studies courses are taught by experienced and dynamic faculty members who believe in individualized attention for their students. This personal approach is enhanced by UCM's 18 to 1 student-faculty ratio. Upon declaring a major in the Department of Government, International Studies, and Languages, students may request that a faculty adviser personally assist them in planning their program. In addition to a wide range of academic and professional experience, all of the department's faculty members have earned doctorates in their fields. Faculty members stay current with their profession through research, writing and participation in regional, national and international conferences.

### Study Abroad

Study abroad programs offer immersion experiences that complement what students have learned in class and are offered in over 50 countries. All international studies majors must satisfy one of the following international experiences:

- a) Participate in a study abroad program approved by UCM;

- b) Participate in an international internship approved by the International Studies Director and sponsored by a department at UCM;
- c) Participate in an international service learning program approved by the International Studies Director.

### Career Opportunities

Students who graduate from the program can look forward to several career options. Many of our students work with Federal and State Agencies, Foreign Service, State Department, International Organizations, Non-Governmental Organizations, and Multinational Corporations.

Other areas of possible employment include working as a Civil Servant, Diplomat, Translator, Trade Specialist, Peace Corps Officer, Human Rights Advocate, International Center Director, International Development or International Aid Officer, Policy Analyst, International Student Recruiter, International Student Advisor, Immigration Specialist, or Global Consultant.

### To Learn More

For more information, contact the Department of Government, International Studies, and Languages, Wood Building, Suite 5, UCM, Warrensburg, MO 64093; call 660-543-8948; e-mail Dr. Darlene Budd at [dbudd@ucmo.edu](mailto:dbudd@ucmo.edu); or visit the department's Web site at [ucmo.edu/politicalscience](http://ucmo.edu/politicalscience).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**International Studies Major, B.A. Degree (42-563)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> -Spring Semester	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
IS 1000 Introduction to International Studies	3	POLS 2520 Comparative Government and Politics	3
Modern Language Requirement*	3	Modern Language Requirement*	3
General Education	6	General Education	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
AE 1400 Freshman Seminar**	1		
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
POLS 2530 International Relations	3	GEOG 2246 Economic Geography	3
Major Elective in a Geographic Specialization***	3	Major Elective in a Content Specialization#	3
Modern Language Requirement*	3	Major Elective in a Geographic Specialization***	3
General Education	6	Modern Language Requirement*	3
<b>Semester Total</b>	<b>15</b>	General Education	3
		<b>Semester Total</b>	<b>15</b>
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
REL 3210 Comparative World Religions	3	Free Choice Electives## (Suggested Overseas Study, Internship or Service Learning experience)	15
SOC 3885 Globalization and the Future	3	<b>Semester Total</b>	<b>15</b>
Major Electives in a Content Specialization#	6		
General Education	3		
<b>Semester Total</b>	<b>15</b>		
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs.</b>
ANTH 4870 Comparative Cultures	3	IS 4950 Senior Seminar	3
Major Elective in a Content Specialization#	3	General Education	6
General Education	9	Free Choice Electives	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

**International Studies Major, B.A. Degree – 120 hours**

- \*See the current Undergraduate Catalog for B.A. Degree fulfillment options. This plan is based on 12 hours of modern foreign language. The number of free choice electives required will depend on modern language placement.
- \*\*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*\*Students will choose six credit hours of Major Electives in a Geographic Specialization from one of the five Geographic Specialization areas (1 - African Studies, 2 - Asian Studies, 3 - European Studies, 4 - Latin American Studies, or 5 - Middle East Studies). See the Undergraduate Catalog for course selections.
- #Students will choose 12 credit hours of Major Electives in a Content Specialization Courses from one of the four content Specialization areas (1 - The Global Society and Culture, 2 - International Relations, Peace and Justice, 3 - International Political Economy and Policy Studies, or 4 - Human Development and the Physical Environment). A minimum of six credit hours of this 12 must be at the upper level (3000/4000). See the Undergraduate Catalog for course selections.
- ##Students in this major are required to complete an International Experience Requirement (1 - study abroad program, 2 - international internship, or 3 - international service learning program). The experience must be approved by the International Studies director.
- Students must earn 30 hours of upper level credits overall to meet graduation requirements. Make choices in the major electives and/or general education accordingly.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## Harmon College of Business and Professional Studies

Department of Management

AACSB Accredited

# MANAGEMENT

## BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION DEGREE

The Department of Management in the Harmon College of Business and Professional Studies (HCBPS) at UCM offers students educational experiences that will help them address the challenges of business in a wide variety of careers.

The Management Department offers a Bachelor of Science in Business Administration (BSBA) with a major in Management. We also offer a Management minor. The courses in the BSBA in Management major utilize a team-based experiential learning approach, rather than lecture, to help students understand both the theory and practice of management.

In the BSBA in Management major, our students will be given the opportunity to:

- Become more effective decision makers
- Organize activities to implement decisions
- Deliver effective oral presentations and written communications
- Lead others effectively
- Develop skills and attitudes required for life-long learning and serving others

### Qualified, Committed Faculty

We have highly qualified faculty with Ph.D.s and real business experience. Faculty are very committed to working with students to ensure their success. See our "How Your Management & Business Communication Faculty Can Help You" link [ucmo.edu/management](http://ucmo.edu/management)

### Team-Based, Experiential Learning Style of Instruction.

Faculty members prepare students to work effectively and efficiently in team environments.

### The Integrative Business Experience (IBE) (<http://ibe.ucmo.edu>)

The BSBA in Management requires the IBE. IBE classes create, operate, and execute start-up businesses (based on bank loans of up to \$5,000 per business) and manage hands-on service projects for non-profit organizations. In the last 7 years, IBE teams have donated more than \$200,000 in profits to non-profit organizations and have completed service projects involving more than 7,000 hours for the community.

### Real-World Business Experience Internship Programs

Business majors participate in paid internships. The HCBPS Business Internship Center information is at [ucmo.edu/intern](http://ucmo.edu/intern).

### Business Organizations

The most popular clubs for management majors are Enactus (formerly SIFE) and DECA which any UCM major may join. Learn more about these student business organizations at [enactus.org](http://enactus.org) and [ucmdeca.com](http://ucmdeca.com).

### AACSB Accredited Degree

All UCM business programs are accredited by the AACSB International ([aacsb.edu](http://aacsb.edu)).

### Employer Interest in Management Majors

Management continues to be among the top 10 undergraduate majors targeted in the Midwest for college recruiting according to statistics from the National Association of Colleges and Employers (NACE) Job Outlook.

### The UCM Career Services web site is: [ucmo.edu/career](http://ucmo.edu/career).

### Management Major Employers

Service, government, banking, transportation services, agriculture, and products. You can find a full listing of hiring employers at [ucmo.edu/career/students/resources](http://ucmo.edu/career/students/resources).

### Online Information

Learn more about the management major on the departmental website at [ucmo.edu/management](http://ucmo.edu/management). A handbook for management majors is available online at [ucmo.edu/management/documents/handbook.pdf](http://ucmo.edu/management/documents/handbook.pdf).

### Central Summit Center

The BSBA in Management is also offered in Lee's Summit, MO. E-mail Dr. Chris Wright ([cwright@ucmo.edu](mailto:cwright@ucmo.edu)) for more information.

### To Learn More

For more information contact the Harmon College of Business and Professional Studies, UCM, Warrensburg, MO 64093; call the Department of Management at 660-543-4026 or HCBPS at 660-543-4560.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Management Major, B.S.B.A. Degree (46-268)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>		<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>		<b>Hrs.</b>
CIS 1600 Business Information Management*		3	COMM 1000 Public Speaking		3
ENGL 1020 Composition I		3	ECON 1010 Principles of Macroeconomics*		3
MATH 1111 College Algebra*		3	ENGL 1030 Composition II		3
PSY 1100 Gen. Psychology or SOC 1800 Gen. Sociology		3	General Education		6
General Education		3	<b>Semester Total</b>		<b>15</b>
<b>Semester Total</b>		<b>15</b>			
AE 1400 or BADM 1400 Freshman Seminar**		1			

<b>Sophomore Year - Fall Semester</b>		<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>		<b>Hrs.</b>
ACCT 2101 Principles of Financial Accounting*		3	ACCT 2102 Principles of Managerial Accounting*		3
ECON 1011 Principles of Microeconomics*		3	BLAW 2720 Legal Environment of Business*		3
FIN 2801 Business Statistics I*		3	General Education		9
General Education		7	<b>Semester Total</b>		<b>15</b>
<b>Semester Total</b>		<b>16</b>			

**Note: Complete all BSBA Admission requirements and apply for admission.\***

<b>Junior Year - Fall Semester</b>		<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>		<b>Hrs.</b>
FIN 3850 Principles of Finance		3	FIN 3801 Business Statistics II		3
<b>(IBE Block-below)***</b>			HRM 3920 Human Resource Management		3
CIS 3630 Management Information Systems***		3	MGT 3320 System, Teams, & Organizational Behavior		3
MGT 3315 Management of Organizations***		3	MGT 3325 Business Communications		3
MKT 3405 Marketing Policy***		3	MGT 3360 Production/Operations Management		3
IBE Practicum (CIS 3685/MKT 3485/MGT 3385)***		3	<b>Semester Total</b>		<b>15</b>
<b>Semester Total</b>		<b>15</b>			

<b>Senior Year - Fall Semester</b>		<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>		<b>Hrs.</b>
MGT 4325 Management Communication		3	ICAP 4357 Organizational Policy & Strategy		3
Choose two classes (6 hours) from the following:			MGT 3345 International Management		1
HM 4820 Sustainability & Operations Management			MGT 4320 Leading & Managing Teams & Organizations		3
MGT 4310 Quality & Innovation			Free Choice Electives (internship recommended)		7
MGT 4370 Supply Chain Management		6	<b>Semester Total</b>		<b>14</b>
Free Choice Electives (internship recommended)		6			
<b>Semester Total</b>		<b>15</b>			

**Management Major, B.S.B.A. Degree - 120 Hours**

- \*Students in this major must complete eight preadmission courses with a grade of C or higher and must obtain a 2.25 cumulative GPA and a 2.25 in these specific courses, for admission to the degree program. These courses are recommended for completion during the freshman and sophomore years. These courses are indicated with an (\*).
- \*\*AE or BADM 1400 (1 hr.) is highly recommended for academic success. AE or BADM 1400 counts as a free choice elective.
- \*\*\***All Management majors must enroll in the IBE Block.** This includes the IBE Practicum (MGT 3385, MKT 3485 or CIS 3685) concurrently with the IBE sections of MGT 3315, MKT 3405 and CIS 3630. This is typically done during the fall of the junior year. Prerequisites for the IBE block include: ACCT 2101, CIS 1600, and junior standing.
- A 2.25 cumulative GPA is required for graduation with in this major.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## Harmon College of Business and Professional Studies

Department of Economics, Finance, and Marketing

AACSB Accredited

# MARKETING

## BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION DEGREE

Marketing is the driving force behind the success of American business and industry. It provides the competitive edge that is so important to growth and prosperity in today's business world. That's why professionals who are skilled in identifying needs and promoting products and services to meet those needs are in high demand.

The marketing major prepares students for a wide variety of careers in business and industry. These opportunities include advertising, promotion, product and brand management, retail management, distribution, marketing research, sales, and sales management. Marketing professionals are involved from the conception and development of a product or service to the final sale and distribution to the customer.

### Admission

Admission to the BSBA degree program is conditional upon the completion of prerequisites and grade point average requirements as specified in UCM's Undergraduate Catalog. Marketing degree course requirements have been designed to give students a strong practical background in business and in the area of marketing. The program also provides a variety of electives, so students can develop greater competency in areas of particular interest.

### About the Faculty

Marketing classes are taught by experienced faculty members who believe in individualized attention for their students. Additionally, faculty members have significant experience in a variety of industries (retailing,

small business, and entrepreneur firms, etc.) that is used to help students understand current business practices. The faculty is involved in a variety of ventures and has developed a national reputation. The student-faculty ratio at Central Missouri is about 17 to 1, which allows for personalized attention. Faculty members increase student learning through active participation, case studies, presentations, group and individual projects, simulation, and work with actual business clients.

### Student Involvement

In addition to their coursework, students have the opportunity to become highly involved in a number of professional business organizations, including the student chapter of the American Marketing Association. These groups bring guest speakers to campus and sponsor trips to professional meetings and businesses in Kansas City and St. Louis. The organizations allow students to keep abreast of the latest developments in the field, initiate contacts with leading professionals, and develop leadership skills. Students are encouraged to further enhance their program through participation in internships and international study opportunities.

### Special Facilities

Outstanding library and computer facilities are available for student use at UCM. A large number of computers are available throughout campus for Harmon College of Business and Professional Studies student use. Excellent software is also available and programming assistance may be obtained for special projects. Marketing classes are

offered in the Ward Edwards Building. These facilities include the State Farm Sales Lab, a suite equipped for sales training and focus group research applications. Faculty offices for Central Missouri's Harmon College of Business and Professional Studies are housed in the historic Dockery Building.

### AACSB Accredited Degree

All UCM business programs are accredited by the AACSB International ([aacsb.edu](http://aacsb.edu)).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information, write to the Department of Economics, Finance, and Marketing, UCM, Dockery Building, Warrensburg, MO 64093, call 660-543-4246 or visit the department's web page [ucmo.edu/efm](http://ucmo.edu/efm).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).



**Marketing Major, B.S.B.A. Degree (46-269)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CIS 1600 Business Information Management*	3	COMM 1000 Public Speaking	3
ENGL 1020 Composition I	3	ECON 1010 Principles of Macroeconomics*	3
MATH 1111 College Algebra*	3	ENGL 1030 Composition II	3
PSY 1100 Gen. Psychology or SOC 1800 Gen. Sociology	3	General Education	6
General Education	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		
MKT 1400 Orientation to Marketing**	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ACCT 2101 Principles of Financial Accounting*	3	ACCT 2102 Principles of Managerial Accounting*	3
ECON 1011 Principles of Microeconomics*	3	BLAW 2720 Legal Environment of Business*	3
FIN 2801 Business Statistics I*	3	General Education	9
General Education	7	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>16</b>	<b>Note: Complete all B.S.B.A. Admission requirements and apply for admission.*</b>	
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
CIS 3630 Management Information Systems#	3	MGT 3325 Business Communications	3
FIN 3801 Business Statistics II	3	MGT 3360 Production/Operations Management	3
FIN 3850 Principles of Finance	3	MKT 3430 Professional Sales	3
MGT 3315 Management of Organizations#	3	MKT 3480 Consumer Behavior	3
MKT 3405 Marketing Policy#	3	Marketing Major Elective***#	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
MKT 4460 International Marketing	3	ICAP 4357 Organizational Policy & Strategy	3
MKT 4470 Marketing Research	3	MKT 4490 Marketing Management	3
Marketing Major Electives***	6	Marketing Major Electives***	6
Free Choice Electives	5	<b>Semester Total</b>	<b>12</b>
<b>Semester Total</b>	<b>17</b>		

**Marketing Major, B.S.B.A. Degree - 120 Hours**

- \*Students in this major must complete eight preadmission courses with a grade of C or higher and must obtain a 2.25 cumulative GPA and a 2.25 in these specific courses, for admission to the degree program. These courses are recommended for completion during the freshman and sophomore years.
- \*\*MKT 1400 is a free choice elective and is highly recommended for academic success. If MKT 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*\* Marketing elective classes available are: MKT 1400, MKT 3410, MKT 3420, MKT 3435, MKT 3450, MKT 3460, MKT 4420, MKT 4430, MKT 4440, MKT 4450, and MKT 4454. See Department Chair for advice on major electives.
- #Marketing majors may choose to enroll in the IBE Block. This includes the IBE Practicum (MGT 3385, MKT 3485 or CIS 3685) concurrently with the IBE sections of MGT 3315, MKT 3405 and CIS 3630. This is typically done during the fall of the junior year. Prerequisites for the IBE block include: ACCT 2101, CIS 1600, and junior standing. If this option is chosen, the 3 hours of the practicum class will count towards the Marketing Major Electives hours.
- A 2.25 cumulative GPA is required for graduation in this major.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Health, Science, and Technology

Department of Mathematics and Computer Science

# MATHEMATICS

## BACHELOR OF SCIENCE DEGREE

Thinking of mathematics may conjure mental images of someone solving long complicated equations, but mathematics is so much more. It is a varied and exciting field waiting to be discovered. Mathematics is the science of numbers and patterns. Mathematicians deal with the absolute, using rigorous logical arguments to determine truth. Individuals with mathematics degrees are highly valued in the workforce and a bachelor's degree in mathematics will prepare you for a plethora of careers.

The B.S. degree in Mathematics program in the Department of Mathematics and Computer Science at the University of Central Missouri is designed to help you develop a strong mathematical foundation. The skills you acquire will become instrumental as you establish a career or seek further study in a graduate program in mathematics or a related field.

### About the Faculty

All courses in the mathematics major are taught by experienced and caring faculty members who believe in individualized attention for students. All courses beyond the calculus sequence are taught by faculty members who have doctorates in their fields and have years of teaching experience. In addition, some faculty members have also worked as mathematicians in government and industry positions.

In addition to their teaching duties, members of the mathematics faculty at UCM are active researchers in their field, regularly presenting their original work at regional, national, and international conferences and publishing in internationally recognized professional journals.

The UCM Math faculty have research expertise in the areas

of: Algebra, Analysis, Applied Mathematics, Geometry, Graph Theory, Number Theory, Topology, and Statistics.

The student-faculty ratio at UCM is about 17 to 1, which allows for personalized attention for each student. Our faculty spend a large amount of time outside of class working one-to-one with students, making sure that everyone is able to learn and to work to their full potential.

### Student Involvement

The Department of Mathematics and Computer Science sponsors several student organizations that add another dimension to your education. Mathematics majors benefit from several organizations that provide an opportunity to interact with your peers as well as your professors in out-of-the-classroom activities.

The Student Chapter of the Mathematical Association of America participates in several state and national mathematics competitions. The Missouri Beta Chapter of Kappa Mu Epsilon, a mathematics honor society, meets regularly to hear new mathematics presentations by students and faculty, and to attend regional and national mathematical meetings. Joining either of these groups will further develop your appreciation for the vast and varied discipline of mathematics.

UCM Math students also have the opportunity to work with faculty members on joint research projects that often result in published papers in professional journals and presentations at regional and national conferences.

### Career Opportunities

Demand for mathematicians in the workforce is high and growing. According to the U.S. Bureau of

Labor and Statistics, "Employment of mathematicians is expected to increase by 22 percent during the 2008–18 decade, much faster than average for all occupations. Advancements in technology usually lead to expanding applications of mathematics, and more workers with knowledge of mathematics will be required in the future."

In addition to being in demand, mathematicians are consistently ranked as having the best occupation. According to articles in the Wall Street Journal, Mathematician and mathematically related jobs have taken the three top spots for best occupation in the U.S. for 2009 – 2011, with Mathematician ranked at or near the top each year. In fact, over the past decade, mathematicians consistently rank in the top 10 best jobs in terms of salary, stress, and work conditions.

According to the National Association of Colleges and Employers, the 15 highest-earning college degrees are all mathematically related andayscale.com ranks Applied Mathematician 6th out of all careers in the U.S. in terms of salary. Mathematics and Statistics are also found in the top 20.

### To Learn More

For more information, visit the department's webpage at [ucmo.edu/math-cs](http://ucmo.edu/math-cs), send us an email at [math-cs@ucmo.edu](mailto:math-cs@ucmo.edu), or stop by for a campus visit. We're located in W.C. Morris 222 on the Warrensburg campus.

For admission information, call 877-SAY-UCMO (877-729-8266). The university's home page is [ucmo.edu](http://ucmo.edu).

**Mathematics Major, B.S. Degree (43-454)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CS 1100 Computer Programming I	3	ENGL 1030 Composition II	3
ENGL 1020 Composition I	3	MATH 1152 Calculus & Analytic Geometry II	5
MATH 1151 Calculus & Analytic Geometry I	5	MATH 2410 Discrete Mathematics	3
General Education	3	General Education	3
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>14</b>
AE 1400 Freshman Seminar*	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
MATH 2153 Calculus & Analytic Geometry III	3	MATH 3151 Differential Equations**	3
MATH 3710 Linear Algebra	3	MATH or CS Major Elective***	3
General Education	9	General Education	9
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
MATH 3311 Introduction to Mathematical Statistics**	3	MATH or CS Major Elective***	3
MATH 4710 Algebraic Structures**	3	General Education	3
General Education	9	Free Choice Electives	10
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>16</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
MATH 4150 Advanced Calculus I**	3	ICAP 4233 The Sci., Historical, & Sociological Impact of Math	3
MATH 4711 Introduction to Modern Algebra**	3	MATH or CS Major Elective***	3
Free Choice Electives	10	Free Choice Electives	9
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>15</b>

**Mathematics Major, B.S. Degree - 120 hours**

- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*This class is only offered during the semester indicated.
- \*\*\*Choose nine hours of Major Electives from list in Undergraduate Catalog. Upper level electives (3000/4000) are strongly encouraged to help in meeting the 30 hours minimum required for graduation.
- This major does not build in the minimum number (30) of upper-level credit hours required for graduation. Be sure to include upper-level choices (3000/4000) in your major electives, general education, and/or free choice electives.
- Please note: many Math classes are only offered once a year. The correct sequencing of classes in this major is important. There may be time conflicts on occasion that will require choosing alternate courses from another semester's suggested schedule or from completely outside of the suggested list. Consult your catalog for options and seek help from your department advisor before seeing your academic advisor.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

Department of Mathematics and Computer Science

# MATHEMATICS

## ACCELERATED MASTERS OF SCIENCE DEGREE

Thinking of mathematics may conjure mental images of someone solving long complicated equations, but mathematics is so much more. It is a varied and exciting field waiting to be discovered. Mathematics is the science of numbers and patterns. Mathematicians deal with the absolute, using rigorous logical arguments to determine truth. Individuals with mathematics degrees are highly valued in the workforce and a bachelor's degree in mathematics will prepare you for a plethora of careers.

The Accelerated B.S. M.S. in Mathematics program in the Department of Mathematics and Computer Science at the University of Central Missouri is designed to help you develop a strong mathematical foundation and to provide a means for you to earn both a Bachelor's and a Master's degree within 5 years. The skills you acquire will become instrumental as you establish a career or seek further study in a graduate program in mathematics or a related field.

### About the Faculty

All courses in the mathematics major are taught by experienced and caring faculty members who believe in individualized attention for students. All courses beyond the calculus sequence are taught by faculty members who have doctorates in their fields and have years of teaching experience. In addition, some mathematics faculty members have also worked as mathematicians in government and industry positions.

In addition to their teaching duties, members of the mathematics faculty at UCM are active researchers in their field, regularly presenting their original work at regional, national, and international conferences and publishing in internationally

recognized professional journals.

The UCM Math faculty have research expertise in the areas of: Algebra, Analysis, Applied Mathematics, Geometry, Graph Theory, Number Theory, Topology, and Statistics.

The student-faculty ratio at UCM is about 17 to 1, which allows for personalized attention for each student. Our faculty spend a large amount of time outside of class working one-to-one with students, making sure that everyone is able to learn and to work to their full potential.

### Student Involvement

The Department of Mathematics and Computer Science sponsors several student organizations that add another dimension to your education. Mathematics majors benefit from several organizations that provide an opportunity to interact with your peers as well as your professors in out-of-the-classroom activities.

The Student Chapter of the Mathematical Association of America participates in several state and national mathematics competitions. The Missouri Beta Chapter of Kappa Mu Epsilon, a mathematics honor society, meets regularly to hear new mathematics presentations by students and faculty, and to attend regional and national mathematical meetings. Joining either of these groups will further develop your appreciation for the vast and varied discipline of mathematics.

UCM Math students also have the opportunity to work with faculty members on joint research projects that often result in published papers in professional journals and presentations at regional and national conferences.

### Career Opportunities

Demand for mathematicians in the workforce is high and growing. According to the U.S. Bureau of Labor and Statistics, "Employment of mathematicians is expected to increase by 22 percent during the 2008–18 decade, much faster than average for all occupations. Advancements in technology usually lead to expanding applications of mathematics, and more workers with knowledge of mathematics will be required in the future."

In addition to being in demand, mathematicians are consistently ranked as having the best occupation. According to articles in the Wall Street Journal, Mathematician and mathematically related jobs have taken the three top spots for best occupation in the U.S. for 2009 – 2011, with Mathematician ranked at or near the top each year. In fact, over the past decade, mathematicians consistently rank in the top 10 best jobs in terms of salary, stress, and work conditions.

According to the National Association of Colleges and Employers, the 15 highest-earning college degrees are all mathematically related and *payscale.com* ranks Applied Mathematician 6th out of all careers in the U.S. in terms of salary. Mathematics and Statistics are also found in the top 20.

### To Learn More

For more information, visit the department's webpage at [ucmo.edu/math-cs](http://ucmo.edu/math-cs), send us an email at [math-cs@ucmo.edu](mailto:math-cs@ucmo.edu), or stop by for a campus visit. We're located in W.C. Morris 222 on the Warrensburg campus.

For admission information, call 877-SAY-UCMO (877-729-8266). The university's home page is [ucmo.edu](http://ucmo.edu).

**Mathematics Major, Accelerated M.S. Degree (43-607)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CS 1100 Computer Programming I	3	ENGL 1030 Composition II	3
ENGL 1020 Composition I	3	MATH 1152 Calculus & Analytic Geometry II	5
MATH 1151 Calculus & Analytic Geometry I	5	MATH 2410 Discrete Mathematics	3
General Education	3	General Education	3
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>14</b>
AE 1400 Freshman Seminar*	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
MATH 2153 Calculus & Analytic Geometry III	3	MATH 3151 Differential Equations**	3
MATH 3710 Linear Algebra	3	MATH Major Elective***	3
General Education	9	General Education	9
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester#</b>	<b>Hrs.</b>
MATH 3311 Introduction to Mathematical Statistics**	3	MATH Major Elective***	3
MATH 4710 Algebraic Structures**	3	General Education	3
General Education	9	Free Choice Electives	10
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>16</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester##</b>	<b>Hrs.</b>
MATH 4150 Advanced Calculus I**	3	ICAP 4233 The Sci., Historical, & Sociological Impact of Math**3	3
MATH 4711 Introduction to Modern Algebra**	3	MATH Major Elective***	3
Free Choice Electives	9	Graduate-level Elective in MATH###	3
<b>Semester Total</b>	<b>15</b>	Free Choice Electives	6
		<b>Semester Total</b>	<b>15</b>
<b>Fifth Year - Fall Semester</b>	<b>Hrs.</b>	<b>Fifth Year - Spring Semester</b>	<b>Hrs.</b>
MATH 4211 Topology I	3	MATH 5150 Advanced Calculus II or MATH 5180 Real Analysis3	3
Graduate-level Electives in MATH###	9	MATH 5711 Adv. Group & Field Theory or	
<b>Semester Total</b>	<b>12</b>	MATH 5722 Adv. Ring & Module Theory###	3
		Graduate-level Elective in MATH	3
		<b>Semester Total</b>	<b>9</b>

**Mathematics Major, Accelerated M.S. Degree - 140 hours**

- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*This class is only offered during the semester indicated.
- \*\*\*Choose nine hours of Major Electives from the list in Undergraduate Catalog.
- #See the department and your academic advisor for admission to the program/graduate school.
- ##During the final semester of undergraduate work, students may enroll in only 3 credit hours of graduate-level work. A maximum of 16 hours of credit (undergraduate and graduate combined) is allowed during this term. To maintain eligibility for state and federal financial aid, students must be enrolled in at least 12 undergraduate semester credit hours.
- ###Students must complete a total of 21 hours of graduate-level electives in Math. Three to six hours may be chosen from MATH 5150 and/or MATH 5180; three to six hours may be chosen from MATH 5711 and/or MATH 5722; nine to fifteen hours may be chosen from a list provided in the Undergraduate Catalog - with no more than 12 hours at or above the 5900 level.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

Department of Mathematics and Computer Science

# MATHEMATICS

## BACHELOR OF SCIENCE IN EDUCATION DEGREE

According to Cathy Seeley, NCTM Past-President, "being a teacher is the most important job on the planet, and mathematics opens doors to all kinds of options for students." Teaching is a career that guides the thoughts of the next generation. It calls for a combination of skills demanded by few other professions, and brings rewards like no other. It is a career respected by the whole community. Teachers play a significant role in the lives of students and help shape the future by helping others to learn.

This is an exciting time to be a mathematics educator. As the Common Core State Standards for Mathematics are being implemented across the United States, mathematics teachers will have the opportunity to help our students gain the knowledge and skills needed for success in college and careers. Beginning teachers will work hand-in-hand with experienced educators to design the learning experiences that will ensure our students meet these standards.

In addition, at a time when many professions are feeling the drastic effects of "downsizing", the demand for teaching mathematics shows no signs of collapsing.

- In 2004-2005 in Missouri, there were 122 secondary math education graduates in the state and 422 secondary math teaching vacancies.
- In 2006-2007 in Missouri DESE identified secondary mathematics as a "teacher shortage area."
- The U.S. Department of Education has declared a nationwide shortage of science and mathematics teachers.
- Each year Missouri schools post hundreds of openings for mathematics teachers.
- Currently, Missouri colleges do not graduate enough

mathematics teachers to meet the schools' employment needs.

- Numerous science and mathematics teaching positions in Missouri remain unfilled or are filled with uncertified teachers.
- Half of all Missouri teachers were eligible to retire in 2010.

### Curriculum

The Department of Mathematics and Computer Science offers a diverse curriculum, including courses in mathematics education, calculus, computer science, geometry, abstract algebra, statistics, and actuarial science. Students may begin the study of mathematics at a level equal to their background.

The mathematics education, mathematics and computer science programs are supported by a laboratory of networked PCs running Linux and Windows and a MAC lab provides mathematics education students access to a variety of mathematical software. Electronic mail, World Wide Web access, and programming language compilers are available. Laboratory access is available via the Internet.

### Student Organizations

There are many opportunities for Central students to become involved in their selected career fields. The Department of Mathematics and Computer Science sponsors five student organizations which meet regularly to discuss topics ranging from new discoveries to career opportunities.

The Central Missouri Mathematics Educators organization provides opportunities for pre-service elementary, middle, and high school mathematics teachers to discuss methods and trends in teacher

education with UCM faculty and area public school teachers.

Other departmental organizations include Kappa Mu Epsilon, a national honor society for mathematics students, Association for Computing Machinery which keeps students informed of changes in the university's computer facilities, a student chapter of the Mathematical Association of America for students interested in recent developments in the mathematical community, and The Actuarial Organization which provides students with career information about the actuarial profession.

### Scholarships and Financial Assistance

Several endowed scholarships are available to students who major in programs in the Department of Mathematics and Computer Science. Many of these scholarships are offered specifically for students majoring in mathematics education. Application forms for scholarships are available online, and recipients are selected in March. Student employment as graders for department faculty is available to majors and minors.

### To Learn More

For more information contact the Department of Mathematics and Computer Science, W.C. Morris 222, UCM, Warrensburg, MO 64093; call 660-543-4930; or visit the department's web page, at [ucmo.edu/math-cs](http://ucmo.edu/math-cs).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Mathematics Major, B.S. in Ed. Degree (41-459)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
CS 1100 Computer Programming I	3	<b>ENGL 1030 Composition II</b>	3
<b>ENGL 1020 Composition I</b>	3	<b>HIST 1350 or 1351 History of the United States</b>	3
<b>MATH 1151 Calculus &amp; Analytic Geometry I</b>	5	MATH 1152 Calculus & Analytic Geometry II	5
MATH 1850 Orientation Seminar*	.5	MATH 2410 Discrete Mathematics	3
General Education	3	<b>Semester Total</b>	<b>14</b>
<b>Semester Total</b>	<b>14.5</b>		
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
EDFL 2100 Foundations of Education	2	MATH 2861 Advanced Perspectives on HS Mathematics*	3
EDFL 2240 Educational Psychology	3	MATH 4851 Prob. & Statistics for Mid./High School Math*	3
FLDX 2150 Introductory Field Experience	1	POLS 1510 American Government	3
MATH 2221 Foundations of Geometry*	3	General Education	6
MATH 3710 Linear Algebra	3	<b>Semester Total</b>	<b>15</b>
<b>General Education Science w/lab**</b>	4		
<b>Semester Total</b>	<b>16</b>		
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
MATH 3850 Strategies in Teaching Secondary Math*	3	EDFL 4210 The Teaching of Reading in the Secondary School	2
MATH 4710 Algebraic Structures*	3	EDSP 2100 Education of the Exceptional Child	2
PSY 4230 Adolescent Psychology	3	ICAP 4233 The Scientific, Historical, Soc. Impact of Math*	3
General Education	8	General Education	6
<b>Semester Total</b>	<b>17</b>	Free Choice Elective	3
		<b>Semester Total</b>	<b>16</b>
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester+	<b>Hrs.</b>
EDFL 3500 Secondary Teaching & Behavior Management	3	FLDX 4595 Student Teaching Secondary I	5
FLDX 3550 Practicum in Secondary Instruction	1	ICAP 4468 Student Teaching Secondary II	4
EDFL 4300 Educational Measurement & Evaluation	2	MATH 4820 Secondary Field Experience II	1
Free Choice Electives	9.5	MATH 4870 Methods of Teaching Math	2
<b>Semester Total</b>	<b>15.5</b>	<b>Semester Total</b>	<b>12</b>

**Mathematics Major, B.S. in Ed. Degree - 120 hours**

- \*This course is only offered during the semester indicated.
- \*\*Students pursuing a B.S. in Ed. must take a biology prefix.
- +The courses listed for this semester constitute the professional education (student teaching) block. The student should not take any other courses during this semester.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before enrollment in professional education classes and student teaching. The application for student teaching is due approximately one year in advance.



## College of Health, Science, and Technology

Department of Biology and Earth Science

# MEDICAL TECHNOLOGY

## BACHELOR OF SCIENCE DEGREE

Medical Technology offers exciting educational and career opportunities for students wishing to combine an interest in the sciences with laboratory medicine. As vital members of the health care team, medical technologists perform diagnostic laboratory tests used to prevent, diagnose, and treat disease.

Technologists have diverse career opportunities in hospital, university, government, and industrial laboratories. They represent the upper division of medical laboratory personnel and can pursue challenging positions in laboratory administration, specialized research, technical services, marketing, or education. Graduates are qualified to enter graduate programs leading to master's and doctoral degrees. Medical technology is a very good choice of undergraduate major for those interested in professional school because it provides an excellent foundation in diagnostic medicine.

The practice of modern medicine would not be possible without the tests performed in clinical laboratories. Medical technologists perform and supervise tests on blood, tissue, and body fluids, using precision instruments such as microscopes and automated, computerized analyzers. They also establish and monitor quality control programs, which ensure the precision and accuracy of both the instruments and the laboratory staff. They are

able to recognize interdependency of tests and have knowledge of physiological conditions affecting test results. These skills are necessary in order to provide correct data which is used by the physician in determining the presence, extent, and as far as possible, the cause of disease. The medical technologist is also knowledgeable in all areas of the laboratory and are able to perform all routine and specialized procedures, as well as assuming supervisory and teaching positions.

Classroom learning is reinforced in most courses through practical laboratory experiences. A new Molecular Science Research Lab and Animal Research Facility allows use of molecular techniques in courses and new courses in biotechnology.

Before admission to the medical technology training program at Central's affiliated hospitals, a student must first earn a minimum of 94 semester hours of college credit. After a satisfactory completion of the training program, students are awarded a degree and are eligible and expected to take the national certification examination.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide assistance with writing cover letters and resumes and offer a career library, mock interviews, and

career counseling. The office also serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students/](http://ucmo.edu/career/students/).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information, contact the Department of Biology and Earth Science, UCM, Warrensburg, MO 64093, or call 660-543-4933.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Medical Technology, B.S. Degree (43-384)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs</b>
BIOL 1000 The Discipline of Biology and Earth Science	1	BIOL 2512 Cell Biology	3
BIOL 1110 Principles of Biology or BIOL 1112 Animal Biology*	3-4	BIOL 3401 Human Anatomy	3
CHEM 1131 General Chemistry I	5	CHEM 1132 General Chemistry II	5
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
MATH 1111 College Algebra	3	General Education	3
<b>Semester Total</b>	<b>15-16</b>	<b>Semester Total</b>	<b>17</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs</b>
BIOL 3402 Human Physiology	5	BIOL 3611 Microbiology	4
BIOL 3511 Genetics	4	BIOL 4514 Molecular Biology	3
CHEM 3341 Organic Chemistry I	4	MATH 1300 Basic Statistics or PSY 4520 Statistics for Behavioral Sciences	3
General Education	3	General Education	6
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>16</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs</b>
BIOL 4000 Biology Colloquium	1	BIOL 3413 Immunology	3
BIOL 4311 Parasitology	4	BIOL 4516 Hematology/Virology**	3
CHEM 3421 Intermediate Biochemistry	3	ICAP 4222 The Biological Perspectives	3
General Education	8	General Education	9
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>18</b>
<b>Senior Year - Summer Semester</b>	<b>Hrs</b>		
BIOL 4015 Clinical Immunohematology	4		
BIOL 4016 Clinical Urinalysis	2		
<b>Semester Total</b>	<b>6</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs</b>
BIOL 4017 Clinical Microbiology	7	BIOL 4019 Clinical Biochemistry	7
BIOL 4018 Clinical Immunology	5	BIOL 4020 Clinical Hematology	4
<b>Semester Total</b>	<b>12</b>	BIOL 4021 Clinical Special Topics	1
		<b>Semester Total</b>	<b>12</b>

**Medical Technology, B.S. Degree - 128-129 hours**

- \*BIOL 1112 is recommended over BIOL 1110.
- \*\*BIOL 4516 is only taught in the spring semesters of even numbered years. Adjust your schedule accordingly.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Education

Department of Educational Foundations and Literacy

# MIDDLE SCHOOL - JUNIOR HIGH SCHOOL

BUSINESS EDUCATION SUBJECT AREA, BACHELOR OF SCIENCE IN EDUCATION DEGREE

Students who plan to teach at the middle school level have a program prepared especially for teaching students in grades five through nine. This program is designed to meet national and state standards, including two teaching areas and a beneficial sequence of field experiences. The Bachelor of Science in Education degree, with a major in middle school-junior high school education, certifies graduates to teach two subject areas (Business Education, Technology and Engineering, Language Arts, Science, Math, Social Science, and Speech/Theatre) in grades five through nine.

According to the Missouri Department of Elementary and Secondary Education (DESE), UCM has the reputation for preparing some of the finest teachers in the classroom today. Full accreditation by the National Council for Accreditation of Teacher Education (NCATE) and DESE provides further verification of high quality. In addition our program has been nationally recognized by our specialized professional association: the Association of Middle Level Education (amle.org). Central Missouri's programs meet all Missouri certification requirements.

UCM's teacher education program prepares teachers to be competent, caring, reflective practitioners committed to the premise that all can learn. Graduates are well grounded

in general, major, and professional knowledge and skills that are guided by performance standards and assessments, including development of reflective decision-making skills. Program expectations have been derived from consultation with practitioners and reviewed annually by the Middle School Advisor Board.

### Clinical Experiences

Pre-service teachers complete a series of field experiences in the sophomore, junior, and senior years. Their junior and senior years, they participate in professional development school experiences that are co-designed and taught by school practitioners and university faculty. The culminating experience is student teaching.

### International Opportunities

Students in the Department of Educational Foundations and Literacy may choose to participate in several international study experiences. Students may also participate in the full range of international study opportunities offered by the Office of International Programs.

### About the Faculty

Department middle school faculty members all have public school teaching experience and are qualified teachers who engage regularly in a number of school-

based programs, conduct in-service workshops and present papers at international, national and state conferences. Middle school faculty serve as advisors on several Missouri Department of Elementary and Secondary Education committees

### Student Involvement

Membership in the Student Missouri State Teachers Association is available to all education students. Specialized organizations, like the Collegiate Middle Level Association, provide aspiring teachers with practical career and professional information. UCM also has a chapter of Kappa Delta Pi and Phi Kappa Phi, both national honorary fraternities. In addition, Leading Educator Advocates for Diversity and the Latino Student Union attract diverse students to the teaching profession.

### To Learn More

For more information, contact the Department of Educational Foundations and Literacy, UCM, Lovinger 3155, Warrensburg, MO 64093; call 660-543-4235; or visit [ucmo.edu/edfl](http://ucmo.edu/edfl).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Middle School Education Major - Business Education Subject Area, B.S. in Ed. Degree (41-840)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
BTE 1210 Essentials of Managing Information	2	EDFL 2100 Foundations of Education	2
<b>ENGL 1020 Composition I</b>	3	FLDX 2150 Introductory Field Experience	1
<b>POLS 1510 American Government</b>	3	EDFL 2240 Education Psychology	3
General Education	6	<b>ENGL 1030 Composition II</b>	3
<b>Semester Total</b>	<b>14</b>	HIST 1350 or 1351 History of the United States	3
		<b>General Education Math</b>	3
		<b>Semester Total</b>	<b>15</b>
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
BTE 4535 Data Input Technologies	2	BTE 4536 Integrated Productivity Applications	3
EDSP 2100 Education of Exceptional Child	2	CTE 3110 Financial Management Education	3
Second Subject Area*	3	Second Subject Area*	6
<b>General Education Science w/lab</b>	4	General Education	6
General Education	6	<b>Semester Total</b>	<b>18</b>
<b>Semester Total</b>	<b>17</b>		
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
BTE 4560 Emerging Technologies for Business	3	CTE 4501 Managing Classroom Technologies	2
CTE 3060 Technical Writing	3	EDFL 3240 Appl. of Lang., Literacy, & Lit. in the ML Classroom (spring only)	4
EDFL 3230 Intro. to Lang., Literacy and Lit. in the ML Classroom (fall only)	4	EDFL 4135 Middle Level Curriculum & Assessment (spring only)	3
EDFL 4130 Fundamentals of Middle Level Education (fall only)	2	PSY 4230 Psychology of Adolescence	3
EDFL 4300 Educational Measurement & Evaluation	3	Second Subject Area*	6
Second Subject Area (overlap with General Education Class)*	3	<b>Semester Total</b>	<b>18</b>
<b>Semester Total</b>	<b>18</b>		
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester**	<b>Hrs.</b>
BTE 4210 Methods of Teaching Business & Marketing Edu.	3	FLDX 4497 Student Teaching Middle School I	6
CTE 4280 Implementing CTE Program and Lab Management	3	FLDX 4498 Student Teaching Middle School II	6
EDFL 4340 The Engaging Middle Level Classroom (fall only)	3	<b>Semester Total</b>	<b>12</b>
Second Subject Area Teaching Methods Course	3		
Second Subject Area*	3		
General Education	3		
<b>Semester Total</b>	<b>18</b>		

**Middle School Education Major - Business Education Subject Area, B.S. in Ed. Degree - 124-130\* hours**

- \*Middle school majors must choose a second subject area for certification. The subject areas are: Business Education, Language Arts, Math, Science, Social Science, Speech/Theatre, and Technology and Engineering. Each subject area is 21-22 hours plus a teaching methods course. Students should work with their academic advisor early for selection of courses as all areas have some overlap with general education coursework. This may help to reduce required hours.
- \*\*The courses listed for this semester constitute the professional education (student teaching) block. The student should not take any other courses during this semester.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before enrollment in professional education classes and student teaching. The application for student teaching is due approximately one year in advance.

## College of Education

Department of Educational Foundations and Literacy

# MIDDLE SCHOOL - JUNIOR HIGH SCHOOL

LANGUAGE ARTS SUBJECT AREA, BACHELOR OF SCIENCE IN EDUCATION DEGREE

Students who plan to teach at the middle school level have a program prepared especially for teaching students in grades five through nine. This program is designed to meet national and state standards, including two teaching areas and a beneficial sequence of field experiences. The Bachelor of Science in Education degree, with a major in middle school-junior high school education, certifies graduates to teach two subject areas (Business Education, Technology and Engineering, Language Arts, Science, Math, Social Science, and Speech/Theatre) in grades five through nine.

According to the Missouri Department of Elementary and Secondary Education (DESE), UCM has the reputation for preparing some of the finest teachers in the classroom today. Full accreditation by the National Council for Accreditation of Teacher Education (NCATE) and DESE provides further verification of high quality. In addition our program has been nationally recognized by our specialized professional association: the Association of Middle Level Education (amle.org). Central Missouri's programs meet all Missouri certification requirements.

UCM's teacher education program prepares teachers to be competent, caring, reflective practitioners committed to the premise that all can learn. Graduates are well grounded

in general, major, and professional knowledge and skills that are guided by performance standards and assessments, including development of reflective decision-making skills. Program expectations have been derived from consultation with practitioners and reviewed annually by the Middle School Advisor Board.

### Clinical Experiences

Pre-service teachers complete a series of field experiences in the sophomore, junior, and senior years. Their junior and senior years, they participate in professional development school experiences that are co-designed and taught by school practitioners and university faculty. The culminating experience is student teaching.

### International Opportunities

Students in the Department of Educational Foundations and Literacy may choose to participate in several international study experiences. Students may also participate in the full range of international study opportunities offered by the Office of International Programs.

### About the Faculty

Department middle school faculty members all have public school teaching experience and are qualified teachers who engage regularly in a number of school-

based programs, conduct in-service workshops and present papers at international, national and state conferences. Middle school faculty serve as advisors on several Missouri Department of Elementary and Secondary Education committees.

### Student Involvement

Membership in the Student Missouri State Teachers Association is available to all education students. Specialized organizations, like the Collegiate Middle Level Association, provide aspiring teachers with practical career and professional information. UCM also has a chapter of Kappa Delta Pi and Phi Kappa Phi, both national honorary fraternities. In addition, Leading Educator Advocates for Diversity and the Latino Student Union attract diverse students to the teaching profession.

### To Learn More

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**Middle School Education Major - Language Arts Subject Area, B.S. in Ed. Degree (41-840)**

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<b>Freshman Year</b> - Fall Semester <b>ENGL 1020 Composition I</b> <b>POLS 1510 American Government</b> General Education <b>Semester Total</b>	<b>Hrs.</b> 3 3 9 <b>15</b>	<b>Freshman Year</b> - Spring Semester EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDFL 2240 Education Psychology <b>ENGL 1030 Composition II</b> HIST 1350 or 1351 History of the United States <b>General Education Math</b> <b>Semester Total</b>	<b>Hrs.</b> 2 1 3 3 3 3 <b>15</b>
<b>Sophomore Year</b> - Fall Semester EDSP 2100 Education of Exceptional Child Language Arts Subject Area Electives* Second Subject Area** <b>General Education Science w/lab</b> General Education <b>Semester Total</b>	<b>Hrs.</b> 2 4 3 4 3 <b>16</b>	<b>Sophomore Year</b> - Spring Semester Second Subject Area** ENGL 2200, 2205, 2210, 2215, or 2220 General Education <b>Semester Total</b>	<b>Hrs.</b> 6 3 6 <b>15</b>
<b>Junior Year</b> - Fall Semester EDFL 3230 Intro. to Lang., Literacy and Lit. in the ML Classroom (fall only) EDFL 4130 Fundamentals of Middle Level Education (fall only) EDFL 4300 Educational Measurement & Evaluation Second Subject Area** <b>Semester Total</b>	<b>Hrs.</b> 4 3 2 6 <b>15</b>	<b>Junior Year</b> - Spring Semester EDFL 3240 Appl. of Lang., Literacy, & Lit. in the ML Classroom (spring only) EDFL 4135 Middle Level Curriculum & Assessment (spring only) EDFL 4230 Response to Intervention for ML English LA PSY 4230 Psychology of Adolescence Free Choice Electives <b>Semester Total</b>	<b>Hrs.</b> 4 3 4 3 2 <b>16</b>
<b>Senior Year</b> - Fall Semester EDFL 4240 Teaching English Language Arts EDFL 4340 The Engaging Middle Level Classroom (fall only) Second Subject Area* General Education <b>Semester Total</b>	<b>Hrs.</b> 4 3 6 3 <b>16</b>	<b>Senior Year</b> - Spring Semester*** FLDX 4497 Student Teaching Middle School I FLDX 4498 Student Teaching Middle School II <b>Semester Total</b>	<b>Hrs.</b> 6 6 <b>12</b>

**Middle School Education Major - Language Arts Subject Area, B.S. in Ed. Degree - 120 hours**

- \*The department recommends ENGL 3110 and/or ENGL 4840 for the Language Arts Subject Area Electives. If both classes are selected, the two hours of Free Choice Electives in the junior year (spring) are not needed.
- \*\*Middle school majors must choose a second subject area for certification. The subject areas are: Business Education, Language Arts, Math, Science, Social Science, Speech/Theatre, and Technology and Engineering. Each subject area is 21-22 hours plus a teaching methods course. Students should work with their academic advisor early for selection of courses as all areas have some overlap with general education coursework. This may help to reduce required hours.
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## College of Education

Department of Educational Foundations and Literacy

# MIDDLE SCHOOL - JUNIOR HIGH SCHOOL

MATH SUBJECT AREA, BACHELOR OF SCIENCE IN EDUCATION DEGREE

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in general, major, and professional knowledge and skills that are guided by performance standards and assessments, including development of reflective decision-making skills. Program expectations have been derived from consultation with practitioners and reviewed annually by the Middle School Advisor Board.

### Clinical Experiences

Pre-service teachers complete a series of field experiences in the sophomore, junior, and senior years. Their junior and senior years, they participate in professional development school experiences that are co-designed and taught by school practitioners and university faculty. The culminating experience is student teaching.

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**Middle School Education Major - Math Subject Area, B.S. in Ed. Degree (41-840)**

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<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
<b>ENGL 1020 Composition I</b>	3	EDFL 2100 Foundations of Education	2
<b>MATH 1620 Contemporary Math*</b>	3	FLDX 2150 Introductory Field Experience	1
<b>POLS 1510 American Government</b>	3	EDFL 2240 Education Psychology	3
General Education	6	<b>ENGL 1030 Composition II</b>	3
<b>Semester Total</b>	<b>15</b>	HIST 1350 or 1351 History of the United States	3
		<b>General Education Science w/lab</b>	4
		<b>Semester Total</b>	<b>16</b>
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
EDSP 2100 Education of Exceptional Child	2	EDFL 4300 Educational Measurement & Evaluation	2
MATH 2821 Elements of Algebra*	3	MATH 2822 Elements of Geometry*	3
Second Subject Area**	6	Second Subject Area**	6
General Education	5	General Education	6
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>17</b>
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
EDFL 3230 Intro. to Lang., Literacy and Lit. in the ML Classroom (fall only)	4	EDFL 3240 Appl. of Lang., Literacy, & Lit. in the ML Classroom (spring only)	4
EDFL 4130 Fundamentals of Middle Level Education (fall only)	3	EDFL 4135 Middle Level Curriculum & Assessment (spring only)	3
MATH 2823 Introduction to Infinite Processes*	5	PSY 4230 Psychology of Adolescence	3
Second Subject Area**	3	MATH 3800 Intro. Teaching Elementary and MS Math*	3
<b>Semester Total</b>	<b>15</b>	MATH 3802 Concepts and Methods Middle School Math*	2
		MATH 4851 Probability and Statistics Mid/HS Math*	3
		<b>Semester Total</b>	<b>18</b>
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester**	<b>Hrs.</b>
EDFL 4340 The Engaging Middle Level Classroom (fall only)	3	FLDX 4497 Student Teaching Middle School I	6
MATH 3840 Strategies for Teaching Middle School Math*	3	FLDX 4498 Student Teaching Middle School II	6
Second Subject Area (overlap with General Education Class)**	3	<b>Semester Total</b>	<b>12</b>
General Education	6		
<b>Semester Total</b>	<b>15</b>		

**Middle School Education Major - Math Subject Area, B.S. in Ed. Degree - 120-124 hours**

- \*Math subject area courses should be taken in the order listed to graduate in four years.
- \*\*Middle school majors must choose a second subject area for certification. The subject areas are: Business Education, Language Arts, Math, Science, Social Science, Speech/Theatre, and Technology and Engineering. Each subject area is 21-22 hours plus a teaching methods course. Students should work with their academic advisor early for selection of courses as all areas have some overlap with general education coursework. This may help to reduce required hours.
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## College of Education

Department of Educational Foundations and Literacy

# MIDDLE SCHOOL - JUNIOR HIGH SCHOOL

## SCIENCE SUBJECT AREA, BACHELOR OF SCIENCE IN EDUCATION DEGREE

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### Clinical Experiences

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### About the Faculty

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**Middle School Education Major - Science Subject Area, B.S. in Ed. Degree (41-840)**

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**Freshman Year - Fall Semester**

BIOL 1005 Introduction to Environmental Science

**ENGL 1020 Composition I****POLS 1510 American Government**

General Education

**Semester Total****Hrs. Freshman Year - Spring Semester**

EASC 1004 Introduction to the Sciences: Geology

EDFL 2100 Foundations of Education

FLDX 2150 Introductory Field Experience

EDFL 2240 Education Psychology

**ENGL 1030 Composition II****General Education Math****Semester Total****Hrs.**

4

2

1

3

3

3

**16****Sophomore Year - Fall Semester**

ECEL 1310 or 1320 Science for Teachers

EDSP 2100 Education of Exceptional Child

HIST 1350 or 1351 History of the United States

General Education

**Semester Total****Hrs. Sophomore Year - Spring Semester**

BIOL 1004 Introduction to the Sciences: Ecology

Second Subject Area\*

General Education

**Semester Total****16****Hrs.**

4

6

6

**16****Junior Year - Fall Semester**

CHEM 1104 Introduction to the Sciences: Chemistry

EDFL 3230 Intro. to Lang., Literacy and Lit. in the ML Classroom  
(fall only)

EDFL 4130 Fundamentals of Middle Level Education (fall only)

EDFL 4300 Educational Measurement &amp; Evaluation

Second Subject Area\*

**Semester Total****Hrs. Junior Year - Spring Semester**

BIOL 1110 Principles of Biology

EDFL 3240 Appl. of Lang., Literacy, & Lit. in the ML Classroom  
(spring only)

EDFL 4135 Middle Level Curriculum &amp; Assessment (spring only)

PSY 4230 Psychology of Adolescence

Second Subject Area (overlap with General Education Class)\*

**Semester Total****16****Hrs.**

3

4

3

3

3

3

**16****Senior Year - Fall Semester**

EDFL 4340 The Engaging Middle Level Classroom (fall only)

STCH 4050 Science Teaching Methods

Second Subject Area

**Semester Total****Hrs. Senior Year - Spring Semester\*\***

FLDX 4497 Student Teaching Middle School I

FLDX 4498 Student Teaching Middle School II

**Semester Total****15****Hrs.**

6

6

**12****Middle School Education Major - Science Subject Area, B.S. in Ed. Degree - 122 hours**

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## College of Education

Department of Educational Foundations and Literacy

# MIDDLE SCHOOL - JUNIOR HIGH SCHOOL

SOCIAL SCIENCE SUBJECT AREA, BACHELOR OF SCIENCE IN EDUCATION DEGREE

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### About the Faculty

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**Middle School Education Major - Social Science Subject Area, B.S. in Ed. Degree (41-840)**

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<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
<b>ENGL 1020 Composition I</b>	3	EDFL 2100 Foundations of Education	2
<b>POLS 1510 American Government</b>	3	FLDX 2150 Introductory Field Experience	1
General Education	9	EDFL 2240 Education Psychology	3
<b>Semester Total</b>	<b>15</b>	<b>ENGL 1030 Composition II</b>	3
		HIST 1350 History of the United States to 1877	3
		<b>General Education Math</b>	3
		<b>Semester Total</b>	<b>15</b>
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
HIST 1351 History of the United States from 1877	3	ECON 1010 Principles of Macroeconomics	3
Second Subject Area*	3	EDSP 2100 Education of Exceptional Child	2
<b>General Education Science w/lab</b>	4	HIST 2402 History of the Modern World	3
General Education	5	Second Subject Area*	6
<b>Semester Total</b>	<b>15</b>	General Education	3
		<b>Semester Total</b>	<b>17</b>
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
EDFL 3230 Intro. to Lang., Literacy and Lit. in the ML Classroom (fall only)	4	EDFL 3240 Appl. of Lang., Literacy, & Lit. in the ML Classroom (spring only)	4
EDFL 4130 Fundamentals of Middle Level Education (fall only)	3	EDFL 4135 Middle Level Curriculum & Assessment (spring only)	3
EDFL 4300 Educational Measurement & Evaluation	2	GEOG 3201 The Cultural Landscape	3
HIST 4***	3	PSY 4230 Psychology of Adolescence	3
Second Subject Area (overlap with General Education Class)*	3	Second Subject Area*	3
Free Choice Elective	1	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>16</b>		
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester**	<b>Hrs.</b>
ECEL 3420 Teaching Social Studies & Econ. Elem. School	3	FLDX 4497 Student Teaching Middle School I	6
EDFL 4340 The Engaging Middle Level Classroom (fall only)	3	FLDX 4498 Student Teaching Middle School II	6
Second Subject Area*	6	<b>Semester Total</b>	<b>12</b>
General Education	3		
<b>Semester Total</b>	<b>15</b>		

**Middle School Education Major - Social Science Subject Area, B.S. in Ed. Degree - 120 hours**

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## College of Education

Department of Educational Foundations and Literacy

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SPEECH/THEATRE SUBJECT AREA, BACHELOR OF SCIENCE IN EDUCATION DEGREE

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**Middle School Education Major - Speech/Theatre Subject Area, B.S. in Ed. Degree (41-840)**

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<b>ENGL 1020 Composition I</b>	3	EDFL 2100 Foundations of Education	2
<b>POLS 1510 American Government</b>	3	FLDX 2150 Introductory Field Experience	1
<b>THEA 2400 Discovering Theatre</b>	3	EDFL 2240 Education Psychology	3
General Education	6	<b>ENGL 1030 Composition II</b>	3
<b>Semester Total</b>	<b>15</b>	<b>General Education Math</b>	3
		THEA 1500 Acting	3
		<b>Semester Total</b>	<b>15</b>
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
COMM 2100 Introduction to Communication Theory	3	COMM 2330 Communication in Small Groups/Teams	3
EDSP 2100 Education of Exceptional Child	2	Second Subject Area*	9
HIST 1350 or 1351 History of the United States	3	General Education	6
<b>General Education Science w/lab</b>	4	<b>Semester Total</b>	<b>18</b>
General Education	5		
<b>Semester Total</b>	<b>17</b>		
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
COMM 2340 Argumentation and Debate (fall only)	3	EDFL 3240 Appl. of Lang., Literacy, & Lit. in the ML Classroom (spring only)	4
EDFL 3230 Intro. to Lang., Literacy and Lit. in the ML Classroom (fall only)	4	EDFL 4135 Middle Level Curriculum & Assessment (spring only)	3
EDFL 4130 Fundamentals of Middle Level Education (fall only)	3	PSY 4230 Psychology of Adolescence	3
EDFL 4300 Educational Measurement & Evaluation	2	THEA 1600 Stagecraft	3
Second Subject Area (overlap with General Education Class)*	3	THEA 3700 Directing	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>16</b>
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester**	<b>Hrs.</b>
EDFL 4340 The Engaging Middle Level Classroom (fall only)	3	FLDX 4497 Student Teaching Middle School I	6
THEA 4984 Methods of Teaching Speech & Theatre	2	FLDX 4498 Student Teaching Middle School II	6
Second Subject Area*	9	<b>Semester Total</b>	<b>12</b>
General Education	3		
<b>Semester Total</b>	<b>17</b>		

**Middle School Education Major - Speech/Theatre Subject Area, B.S. in Ed. Degree - 125 hours**

- \*Middle school majors must choose a second subject area for certification. The subject areas are: Business Education, Language Arts, Math, Science, Social Science, Speech/Theatre, and Technology and Engineering. Each subject area is 21-22 hours plus a teaching methods course. Students should work with their academic advisor early for selection of courses as all areas have some overlap with general education coursework. This may help to reduce required hours.
- \*\*The courses listed for this semester constitute the professional education (student teaching) block. The student should not take any other courses during this semester.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before enrollment in professional education classes and student teaching. The application for student teaching is due approximately one year in advance.

## College of Education

Department of Educational Foundations and Literacy

# MIDDLE SCHOOL - JUNIOR HIGH SCHOOL

TECHNOLOGY AND ENGINEERING SUBJECT AREA, BACHELOR OF SCIENCE IN EDUCATION DEGREE

Students who plan to teach at the middle school level have a program prepared especially for teaching students in grades five through nine. This program is designed to meet national and state standards, including two teaching areas and a beneficial sequence of field experiences. The Bachelor of Science in Education degree, with a major in middle school-junior high school education, certifies graduates to teach two subject areas (Business Education, Technology and Engineering, Language Arts, Science, Math, Social Science, and Speech/Theatre) in grades five through nine.

According to the Missouri Department of Elementary and Secondary Education (DESE), UCM has the reputation for preparing some of the finest teachers in the classroom today. Full accreditation by the National Council for Accreditation of Teacher Education (NCATE) and DESE provides further verification of high quality. In addition our program has been nationally recognized by our specialized professional association: the Association of Middle Level Education (amle.org). Central Missouri's programs meet all Missouri certification requirements.

UCM's teacher education program prepares teachers to be competent, caring, reflective practitioners committed to the premise that all can learn. Graduates are well grounded

in general, major, and professional knowledge and skills that are guided by performance standards and assessments, including development of reflective decision-making skills. Program expectations have been derived from consultation with practitioners and reviewed annually by the Middle School Advisor Board.

### Clinical Experiences

Pre-service teachers complete a series of field experiences in the sophomore, junior, and senior years. Their junior and senior years, they participate in professional development school experiences that are co-designed and taught by school practitioners and university faculty. The culminating experience is student teaching.

### International Opportunities

Students in the Department of Educational Foundations and Literacy may choose to participate in several international study experiences. Students may also participate in the full range of international study opportunities offered by the Office of International Programs.

### About the Faculty

Department middle school faculty members all have public school teaching experience and are qualified teachers who engage regularly in a number of school-

based programs, conduct in-service workshops and present papers at international, national and state conferences. Middle school faculty serve as advisors on several Missouri Department of Elementary and Secondary Education committees.

### Student Involvement

Membership in the Student Missouri State Teachers Association is available to all education students. Specialized organizations, like the Collegiate Middle Level Association, provide aspiring teachers with practical career and professional information. UCM also has a chapter of Kappa Delta Pi and Phi Kappa Phi, both national honorary fraternities. In addition, Leading Educator Advocates for Diversity and the Latino Student Union attract diverse students to the teaching profession.

### To Learn More

For more information, contact the Department of Educational Foundations and Literacy, UCM, Lovinger 3155, Warrensburg, MO 64093; call 660-543-4235; or visit [ucmo.edu/edfl](http://ucmo.edu/edfl).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Middle School Education Major - Technology and Engineering Subject Area, B.S. in Ed. Degree (41-840)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
CTE 1300 Introduction to Engineering Design (fall only)	3	CTE 1500 Gateway to Engineering (spring only)	3
<b>ENGL 1020 Composition I</b>	3	EDFL 2100 Foundations of Education	2
<b>POLS 1510 American Government</b>	3	FLDX 2150 Introductory Field Experience	1
General Education	6	EDFL 2240 Education Psychology	3
<b>Semester Total</b>	<b>15</b>	<b>ENGL 1030 Composition II</b>	3
		<b>General Education Math</b>	3
		<b>Semester Total</b>	<b>15</b>
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
CTE 2000 Technology & Society	3	ENGT 1510 Introduction to Manufacturing Processes	3
EDSP 2100 Education of Exceptional Child	2	Second Subject Area*	6
HIST 1350 or 1351 History of the United States	3	General Education	6
<b>General Education Science w/lab</b>	4	<b>Semester Total</b>	<b>15</b>
Second Subject Area*	3		
<b>Semester Total</b>	<b>15</b>		
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
EDFL 3230 Intro. to Lang., Literacy and Lit. in the ML Classroom (fall only)	4	EDFL 3240 Appl. of Lang., Literacy, & Lit. in the ML Classroom (spring only)	4
EDFL 4130 Fundamentals of Middle Level Education (fall only)	3	EDFL 4135 Middle Level Curriculum & Assessment (spring only)	3
EDFL 4300 Educational Measurement & Evaluation	2	PSY 4230 Psychology of Adolescence	3
IGEN 3116 Creative Problem Solving	3	SOT 3022 Internship in Technology	3
Second Subject Area (overlap with General Education Class)*	3	Second Subject Area*	3
General Education	3	<b>Semester Total</b>	<b>16</b>
<b>Semester Total</b>	<b>18</b>		
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester**	<b>Hrs.</b>
CTE 4125 Methods of Teaching Problem-based Learning	3	FLDX 4497 Student Teaching Middle School I	6
EDFL 4340 The Engaging Middle Level Classroom (fall only)	2	FLDX 4498 Student Teaching Middle School II	6
Departmentally approved elective in Technology & Engin.	1	<b>Semester Total</b>	<b>12</b>
Second Subject Area*	6		
General Education	3		
<b>Semester Total</b>	<b>15</b>		

**Middle School Education Major - Technology and Engineering Subject Area, B.S. in Ed. Degree - 121 hours**

- \*Middle school majors must choose a second subject area for certification. The subject areas are: Business Education, Language Arts, Math, Science, Social Science, Speech/Theatre, and Technology and Engineering. Each subject area is 21-22 hours plus a teaching methods course. Students should work with their academic advisor early for selection of courses as all areas have some overlap with general education coursework. This may help to reduce required hours.
- \*\*The courses listed for this semester constitute the professional education (student teaching) block. The student should not take any other courses during this semester.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before enrollment in professional education classes and student teaching. The application for student teaching is due approximately one year in advance.

## College of Arts, Humanities, and Social Sciences

Department of Government, International Studies, and Languages

# MODERN LANGUAGES

## AREA 1: LANGUAGE AND CULTURE, BACHELOR OF ARTS DEGREE

Thinking about a language major or minor? Consider this: a language major or minor will make you more competitive on the job market. Indeed, studying a language gives you a skill set that is widely applicable and pairs ideally with virtually any course of study as a second major or minor. A second language can be of great professional value in fields such as criminal justice, education, social work, business, medicine, sciences, engineering, computing, music, art, law, public relations, politics, tourism, and technology.

Studying a language gives you solid preparation for understanding and dealing with an entirely new culture—a skill that is increasingly important in today's global society. Proficiency in foreign languages and an understanding of other cultures tells a potential employer that you are flexible in learning and thinking, and it can put you in a position to travel or complete an international internship or scholarship. If you plan to continue on in higher education, second language proficiency is a desirable asset in many graduate programs.

### Curriculum

The Modern Languages Major requires 36 hours of course work beyond the elementary sequence in French, German or Spanish. It is not necessary to formally declare which language you wish to study, but all course work must be in the same language. While there are no specific course requirements, prerequisites dictate that some classes that must be taken in sequence. These vary by language, so it is important to consult with a Modern Languages faculty member for advising and degree planning.

Students majoring in Modern Languages must choose one of two Areas: Language and Culture, or Professional Applications. The Language and Culture Area includes only the 36-hour major; no minor is required. The Professional Applications Area requires an additional 30-hour Concentration in one of five career-training fields: Marketing, Criminal Justice, Education, Hospitality Management, or Public Relations. These optional Concentrations each include a hands-on internship or practicum. Advisors will work with students to help them pursue internships that provide the opportunity to use second language skills in a professional setting. A variety of courses is available to students in either track, including conversation, business, composition, film, literature, and culture classes.

### Study Abroad

Study abroad is an important component of learning a second language. All majors and minors are strongly encouraged to include study abroad in their programs. Most students in French and German, who wish to graduate in four years, will need to study abroad. Currently, UCM offers opportunities to study in many Spanish, German and French speaking countries during the summer, fall, spring, or entire academic year. Financial aid can be applied to UCM-sponsored programs, and additional financial assistance for studying abroad may be available from the International Center.

### Student Activities

Students can enhance their academic and cultural experience by participating in a variety of Modern Languages Club activities: "Day of the

Dead Celebration", "Foreign Flicks", "Fondue Night", "Kaffeestuden", "International Food Day" and "Tabla de conversación". There are also other activities geared toward helping students improve their language skills: 1) advanced level students volunteer to tutor students at the beginning level and, 2) international students work as conversation group leaders to help our French, German and Spanish students improve their speaking skills.

### Program Delivery

The latest and best instructional technology and methods are used. Courses in each language cover basic skills, conversation, civilization, contemporary life and literature. Students are able to practice their skills in a state-of-the-art computerized language laboratory. Many resources offered to students can be accessed from any Internet-connected computer.

### Financial Assistance

Employment in the language laboratory is available on a competitive basis to modern language students. Two endowed scholarships in Spanish also are available.

### For More Information

To learn more contact the Department of Government, International Studies, and Languages, Wood 203, UCM, Warrensburg, MO 64093; call 660-543-4780; or visit the department's web page at [ucmo.edu/modlang](http://ucmo.edu/modlang).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Modern Languages Major - Area 1: Language and Culture, B.A. Degree (42-01574)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> -Spring Semester	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
Intermediate I (FREN, GER, or SPAN)*+	3	Intermediate II (FREN, GER, or SPAN)*	3
General Education	9	General Education	9
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
AE 1400 Freshman Seminar**	1		
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
2000/3000 level course (FREN, GER, or SPAN)*	3	3000 level courses (FREN, GER, or SPAN)*	6
3000 level course (FREN, GER, or SPAN)*	3	General Education	9
General Education	9	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
3000 level course (FREN, GER, or SPAN)*	3	4000 level courses (FREN, GER, or SPAN)*	6
3000/4000 level course (FREN, GER, or SPAN)*	3	Free Choice Electives	9
Free Choice Electives	9	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs.</b>
4000 level course (FREN, GER, or SPAN)*	3	4000 level course (FREN, GER, or SPAN)*	3
Free Choice Electives	9	General Education (IGEN/ICAP)	3
<b>Semester Total</b>	<b>12</b>	Free Choice Electives	6
		<b>Semester Total</b>	<b>12</b>

**Modern Languages Major - Area 1: Language and Culture, B.A. Degree - 120 hours (114 hours taken on campus plus 6 hours of "validated credit" or "dual credit".)**

- \*All 36 hours of the language requirement must be in the same modern foreign language (French, German, or Spanish).
- +Enrollment in Intermediate I requires completion of 6 hours of credit for Elementary Language I and Elementary Language II or equivalent proficiency. If you received college credit for these classes while in high school (dual credit), these credits will be applied to the major sequence. Students who have taken high school language courses (French, German or Spanish) may enroll beyond the Elementary I level, and may apply for Validated Credit for the class(es) skipped. A student completing Elementary II with a grade of C or higher will earn three credit hours for Elementary I at no tuition charge; a student completing Intermediate I with a grade of C or higher will earn six credit hours for Elementary I and II at no tuition charge.
- \*\*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- ARE YOU PLANNING TO TEACH A MODERN LANGUAGE? If so choose, Area 2 - Professional Applications of the Modern Languages major with the Education Concentration (K-12 Certification).
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Arts, Humanities, and Social Sciences

Department of Government, International Studies, and Languages

# MODERN LANGUAGES

## AREA 2: PROFESSIONAL APPLICATIONS - MARKETING CONCENTRATION, BACHELOR OF ARTS DEGREE

Thinking about a language major or minor? Consider this: a language major or minor will make you more competitive on the job market. Indeed, studying a language gives you a skill set that is widely applicable and pairs ideally with virtually any course of study as a second major or minor. A second language can be of great professional value in fields such as criminal justice, education, social work, business, medicine, sciences, engineering, computing, music, art, law, public relations, politics, tourism, and technology.

Studying a language gives you solid preparation for understanding and dealing with an entirely new culture—a skill that is increasingly important in today's global society. Proficiency in foreign languages and an understanding of other cultures tells a potential employer that you are flexible in learning and thinking, and it can put you in a position to travel or complete an international internship or scholarship. If you plan to continue on in higher education, second language proficiency is a desirable asset in many graduate programs.

### Curriculum

The Modern Languages Major requires 36 hours of course work beyond the elementary sequence in French, German or Spanish. It is not necessary to formally declare which language you wish to study, but all course work must be in the same language. While there are no specific course requirements, prerequisites dictate that some classes that must be taken in sequence. These vary by language, so it is important to consult with a Modern Languages faculty member for advising and degree planning.

Students majoring in Modern Languages must choose one of two Areas: Language and Culture, or Professional Applications. The Language and Culture Area includes only the 36-hour major; no minor is required. The Professional Applications Area requires an additional 30-hour Concentration in one of five career-training fields: Marketing, Criminal Justice, Education, Hospitality Management, or Public Relations. These optional Concentrations each include a hands-on internship or practicum. Advisors will work with students to help them pursue internships that provide the opportunity to use second language skills in a professional setting. A variety of courses is available to students in either track, including conversation, business, composition, film, literature, and culture classes.

### Study Abroad

Study abroad is an important component of learning a second language. All majors and minors are strongly encouraged to include study abroad in their programs. Most students in French and German, who wish to graduate in four years, will need to study abroad. Currently, UCM offers opportunities to study in many Spanish, German and French speaking countries during the summer, fall, spring, or entire academic year. Financial aid can be applied to UCM-sponsored programs, and additional financial assistance for studying abroad may be available from the International Center.

### Student Activities

Students can enhance their academic and cultural experience by participating in a variety of Modern Languages Club activities: "Day of the

Dead Celebration", "Foreign Flicks", "Fondue Night", "Kaffeestuden", "International Food Day" and "Tabla de conversación". There are also other activities geared toward helping students improve their language skills: 1) advanced level students volunteer to tutor students at the beginning level and, 2) international students work as conversation group leaders to help our French, German and Spanish students improve their speaking skills.

### Program Delivery

The latest and best instructional technology and methods are used. Courses in each language cover basic skills, conversation, civilization, contemporary life and literature. Students are able to practice their skills in a state-of-the-art computerized language laboratory. Many resources offered to students can be accessed from any Internet-connected computer.

### Financial Assistance

Employment in the language laboratory is available on a competitive basis to modern language students. Two endowed scholarships in Spanish also are available.

### For More Information

To learn more contact the Department of Government, International Studies, and Languages, Wood 203, UCM, Warrensburg, MO 64093; call 660-543-4780; or visit the department's web page at [ucmo.edu/modlang](http://ucmo.edu/modlang).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Modern Languages Major - Area 2: Prof. Apps. - Marketing Concentration, B.A. Degree (42-02574)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> -Spring Semester	<b>Hrs.</b>
ENGL 1020 Composition I	3	ECON 1010 Principles of Macroeconomics	3
Intermediate I (FREN, GER, or SPAN)*+	3	ENGL 1030 Composition II	3
General Education	9	Intermediate II (FREN, GER, or SPAN)*	3
<b>Semester Total</b>	<b>15</b>	General Education	6
AE 1400 Freshman Seminar**	1	<b>Semester Total</b>	<b>15</b>
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
2000/3000 level course (FREN, GER, or SPAN)*	3	BLAW 2720 Legal Environment of Business	3
3000 level course (FREN, GER, or SPAN)*	3	3000 level courses (FREN, GER, or SPAN)*	6
General Education	9	General Education	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
MKT 3405 Marketing Policy	3	MGT 3315 Management of Organizations	3
3000 level course (FREN, GER, or SPAN)*	3	MKT 3430 Professional Sales	3
3000/4000 level course (FREN, GER, or SPAN)*	3	4000 level courses (FREN, GER, or SPAN)*	6
General Education	3	<b>Semester Total</b>	<b>12</b>
<b>Semester Total</b>	<b>12</b>		
<b>Summer bt. Junior &amp; Senior Year</b> - Summer Semester	<b>Hrs.</b>		
MKT 3435 Internship in Marketing	6		
<b>Semester Total</b>	<b>6</b>		
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs.</b>
MKT 3410 Retail Management, MKT 3420 Principles of Advertising, or MKT 3460 Advanced Professional Sales	3	MKT 4460 International Marketing	3
MKT 3480 Consumer Behavior	3	ML 4050 Language in the Professions/Translation	3
4000 level course (FREN, GER, or SPAN)*	3	General Education (IGEN/ICAP)	3
Free Choice Elective	3	Free Choice Electives	3
<b>Semester Total</b>	<b>12</b>	<b>Semester Total</b>	<b>12</b>

**Modern Languages Major - Area 2: Professional Applications - Marketing Concentration, B.A. Degree - 120 hours (114 hours taken on campus plus 6 hours of "validated credit" or "dual credit".)**

- \*All 33 hours of the language requirement must be in the same modern foreign language (French, German, or Spanish).
- +Enrollment in Intermediate I requires completion of 6 hours of credit for Elementary Language I and Elementary Language II or equivalent proficiency. If you received college credit for these classes while in high school (dual credit), these credits will be applied to the major sequence. Students who have taken high school language courses (French, German or Spanish) may enroll beyond the Elementary I level, and may apply for Validated Credit for the class(es) skipped. A student completing Elementary II with a grade of C or higher will earn three credit hours for Elementary I at no tuition charge; a student completing Intermediate I with a grade of C or higher will earn six credit hours for Elementary I and II at no tuition charge.
- \*\*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- ARE YOU PLANNING TO TEACH A MODERN LANGUAGE? If so choose, Area 2 - Professional Applications of the Modern Languages major with the Education Concentration (K-12 Certification).
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Arts, Humanities, and Social Sciences

Department of Government, International Studies, and Languages

# MODERN LANGUAGES

## AREA 2: PROFESSIONAL APPLICATIONS - CRIMINAL JUSTICE CONCENTRATION, BACHELOR OF ARTS DEGREE

Thinking about a language major or minor? Consider this: a language major or minor will make you more competitive on the job market. Indeed, studying a language gives you a skill set that is widely applicable and pairs ideally with virtually any course of study as a second major or minor. A second language can be of great professional value in fields such as criminal justice, education, social work, business, medicine, sciences, engineering, computing, music, art, law, public relations, politics, tourism, and technology.

Studying a language gives you solid preparation for understanding and dealing with an entirely new culture—a skill that is increasingly important in today's global society. Proficiency in foreign languages and an understanding of other cultures tells a potential employer that you are flexible in learning and thinking, and it can put you in a position to travel or complete an international internship or scholarship. If you plan to continue on in higher education, second language proficiency is a desirable asset in many graduate programs.

### Curriculum

The Modern Languages Major requires 36 hours of course work beyond the elementary sequence in French, German or Spanish. It is not necessary to formally declare which language you wish to study, but all course work must be in the same language. While there are no specific course requirements, prerequisites dictate that some classes that must be taken in sequence. These vary by language, so it is important to consult with a Modern Languages faculty member for advising and degree planning.

Students majoring in Modern Languages must choose one of two Areas: Language and Culture, or Professional Applications. The Language and Culture Area includes only the 36-hour major; no minor is required. The Professional Applications Area requires an additional 30-hour Concentration in one of five career-training fields: Marketing, Criminal Justice, Education, Hospitality Management, or Public Relations. These optional Concentrations each include a hands-on internship or practicum. Advisors will work with students to help them pursue internships that provide the opportunity to use second language skills in a professional setting. A variety of courses is available to students in either track, including conversation, business, composition, film, literature, and culture classes.

### Study Abroad

Study abroad is an important component of learning a second language. All majors and minors are strongly encouraged to include study abroad in their programs. Most students in French and German, who wish to graduate in four years, will need to study abroad. Currently, UCM offers opportunities to study in many Spanish, German and French speaking countries during the summer, fall, spring, or entire academic year. Financial aid can be applied to UCM-sponsored programs, and additional financial assistance for studying abroad may be available from the International Center.

### Student Activities

Students can enhance their academic and cultural experience by participating in a variety of Modern Languages Club activities: "Day of the

Dead Celebration", "Foreign Flicks", "Fondue Night", "Kaffeestuden", "International Food Day" and "Tabla de conversación". There are also other activities geared toward helping students improve their language skills: 1) advanced level students volunteer to tutor students at the beginning level and, 2) international students work as conversation group leaders to help our French, German and Spanish students improve their speaking skills.

### Program Delivery

The latest and best instructional technology and methods are used. Courses in each language cover basic skills, conversation, civilization, contemporary life and literature. Students are able to practice their skills in a state-of-the-art computerized language laboratory. Many resources offered to students can be accessed from any Internet-connected computer.

### Financial Assistance

Employment in the language laboratory is available on a competitive basis to modern language students. Two endowed scholarships in Spanish also are available.

### For More Information

To learn more contact the Department of Government, International Studies, and Languages, Wood 203, UCM, Warrensburg, MO 64093; call 660-543-4780; or visit the department's web page at [ucmo.edu/modlang](http://ucmo.edu/modlang).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Modern Languages Major - Area 2: Prof. Apps. - Criminal Justice Conc., B.A. Degree (42-02574)**

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<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> -Spring Semester	<b>Hrs.</b>
CJ 1000 Introduction to Criminal Justice	3	CJ 2315 The Criminal Court System	3
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
Intermediate I (FREN, GER, or SPAN)*+	3	Intermediate II (FREN, GER, or SPAN)*	3
General Education	6	General Education	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
AE 1400 Freshman Seminar**	1		
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
CJ 3006 Corrections	3	CJ 3010 Policing a Democratic Society	3
2000/3000 level course (FREN, GER, or SPAN)*	3	3000 level courses (FREN, GER, or SPAN)*	6
3000 level course (FREN, GER, or SPAN)*	3	General Education	6
General Education	6	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
CJ 3020 Comparative Justice Systems	3	CJ Elective	3
3000 level course (FREN, GER, or SPAN)*	3	SOC 3890 Criminology	3
3000/4000 level course (FREN, GER, or SPAN)*	3	4000 level courses (FREN, GER, or SPAN)*	6
General Education	6	<b>Semester Total</b>	<b>12</b>
<b>Semester Total</b>	<b>15</b>		
<b>Summer bt. Junior &amp; Senior Year</b> - Summer Semester	<b>Hrs.</b>		
CJ 4602 Internship in Criminal Justice	3		
<b>Semester Total</b>	<b>3</b>		
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs.</b>
CJ Electives	6	ML 4050 Language in the Professions/Translation	3
4000 level course (FREN, GER, or SPAN)*	3	General Education (IGEN/ICAP)	3
General Education	3	Free Choice Electives	6
<b>Semester Total</b>	<b>12</b>	<b>Semester Total</b>	<b>12</b>

**Modern Languages Major - Area 2: Professional Applications - Criminal Justice Concentration, B.A. Degree - 120 hours**

(114 hours taken on campus plus 6 hours of "validated credit" or "dual credit".)

- \*All 33 hours of the language requirement must be in the same modern foreign language (French, German, or Spanish).
- +Enrollment in Intermediate I requires completion of 6 hours of credit for Elementary Language I and Elementary Language II or equivalent proficiency. If you received college credit for these classes while in high school (dual credit), these credits will be applied to the major sequence. Students who have taken high school language courses (French, German or Spanish) may enroll beyond the Elementary I level, and may apply for Validated Credit for the class(es) skipped. A student completing Elementary II with a grade of C or higher will earn three credit hours for Elementary I at no tuition charge; a student completing Intermediate I with a grade of C or higher will earn six credit hours for Elementary I and II at no tuition charge.
- \*\*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- ARE YOU PLANNING TO TEACH A MODERN LANGUAGE? If so choose, Area 2 - Professional Applications of the Modern Languages major with the Education Concentration (K-12 Certification).
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Arts, Humanities, and Social Sciences

Department of Government, International Studies, and Languages

# MODERN LANGUAGES

## AREA 2: PROFESSIONAL APPLICATIONS - HOSPITALITY MGMT. CONCENTRATION, BACHELOR OF ARTS DEGREE

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Studying a language gives you solid preparation for understanding and dealing with an entirely new culture—a skill that is increasingly important in today's global society. Proficiency in foreign languages and an understanding of other cultures tells a potential employer that you are flexible in learning and thinking, and it can put you in a position to travel or complete an international internship or scholarship. If you plan to continue on in higher education, second language proficiency is a desirable asset in many graduate programs.

### Curriculum

The Modern Languages Major requires 36 hours of course work beyond the elementary sequence in French, German or Spanish. It is not necessary to formally declare which language you wish to study, but all course work must be in the same language. While there are no specific course requirements, prerequisites dictate that some classes that must be taken in sequence. These vary by language, so it is important to consult with a Modern Languages faculty member for advising and degree planning.

Students majoring in Modern Languages must choose one of two Areas: Language and Culture, or Professional Applications. The Language and Culture Area includes only the 36-hour major; no minor is required. The Professional Applications Area requires an additional 30-hour Concentration in one of five career-training fields: Marketing, Criminal Justice, Education, Hospitality Management, or Public Relations. These optional Concentrations each include a hands-on internship or practicum. Advisors will work with students to help them pursue internships that provide the opportunity to use second language skills in a professional setting. A variety of courses is available to students in either track, including conversation, business, composition, film, literature, and culture classes.

### Study Abroad

Study abroad is an important component of learning a second language. All majors and minors are strongly encouraged to include study abroad in their programs. Most students in French and German, who wish to graduate in four years, will need to study abroad. Currently, UCM offers opportunities to study in many Spanish, German and French speaking countries during the summer, fall, spring, or entire academic year. Financial aid can be applied to UCM-sponsored programs, and additional financial assistance for studying abroad may be available from the International Center.

### Student Activities

Students can enhance their academic and cultural experience by participating in a variety of Modern Languages Club activities: "Day of the

Dead Celebration", "Foreign Flicks", "Fondue Night", "Kaffeestuden", "International Food Day" and "Tabla de conversación". There are also other activities geared toward helping students improve their language skills: 1) advanced level students volunteer to tutor students at the beginning level and, 2) international students work as conversation group leaders to help our French, German and Spanish students improve their speaking skills.

### Program Delivery

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### Financial Assistance

Employment in the language laboratory is available on a competitive basis to modern language students. Two endowed scholarships in Spanish also are available.

### For More Information

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**Modern Languages Major - Area 2: Prof. Apps. - Hospitality Mgmt. Conc., B.A. Degree (42-02574)**

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<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year -Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
HM 1800 Introduction to Hospitality (Fall only)	3	Intermediate II (FREN, GER, or SPAN)*	3
Intermediate I (FREN, GER, or SPAN)*+	3	General Education	9
General Education	6	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		
AE 1400 Freshman Seminar**	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ACCT 2100 Survey of Accounting	3	HM 2830 Hotel-Restaurant Sanitation & Safety***	1
2000/3000 level course (FREN, GER, or SPAN)*	3	3000 level courses (FREN, GER, or SPAN)*	6
3000 level course (FREN, GER, or SPAN)*	3	General Education	6
General Education	6	<b>Semester Total</b>	<b>13</b>
<b>Semester Total</b>	<b>15</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
FOOD 3333 Food Systems Management (Fall only)	3	HM 2830 Hotel-Restaurant Sanitation & Safety***	1
3000 level course (FREN, GER, or SPAN)*	3	MGT 3315 Management of Organizations	3
3000/4000 level course (FREN, GER, or SPAN)*	3	4000 level courses (FREN, GER, or SPAN)*	3
General Education	3	General Education	3
Free Choice Elective	3	Free Choice Elective	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>13</b>
<b>Summer bt. Junior &amp; Senior Year - Summer Semester</b>	<b>Hrs.</b>		
HM 4810 Internship	5		
<b>Semester Total</b>	<b>5</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
HM 2830 Hotel-Restaurant Sanitation & Safety***	1	HM 4840 Legal Aspects of Hotel and Rest. Mgmt. (Spring only)	3
HM 4850 Hospitality Operations Analysis (Fall only)	3	ML 4050 Language in the Professions/Translation	3
4000 level course (FREN, GER, or SPAN)*	3	4000 level courses (FREN, GER, or SPAN)*	3
Free Choice Electives	6	General Education (IGEN/ICAP)	3
<b>Semester Total</b>	<b>13</b>	<b>Semester Total</b>	<b>12</b>

**Modern Languages Major - Area 2: Professional Applications - Hospitality Management Concentration, B.A. Degree - 120 hours**  
**(114 hours taken on campus plus 6 hours of "validated credit" or "dual credit".)**

- \*All 33 hours of the language requirement must be in the same modern foreign language (French, German, or Spanish).
- +Enrollment in Intermediate I requires completion of 6 hours of credit for Elementary Language I and Elementary Language II or equivalent proficiency. If you received college credit for these classes while in high school (dual credit), these credits will be applied to the major sequence. Students who have taken high school language courses (French, German or Spanish) may enroll beyond the Elementary I level, and may apply for Validated Credit for the class(es) skipped. A student completing Elementary II with a grade of C or higher will earn three credit hours for Elementary I at no tuition charge; a student completing Intermediate I with a grade of C or higher will earn six credit hours for Elementary I and II at no tuition charge.
- \*\*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*\*HM 2830 is a one-credit hour course that must be repeated for a total of three credit hours.
- ARE YOU PLANNING TO TEACH A MODERN LANGUAGE? If so choose, Area 2 - Professional Applications of the Modern Languages major with the Education Concentration (K-12 Certification).
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Arts, Humanities, and Social Sciences

Department of Government, International Studies, and Languages

# MODERN LANGUAGES

## AREA 2: PROFESSIONAL APPLICATIONS - PUBLIC RELATIONS CONCENTRATION, BACHELOR OF ARTS DEGREE

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Studying a language gives you solid preparation for understanding and dealing with an entirely new culture—a skill that is increasingly important in today's global society. Proficiency in foreign languages and an understanding of other cultures tells a potential employer that you are flexible in learning and thinking, and it can put you in a position to travel or complete an international internship or scholarship. If you plan to continue on in higher education, second language proficiency is a desirable asset in many graduate programs.

### Curriculum

The Modern Languages Major requires 36 hours of course work beyond the elementary sequence in French, German or Spanish. It is not necessary to formally declare which language you wish to study, but all course work must be in the same language. While there are no specific course requirements, prerequisites dictate that some classes that must be taken in sequence. These vary by language, so it is important to consult with a Modern Languages faculty member for advising and degree planning.

Students majoring in Modern Languages must choose one of two Areas: Language and Culture, or Professional Applications. The Language and Culture Area includes only the 36-hour major; no minor is required. The Professional Applications Area requires an additional 30-hour Concentration in one of five career-training fields: Marketing, Criminal Justice, Education, Hospitality Management, or Public Relations. These optional Concentrations each include a hands-on internship or practicum. Advisors will work with students to help them pursue internships that provide the opportunity to use second language skills in a professional setting. A variety of courses is available to students in either track, including conversation, business, composition, film, literature, and culture classes.

### Study Abroad

Study abroad is an important component of learning a second language. All majors and minors are strongly encouraged to include study abroad in their programs. Most students in French and German, who wish to graduate in four years, will need to study abroad. Currently, UCM offers opportunities to study in many Spanish, German and French speaking countries during the summer, fall, spring, or entire academic year. Financial aid can be applied to UCM-sponsored programs, and additional financial assistance for studying abroad may be available from the International Center.

### Student Activities

Students can enhance their academic and cultural experience by participating in a variety of Modern Languages Club activities: "Day of the

Dead Celebration", "Foreign Flicks", "Fondue Night", "Kaffeestuden", "International Food Day" and "Tabla de conversación". There are also other activities geared toward helping students improve their language skills: 1) advanced level students volunteer to tutor students at the beginning level and, 2) international students work as conversation group leaders to help our French, German and Spanish students improve their speaking skills.

### Program Delivery

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### Financial Assistance

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### For More Information

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**Modern Languages Major - Area 2: Prof. Apps. - Public Relations Conc., B.A. Degree (42-02574)**

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<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year -Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
Intermediate I (FREN, GER, or SPAN)*+	3	Intermediate II (FREN, GER, or SPAN)*	3
General Education	9	General Education	9
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
AE 1400 Freshman Seminar**	1		

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
COMM 2620 Introduction to Public Relations	3	COMM 2625 Writing & Editing for Public Relations	3
2000/3000 level course (FREN, GER, or SPAN)*	3	3000 level courses (FREN, GER, or SPAN)*	6
3000 level course (FREN, GER, or SPAN)*	3	General Education	6
General Education	6	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
COMM 3620 Strategic Planning for Public Relations	3	COMM 3010 Interpersonal Communication	3
3000 level course (FREN, GER, or SPAN)*	3	COMM 4680 Advanced PR Writing	3
3000/4000 level course (FREN, GER, or SPAN)*	3	4000 level courses (FREN, GER, or SPAN)*	6
General Education	3	<b>Semester Total</b>	<b>12</b>
Free Choice Elective	3		
<b>Semester Total</b>	<b>15</b>		

<b>Summer bt. Junior &amp; Senior Year - Summer Semester</b>	<b>Hrs.</b>
COMM 4295 Internship	3
<b>Semester Total</b>	<b>3</b>

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
COMM 3100 Communication Research Methods	3	ML 4050 Language in the Professions/Translation	3
COMM 3340 Intercultural Communication	3	4000 level courses (FREN, GER, or SPAN)*	3
COMM 4670 Strategic Crisis Communication	3	General Education (IGEN/ICAP)	3
POLS 4520 Principles of International Development	3	Free Choice Elective	3
<b>Semester Total</b>	<b>12</b>	<b>Semester Total</b>	<b>12</b>

**Modern Languages Major - Area 2: Professional Applications - Public Relations Concentration, B.A. Degree - 120 hours**  
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- \*\*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- ARE YOU PLANNING TO TEACH A MODERN LANGUAGE? If so choose, Area 2 - Professional Applications of the Modern Languages major with the Education Concentration (K-12 Certification).
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## College of Arts, Humanities, and Social Sciences

Department of Government, International Studies, and Languages

# MODERN LANGUAGES

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**Modern Languages Major - Area 2: Prof. Apps. - Educ. Conc. (K-12 Cert.), B.A. Degree (42-02574)**

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<b>ENGL 1020 Composition I</b>	3	<b>ENGL 1030 Composition II</b>	3
<b>POLS 1510 American Government</b>	3	<b>HIST 1350 or 1351 History of the United States</b>	3
Intermediate I (FREN, GER, or SPAN)*+	3	Intermediate II (FREN, GER, or SPAN)*	3
<b>General Education Science w/lab**</b>	4	<b>General Education Math</b>	3
General Education (technology)	2-3	General Education	3
<b>Semester Total</b>	<b>15-16</b>	<b>Semester Total</b>	<b>15</b>
AE 1400 Freshman Seminar***	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
EDFL 2100 Foundations of Education	2	3000 level courses (FREN, GER, or SPAN)*	6
FLDX 2150 Introductory Field Experience	1	General Education	9
EDFL 2240 Educational Psychology	3	<b>Semester Total</b>	<b>15</b>
2000/3000 level course (FREN, GER, or SPAN)*	3		
3000 level course (FREN, GER, or SPAN)*	3		
General Education	3		
<b>Semester Total</b>	<b>15</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
3000 level course (FREN, GER, or SPAN)*	3	CD 2000 The Bases of Speech and Language	2
4000 level course (FREN, GER, or SPAN)*	3	EDFL 4210 The Teaching of Reading in the Secondary School	2
General Education	3	EDFL 4300 Educational Measurement & Evaluation	2
Free Choice Electives	6	EDSP 2100 Education of the Exceptional Child	2
<b>Semester Total</b>	<b>15</b>	4000 level courses (FREN, GER, or SPAN)*	6
		<b>Semester Total</b>	<b>14</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
EDFL 3500 Secondary Teaching & Behavior Management	3	FLDX 4495 Student Teaching Elementary I	8
FLDX 3550 Practicum in Secondary Instruction	1	ICAP 4468 Student Teaching Secondary II	4
ML 4054 Methods of Teaching Foreign Language	3	<b>Semester Total</b>	<b>12</b>
PSY 4230 Adolescent Psychology	3		
4000 level course (FREN, GER, or SPAN)*	3		
<b>Semester Total</b>	<b>13</b>		

**Modern Languages Major - Area 2: Professional Applications - Education Concentration (K-12 Certification), B.A. Degree 120 hours (114 hours taken on campus plus six hours of "validated credit" or "dual credit".)**

- \*All 33 hours of the language requirement must be in the same modern foreign language (French, German, or Spanish).
- + Enrollment in Intermediate I requires completion of 6 hours of credit for Elementary Language I and Elementary Language II or equivalent proficiency. If you received college credit for these classes while in high school (dual credit), these credits will be applied to the major sequence. Students who have taken high school language courses (French, German or Spanish) may enroll beyond the Elementary I level, and may apply for Validated Credit for the class(es) skipped. A student completing Elementary II with a grade of C or higher will earn three credit hours for Elementary I at no tuition charge; a student completing Intermediate I with a grade of C or higher will earn six credit hours for Elementary I and II at no tuition charge.
- \*\* Students pursuing the Education Concentration must complete a biology prefix.
- \*\*\*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before enrollment in professional education classes and student teaching. The application for student teaching is due approximately one year in advance.

## College of Arts, Humanities, and Social Sciences

Department of Music

# MUSIC

## BACHELOR OF ARTS DEGREE

The Bachelor of Arts in Music degree is designed for students who wish to pursue a liberal arts degree or across-discipline, individualized programs, such as music business. Music programs at UCM offer a balanced curriculum of classroom studies and practical experiences. Music is an essential part of the academic, social and cultural life at UCM. Each year more than 100 student and faculty recitals, concerts and other musical performances delight campus audiences and provide academic experiences for students.

### About the Faculty

All Major and Minor music courses are taught by experienced faculty who offer specialized instruction in diverse music disciplines. Most of the full time faculty members have doctoral degrees, and all teach beginning and advanced classes. Besides teaching, many perform recitals, teach master classes and workshops, and adjudicate competitions both on and off campus. Additionally, many pursue other scholarly activities including writing books and articles, and creating compositions and recordings.

### Accreditation

The Department of Music is accredited by the National Association of Schools of Music.

### Career Opportunities

UCM has been successful in placing graduates in prestigious teaching, performing, and other music-related careers including the recording industry. Central Missouri alumni include the concertmaster of the St. Louis Symphony Orchestra, a former member of the U.S. Navy Sea Chanters, a vocal soloist with the New York Philharmonic Orchestra, winners

of national composition contests, employees of major record labels, and highly successful educators.

### Financial Assistance

The Department of Music's Merit Scholarships, Service Awards and Music Foundation Scholarships are awarded based on ability and various combinations of enrollment in applied lessons and ensemble participation. Any student that participates is eligible for most of these awards. There are a few awards reserved specifically for music majors. Additionally, the University awards academic scholarships based on previous academic performance and test scores. Auditions are held in November, on Presidents Day weekend each February, or by appointment.

### Performing Groups

UCM offers a wide range of performing experiences from the University Symphony Orchestra and Opera Workshop to the Jazz-Rock Combos and Vocal Jazz Ensemble. Many of these ensembles are also open to the avocational musician and all groups present periodic performances for the public.

Vocal large ensembles include the university Concert Choir and Collegiate Choir as well as Women's Chorus. Students can also join the Opera Workshop for staged scenes and full productions of opera repertoire. The Vocal Jazz Ensemble concentrates on jazz and popular music standards.

Instrumental Ensembles are also numerous and varied. The University Symphony Orchestra presents at least four concerts a year including an Oratorio performance with the choirs in the Spring. The orchestra includes a full wind and percussion section. The Wind Ensemble and Symphonic

Band perform traditional concert band repertoire as well as recently written works. The Marching Mules perform at all home football games. The two Jazz ensembles perform a diverse range of music for large Jazz band and the Guitar Ensemble performs music in the classical guitar style.

Other instrumental ensemble opportunities include Jazz-Rock Combos, and various like-instrument chamber ensembles. There is also a Pep Band that performs for the Basketball games and a Pit Orchestra for the fall musical presented in conjunction with the Theatre Department.

Keyboard students can participate in any of the large ensembles as well as Keyboard Ensemble and numerous chamber music and accompanying opportunities.

### Curriculum

The Music curriculum is geared toward creating literate musicians. It starts with a solid foundation of basic materials and instruction and then builds on that foundation with advanced courses taught by specialists in those areas. The curriculum is supported by well-equipped classrooms and recording studios.

### To Learn More

For more information, contact the Department of Music, UCM, Warrensburg, MO 64093, or call 660-543-4530. The department's home page address is [ucmo.edu/music](http://ucmo.edu/music).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Music Major, B.A. Degree (42-436)**

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<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 1100 Fundamentals of Music+* or General Education	3	MUS 1111 Theory I*	3
MUS 1225 Music of the World's Cultures	3	MUS 1121 Aural Training I*	1
Major Instrument or Voice, 1000 Level	1	Major Instrument or Voice, 1000 Level	1
Major Large Ensemble	1	Major Large Ensemble	1
Modern Language Requirement**	3	Modern Language Requirement**	3
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>3</b>
AE 1400 Freshman Seminar***	1		<b>15</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 2220 World Masterpieces**	3	MUS 1000 Recital Attendance	0
MUS 1000 Recital Attendance	0	MUS 2111 Theory III*	3
MUS 1112 Theory II*	3	MUS 2121 Aural Training III*	1
MUS 1122 Aural Training II*	1	MUS 2222 Introduction to Music Literature II*	2
MUS 2221 Introduction to Music Literature I*	2	Major Instrument or Voice, 1000 Level	1
Major Instrument or Voice, 1000 Level	1	Minor Coursework	3
General Education	6	General Education	6
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>16</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 3211 Music History to 1800*	3	MUS 3212 Music History 1800-Present*	3
Major Instrument or Voice, 3000 Level	1.5	Major Instrument or Voice, 3000 Level	1.5
Minor Coursework	6	Minor Coursework	6
General Education	6	General Education	6
<b>Semester Total</b>	<b>16.5</b>	<b>Semester Total</b>	<b>16.5</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
Major Instrument or Voice, 3000 Level	1.5	Major Instrument or Voice, 3000 Level	1.5
Elective in Music	3	Minor Coursework	3
Minor Coursework	3	General Education (IGEN/ICAP)	3
Free Choice Electives	8	Free Choice Electives	7
<b>Semester Total</b>	<b>15.5</b>	<b>Semester Total</b>	<b>14.5</b>

**Music Major, B.A. Degree - 124 hours**

- +MUS 1100 with a grade of C or better may be required as a prerequisite to MUS 1111 if the student does not pass this course by the admission examination.
- \*This course is only offered during the semester listed.
- \*\*Refer to the Bachelor's Degree Requirements section in the catalog for the B.A. Modern Language requirement. This plan is based on two modern language courses and ENGL 2220 for General Education Literature.
- \*\*\*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- This plan is based on a 21-hour minor.
- This major does not build in the minimum number (30) of upper-level credit hours required for graduation. Be sure to include upper-level choices (3000/4000) in your major electives, minor, general education, and/or free choice electives.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Arts, Humanities, and Social Sciences

Department of Music

# MUSIC (AREA 1 INSTRUMENTAL)

## BACHELOR OF MUSIC DEGREE

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### About the Faculty

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### Accreditation

The Department of Music is accredited by the National Association of Schools of Music.

### Career Opportunities

UCM has been successful in placing graduates in prestigious teaching, performing, and other music-related careers including the recording industry. Central Missouri alumni include the concertmaster of the St. Louis Symphony Orchestra, a former member of the U.S. Navy Sea Chanters, a vocal soloist with the New York Philharmonic Orchestra, winners

of national composition contests, employees of major record labels, and highly successful educators.

### Financial Assistance

The Department of Music's Merit Scholarships, Service Awards and Music Foundation Scholarships are awarded based on ability and various combinations of enrollment in applied lessons and ensemble participation. Any student that participates is eligible for most of these awards. There are a few awards reserved specifically for music majors. Additionally, the University awards academic scholarships based on previous academic performance and test scores. Auditions are held in November, on Presidents Day weekend each February, or by appointment.

### Performing Groups

UCM offers a wide range of performing experiences from the University Symphony Orchestra and Opera Workshop to the Jazz-Rock Combos and Vocal Jazz Ensemble. Many of these ensembles are also open to the avocational musician and all groups present periodic performances for the public.

Vocal large ensembles include the university Concert Choir and Collegiate Choir as well as Women's Chorus. Students can also join the Opera Workshop for staged scenes and full productions of opera repertoire. The Vocal Jazz Ensemble concentrates on jazz and popular music standards.

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The Wind Ensemble and Symphonic Band perform traditional concert band repertoire as well as recently written works. The Marching Mules perform at all home football games. The two Jazz ensembles perform a diverse range of music for large Jazz band and the Guitar Ensemble performs music in the classical guitar style.

Other instrumental ensemble opportunities include Jazz-Rock Combos, and various like-instrument chamber ensembles. There is also a Pep Band that performs for the Basketball games and a Pit Orchestra for the fall musical presented in conjunction with the Theatre Department.

Keyboard students can participate in any of the large ensembles as well as Keyboard Ensemble and numerous chamber music and accompanying opportunities.

### Curriculum

The Music curriculum is geared toward creating literate musicians. It starts with a solid foundation of basic materials and instruction and then builds on that foundation with advanced courses taught by specialists in those areas. The curriculum is supported by well-equipped classrooms and recording studios.

### To Learn More

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**Music Major (Area 1 Instrumental - odd year start), B.M. Degree (44-01472)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 1100 Fundamentals of Music+* or General Education	3	MUS 1111 Theory I*	3
MUS 2221 Introduction to Music Literature I*	2	MUS 1121 Aural Training I*	1
Major Instrument, 1000 Level	2	MUS 1225 Music of the World's Cultures	3
Major Large Instrument Ensemble (Piano Class I)**	1	MUS 2222 Introduction to Music Literature II*	2
General Education	(1)	Major Instrument, 1000 Level	2
	3	Major Large Instrument Ensemble (Piano Class II)**	1
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>(1)</b>
			<b>15</b>

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 1112 Theory II*	3	MUS 2111 Theory III*	3
MUS 1122 Aural Training II*	1	MUS 2121 Aural Training III*	1
MUS 2300 Fundamentals of Conducting* Instrumental Music Elective	2	MUS Electives	1
Major Instrument, 1000 Level	1	Instrumental Music Elective	1
Major Large Instrument Ensemble (Piano Class III)**	2	Major Instrument, 1000 Level	2
General Education	1	Major Large Instrument Ensemble (Piano Class IV)**	1
	(1)	General Education	(1)
	6		6
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>15</b>

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 2112 Theory IV*	3	MUS 3060 Junior Recital	1
MUS 2122 Aural Training IV*	1	MUS 3212 Music History 1800-Present*	3
MUS 3211 Music History to 1800*	3	MUS Electives	3
MUS 4125 Form & Analysis (only offered Fall semesters of odd numbered years)	3	Major Instrument, 3000 Level	3
MUS Required Elective***	3	Major Large Instrument Ensemble	1
Major Instrument, 3000 Level	3	General Education	6
Major Large Instrument Ensemble	1	<b>Semester Total</b>	<b>17</b>
<b>Semester Total</b>	<b>17</b>		

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 4240, 4245, 4250, or 4255 Instrumental Lit. & Ped.	2	MUS 4060 Senior Recital	2
MUS Electives	3	Major Instrument, 3000 Level	3
Major Instrument, 3000 Level	3	MUS Electives	3
Small Instrumental Ensemble	1	Small Instrumental Ensemble	1
General Education (only 6 hours of General Education are needed here if the other 3 hours were taken in the first semester instead of MUS 1100)	6-9	General Education	6
<b>Semester Total</b>	<b>15-18</b>	<b>Semester Total</b>	<b>15</b>

**Music Major (Area 1 Instrumental - odd year start), B.M. Degree - 124 hours**

- +MUS 1100 with a grade of C or better may be required as a prerequisite to MUS 1111 if the student does not pass this course by the admission examination.
- \*This course is only offered during the semester listed.
- \*\*Keyboard competency is required for this degree program. Private piano lessons may be required to reach competency.
- \*\*\*For the MUS Required Elective choose among the following three courses: MUS 4101 Counterpoint I (offered fall semester of even numbered years only), MUS 4115 Instrumentation (offered spring semester), or MUS 4185 Jazz-Commercial Arranging (offered spring semester of odd numbered years only).
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Arts, Humanities, and Social Sciences

Department of Music

# MUSIC (AREA 1 INSTRUMENTAL)

## BACHELOR OF MUSIC DEGREE

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### About the Faculty

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### Accreditation

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### Career Opportunities

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### Financial Assistance

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### Performing Groups

UCM offers a wide range of performing experiences from the University Symphony Orchestra and Opera Workshop to the Jazz-Rock Combos and Vocal Jazz Ensemble. Many of these ensembles are also open to the avocational musician and all groups present periodic performances for the public.

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### To Learn More

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**Music Major (Area 1 Instrumental - even year start), B.M. Degree (44-01472)**

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<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 1100 Fundamentals of Music+* or General Education	3	MUS 1111 Theory I*	3
MUS 2221 Introduction to Music Literature I*	2	MUS 1121 Aural Training I*	1
Major Instrument, 1000 Level	2	MUS 1225 Music of the World's Cultures	3
Major Large Instrument Ensemble	1	MUS 2222 Introduction to Music Literature II*	2
(Piano Class I)**	(1)	Major Instrument, 1000 Level	2
General Education	3	Major Large Instrument Ensemble	1
<b>Semester Total</b>	<b>14</b>	(Piano Class II)**	(1)
		<b>Semester Total</b>	<b>15</b>

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 1112 Theory II*	3	MUS 2111 Theory III*	3
MUS 1122 Aural Training II*	1	MUS 2121 Aural Training III*	1
MUS 2300 Fundamentals of Conducting*	2	MUS Electives	1
Instrumental Music Elective	1	Instrumental Music Elective	1
Major Instrument, 1000 Level	2	Major Instrument, 1000 Level	2
Major Large Instrument Ensemble	1	Major Large Instrument Ensemble	1
(Piano Class III)**	(1)	(Piano Class IV)**	(1)
General Education	6	General Education	6
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>15</b>

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 2112 Theory IV*	3	MUS 3060 Junior Recital	1
MUS 2122 Aural Training IV*	1	MUS 3212 Music History 1800-Present*	3
MUS 3211 Music History to 1800*	3	MUS Electives	3
MUS Required Elective***	3	Major Instrument, 3000 Level	3
Major Instrument, 3000 Level	3	Major Large Instrument Ensemble	1
Major Large Instrument Ensemble	1	General Education	6
General Education	3	<b>Semester Total</b>	<b>17</b>
<b>Semester Total</b>	<b>17</b>		

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 4125 Form & Analysis (only offered Fall semesters of odd numbered years)	3	MUS 4060 Senior Recital	2
MUS 4240, 4245, 4250, or 4255 Instrumental Lit. & Ped.	2	Major Instrument, 3000 Level	3
MUS Electives	3	MUS Electives	3
Major Instrument, 3000 Level	3	Small Instrumental Ensemble	1
Small Instrumental Ensemble	1	General Education	6
General Education (only 3 hours of General Education are needed here if the other 3 hours were taken in the first semester instead of MUS 1100)	3-6	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15-18</b>		

**Music Major (Area 1 Instrumental - even year start), B.M. Degree - 124 hours**

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- \*\*Keyboard competency is required for this degree program. Private piano lessons may be required to reach competency.
- \*\*\*For the MUS Required Elective choose among the following three courses: MUS 4101 Counterpoint I (offered fall semester of even numbered years only), MUS 4115 Instrumentation (offered spring semester), or MUS 4185 Jazz-Commercial Arranging (offered spring semester of odd numbered years only).
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## College of Arts, Humanities, and Social Sciences

Department of Music

# MUSIC (AREA 2 JAZZ-COMMERCIAL MUSIC)

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### Accreditation

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### Career Opportunities

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Vocal large ensembles include the university Concert Choir and Collegiate Choir as well as Women's Chorus. Students can also join the Opera Workshop for staged scenes and full productions of opera repertoire. The Vocal Jazz Ensemble concentrates on jazz and popular music standards.

Instrumental Ensembles are also numerous and varied. The University Symphony Orchestra presents at least four concerts a year including an Oratorio performance with the choirs in the Spring. The orchestra includes a full wind and percussion section.

The Wind Ensemble and Symphonic Band perform traditional concert band repertoire as well as recently written works. The Marching Mules perform at all home football games. The two Jazz ensembles perform a diverse range of music for large Jazz band and the Guitar Ensemble performs music in the classical guitar style.

Other instrumental ensemble opportunities include Jazz-Rock Combos, and various like-instrument chamber ensembles. There is also a Pep Band that performs for the Basketball games and a Pit Orchestra for the fall musical presented in conjunction with the Theatre Department.

Keyboard students can participate in any of the large ensembles as well as Keyboard Ensemble and numerous chamber music and accompanying opportunities.

### Curriculum

The Music curriculum is geared toward creating literate musicians. It starts with a solid foundation of basic materials and instruction and then builds on that foundation with advanced courses taught by specialists in those areas. The curriculum is supported by well-equipped classrooms and recording studios.

### To Learn More

For more information, contact the Department of Music, UCM, Warrensburg, MO 64093, or call 660-543-4530. The department's home page address is [ucmo.edu/music](http://ucmo.edu/music).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).



**Music Major (Area 2 Jazz-Commercial Music - odd year start), B.M. Degree (44-02472)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 1085 Jazz-Rock Combo	1	MUS 1111 Theory I*	3
MUS 1100 Fundamentals of Music+* or General Education	3	MUS 1121 Aural Training I*	1
Major Large Jazz Ensemble	1	MUS 1281 History & Development of Jazz*	3
Major Instrument, 1000 Level (Piano Class I)**	2 (1)	Major Instrument, 1000 Level	2
General Education	6	Major Large Jazz Ensemble	1
<b>Semester Total</b>	<b>16</b>	Major Large Non-Jazz Ensemble (Piano Class II)**	1 (1)
		General Education	3
		<b>Semester Total</b>	<b>17</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 1112 Theory II*	3	MUS 2111 Theory III*	3
MUS 1122 Aural Training II*	1	MUS 2121 Aural Training III*	1
MUS 1225 Music of the World's Cultures	3	MUS 2141 Composition I	3
MUS 2180 Jazz Improvisation I*	2	MUS 2181 Jazz Improvisation II*	2
MUS 2300 Fundamentals of Conducting*	2	Major Large Jazz Ensemble	1
Major Large Jazz Ensemble	1	Major Instrument, 1000 Level (Piano Class IV)**	2 (1)
Major Instrument, 1000 Level	2	General Education	3
Major Large Non-Jazz Ensemble (Piano Class III)**	1 (1)	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 2112 Theory IV*	3	MUS 1085 Jazz-Rock Combo	1
MUS 2122 Aural Training IV*	1	MUS 3060 Junior Recital	1
MUS 3211 Music History to 1800*	3	MUS 3212 Music History 1800-Present*	3
MUS 4125 Form & Analysis (only offered Fall semesters of odd numbered years)	3	Major Large Jazz Ensemble	1
Major Large Jazz Ensemble	1	Major Instrument, 3000 Level	3
Major Instrument, 3000 Level	3	General Education	6
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>15</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 4181 Advanced Jazz Improvisation* or MUS 4186 Advanced Jazz-Commercial Arranging***	2	MUS 4060 Senior Recital	2
MUS electives	2	MUS 4185 Jazz-Commercial Arranging (only offered Spring semesters of odd numbered years)	3
Major Instrument, 3000 Level	3	Major Instrument, 3000 Level	3
General Education	9	General Education (only 6 hours of General Education are needed here if the other 3 hours were taken in the first semester instead of MUS 1100)	6-9
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>14-17</b>
<b>Fifth Year - Fall Semester</b>	<b>Hrs.</b>		
MUS 4181 Advanced Jazz Improvisation* or MUS 4186 Advanced Jazz-Commercial Arranging***	2		
<b>Semester Total</b>	<b>2</b>		

**Music Major (Area 2 Jazz-Commercial Music - odd year start), B.M. Degree - 124**

- +MUS 1100 with a grade of C or better may be required as a prerequisite to MUS 1111 if the student does not pass this course by the admission examination.
- \*This course is only offered during the semester listed.
- \*\*Keyboard competency is required for this degree program. Private piano lessons may be required to reach competency.
- \*\*\*This course requires the prerequisite of MUS 4185. If chosen, adjust schedule to take after 4185. This course is only offered as needed by the department. See department for projected course offerings.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Arts, Humanities, and Social Sciences

Department of Music

# MUSIC (AREA 2 JAZZ-COMMERCIAL MUSIC)

## BACHELOR OF MUSIC DEGREE

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### About the Faculty

All Major and Minor music courses are taught by experienced faculty who offer specialized instruction in diverse music disciplines. Most of the full time faculty members have doctoral degrees, and all teach beginning and advanced classes. Besides teaching, many perform recitals, teach master classes and workshops, and adjudicate competitions both on and off campus. Additionally, many pursue other scholarly activities including writing books and articles, and creating compositions and recordings.

### Accreditation

The Department of Music is accredited by the National Association of Schools of Music.

### Career Opportunities

UCM has been successful in placing graduates in prestigious teaching, performing, and other music-related careers including the recording industry. Central Missouri alumni include the concertmaster of the St. Louis Symphony Orchestra, a former member of the U.S. Navy Sea Chanters, a vocal soloist with the New York Philharmonic Orchestra, winners

of national composition contests, employees of major record labels, and highly successful educators.

### Financial Assistance

The Department of Music's Merit Scholarships, Service Awards and Music Foundation Scholarships are awarded based on ability and various combinations of enrollment in applied lessons and ensemble participation. Any student that participates is eligible for most of these awards. There are a few awards reserved specifically for music majors. Additionally, the University awards academic scholarships based on previous academic performance and test scores. Auditions are held in November, on Presidents Day weekend each February, or by appointment.

### Performing Groups

UCM offers a wide range of performing experiences from the University Symphony Orchestra and Opera Workshop to the Jazz-Rock Combos and Vocal Jazz Ensemble. Many of these ensembles are also open to the avocational musician and all groups present periodic performances for the public.

Vocal large ensembles include the university Concert Choir and Collegiate Choir as well as Women's Chorus. Students can also join the Opera Workshop for staged scenes and full productions of opera repertoire. The Vocal Jazz Ensemble concentrates on jazz and popular music standards.

Instrumental Ensembles are also numerous and varied. The University Symphony Orchestra presents at least four concerts a year including an Oratorio performance with the choirs in the Spring. The orchestra includes a full wind and percussion section. The Wind Ensemble and Symphonic

Band perform traditional concert band repertoire as well as recently written works. The Marching Mules perform at all home football games. The two Jazz ensembles perform a diverse range of music for large Jazz band and the Guitar Ensemble performs music in the classical guitar style.

Other instrumental ensemble opportunities include Jazz-Rock Combos, and various like-instrument chamber ensembles. There is also a Pep Band that performs for the Basketball games and a Pit Orchestra for the fall musical presented in conjunction with the Theatre Department.

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### Curriculum

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### To Learn More

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**Music Major (Area 2 Jazz-Commercial Music - even year start), B.M. Degree (44-02472)**

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<b>Freshman Year - Fall Semester</b>		<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>		<b>Hrs.</b>
ENGL 1020 Composition I		3	ENGL 1030 Composition II		3
MUS 1000 Recital Attendance		0	MUS 1000 Recital Attendance		0
MUS 1085 Jazz-Rock Combo		1	MUS 1111 Theory I*		3
MUS 1100 Fundamentals of Music+* or General Education		3	MUS 1121 Aural Training I*		1
Major Large Jazz Ensemble		1	Major Instrument, 1000 Level		2
Major Instrument, 1000 Level		2	Major Large Jazz Ensemble		1
(Piano Class I)**		(1)	Major Large Non-Jazz Ensemble		1
General Education		6	(Piano Class II)**		(1)
<b>Semester Total</b>		<b>16</b>	General Education		6
			<b>Semester Total</b>		<b>17</b>

<b>Sophomore Year - Fall Semester</b>		<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>		<b>Hrs.</b>
MUS 1000 Recital Attendance		0	MUS 1000 Recital Attendance		0
MUS 1112 Theory II*		3	MUS 1281 History & Development of Jazz*		3
MUS 1122 Aural Training II*		1	MUS 2111 Theory III*		3
MUS 1225 Music of the World's Cultures		3	MUS 2121 Aural Training III*		1
MUS 2180 Jazz Improvisation I*		2	MUS 2141 Composition I		3
MUS 2300 Fundamentals of Conducting*		2	MUS 2181 Jazz Improvisation II*		2
Major Large Jazz Ensemble		1	Major Large Jazz Ensemble		1
Major Instrument, 1000 Level		2	Major Instrument, 1000 Level		2
Major Large Non-Jazz Ensemble		1	(Piano Class IV)**		(1)
(Piano Class III)**		(1)	<b>Semester Total</b>		<b>15</b>
<b>Semester Total</b>		<b>15</b>			

<b>Junior Year - Fall Semester</b>		<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>		<b>Hrs.</b>
MUS 1000 Recital Attendance		0	MUS 1000 Recital Attendance		0
MUS 2112 Theory IV*		3	MUS 1085 Jazz-Rock Combo		1
MUS 2122 Aural Training IV*		1	MUS 3060 Junior Recital		1
MUS 3211 Music History to 1800*		3	MUS 3212 Music History 1800-Present*		3
Major Large Jazz Ensemble		1	MUS 4185 Jazz-Commercial Arranging (only offered Spring semesters of odd numbered years)		3
Major Instrument, 3000 Level		3	Major Large Jazz Ensemble		1
General Education		6	Major Instrument, 3000 Level		3
<b>Semester Total</b>		<b>17</b>	General Education		3
			<b>Semester Total</b>		<b>15</b>

<b>Senior Year - Fall Semester</b>		<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>		<b>Hrs.</b>
MUS 1000 Recital Attendance		0	MUS 1000 Recital Attendance		0
MUS 4125 Form & Analysis (only offered Fall semesters of odd numbered years)		3	MUS 4060 Senior Recital		2
MUS 4181 Advanced Jazz Improvisation* or MUS 4186 Advanced Jazz-Commercial Arranging***		2	MUS 4181 Advanced Jazz Improvisation (fall only) or MUS 4186 Advanced Jazz-Commercial Arranging***		2
MUS electives		2	Major Instrument, 3000 Level		3
Major Instrument, 3000 Level		3	General Education (only 6 hours of General Education are needed here if the other 3 hours were taken in the first semester instead of MUS 1100)		6-9
General Education		6	<b>Semester Total</b>		<b>13-16</b>
<b>Semester Total</b>		<b>16</b>			

**Music Major (Area 2 Jazz-Commercial Music - even year start), B.M. Degree - 124**

- +MUS 1100 with a grade of C or better may be required as a prerequisite to MUS 1111 if the student does not pass this course by the admission examination.
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- \*\*Keyboard competency is required for this degree program. Private piano lessons may be required to reach competency.
- \*\*\*This course is only offered as needed by the department. See department for projected course offerings.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Arts, Humanities, and Social Sciences

Department of Music

# MUSIC (AREA 3 MUSIC TECHNOLOGY)

## BACHELOR OF MUSIC DEGREE

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### About the Faculty

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### Accreditation

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### Career Opportunities

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of national composition contests, employees of major record labels, and highly successful educators.

### Financial Assistance

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### Performing Groups

UCM offers a wide range of performing experiences from the University Symphony Orchestra and Opera Workshop to the Jazz-Rock Combos and Vocal Jazz Ensemble. Many of these ensembles are also open to the avocational musician and all groups present periodic performances for the public.

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Band perform traditional concert band repertoire as well as recently written works. The Marching Mules perform at all home football games. The two Jazz ensembles perform a diverse range of music for large Jazz band and the Guitar Ensemble performs music in the classical guitar style.

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### Curriculum

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### To Learn More

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**Music Major (Area 3 Music Technology), B.M. Degree (44-03472)**

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<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
(MUS 1100 Fundamentals of Music)+*	(3)	MUS 1111 Theory I	3
MUS 1450 Audio & Acoustics	3	MUS 1121 Aural Training I*	1
Electronics or Computer Programming Elective		Approved Elective in Music+ +	1
(Choose from CS 1000, ET 1010, ET 1020, or MUS 4195)	3-4	Major Instrument or Voice, 1000 Level	1
Introductory Music Technology Elective**	.5	Major Large Instrumental or Vocal Ensemble	1
Introductory Music Technology Elective**	.5	(Piano Class II)***	(1)
Major Instrument or Voice, 1000 Level	1	General Education	3
Major Large Instrumental or Vocal Ensemble	1	<b>Semester Total</b>	<b>13-14</b>
(Piano Class I)***	(1)		
<b>Semester Total</b>	<b>12-17</b>		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ECON 1010 Principles of Macroeconomics	3	MUS 1000 Recital Attendance	0
MUS 1000 Recital Attendance	0	MUS 2111 Theory III*	3
MUS 1112 Theory II*	3	MUS 2121 Aural Training III*	1
MUS 1122 Aural Training II*	1	MUS 2410 Digital Audio Production*	3
MUS 2400 Sound Reinforcement & Music Production*	3	MUS 2420 Technology Practicum	0
MUS 2420 Technology Practicum	0	Major Instrument or Voice, 1000 Level	1
Major Instrument or Voice, 1000 Level	1	Major Large Instrumental or Vocal Ensemble	1
Major Large Instrumental or Vocal Ensemble	1	(Piano Class IV)***	(1)
(Piano Class III)***	(1)	General Education	6
General Education	3	<b>Semester Total</b>	<b>15-16</b>
<b>Semester Total</b>	<b>15-16</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 1225 Music of the World's Cultures or		MUS 3212 Music History 1800-Present*	3
MUS 4040 Music Business Practices	3	MUS 4115 Instrumentation*	3
MUS 2112 Theory IV*	3	MUS 4400 Audio for X*	3
MUS 2122 Aural Training IV*	1	MUS 4420 Advanced Music Technology Practicum	0
MUS 3211 Music History to 1800*	3	Approved Elective in Music+ +	1
MUS 4410 Electronic Music Production Techniques	3	General Education	6
MUS 4420 Advanced Music Technology Practicum	0	<b>Semester Total</b>	<b>16</b>
Approved Elective in Music+ +	1		
<b>Semester Total</b>	<b>14</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 4430 Seminar in Music Technology	2
MUS 1225 Music of the World's Cultures or		Music Academic & Technology Studies Elective#	3
MUS 4040 Music Business Practices	3	General Education	9
MUS 4430 Seminar in Music Technology	2	<b>Semester Total</b>	<b>14</b>
Approved Elective in Music+ +	1		
Music Academic & Technology Studies Elective#	3	<b>After Junior or Senior Year - Summer Semester</b>	<b>Hrs.</b>
General Education	6	MUS 4450 Internship in Music Technology	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>6</b>

**Music Major (Area 3 Music Technology), B.M. Degree - 124**

- +MUS 1100 with a grade of C or better may be required as a prerequisite to MUS 1111 if the student does not pass this course by the admission examination.
- + +Eight hours of Approved Electives in Music are required, these may include any MUS course excluding MUS 1100 and MUS 1210. For most students, this will include Piano Class I-IV.
- \*This course is only offered during the semester listed.
- \*\*Choose 1 hour of Introductory Music Technology Electives. Each course is worth .5 credit hours and they must be completed during the freshman year. Choose two courses from the following five: MUS 1400, 1410, 1420, 1430, and/or 1440. Students may also choose to do .5 hours in the fall semester and .5 hours in the spring semester, as three of the courses are fall semester only and two of the courses are spring semester only.
- \*\*\*Keyboard competency is required for this degree program. Private piano lessons may be required to reach competency.
- #This major area requires six hours of Music Academic & Technology Studies Electives. Choose from MUS 3141, 4000, 4101, 4125, 4185, 4190, or 4195.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Arts, Humanities, and Social Sciences

Department of Music

# MUSIC (AREA 4 PIANO)

## BACHELOR OF MUSIC DEGREE

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### Accreditation

The Department of Music is accredited by the National Association of Schools of Music.

### Career Opportunities

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The Department of Music's Merit Scholarships, Service Awards and Music Foundation Scholarships are awarded based on ability and various combinations of enrollment in applied lessons and ensemble participation. Any student that participates is eligible for most of these awards. There are a few awards reserved specifically for music majors. Additionally, the University awards academic scholarships based on previous academic performance and test scores. Auditions are held in November, on Presidents Day weekend each February, or by appointment.

### Performing Groups

UCM offers a wide range of performing experiences from the University Symphony Orchestra and Opera Workshop to the Jazz-Rock Combos and Vocal Jazz Ensemble. Many of these ensembles are also open to the avocational musician and all groups present periodic performances for the public.

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**Music Major (Area 4 Piano - odd year start), B.M. Degree (44-04472)**

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<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 1100 Fundamentals of Music+* or General Education	3	MUS 1111 Theory I*	3
MUS 1510 Piano I	2	MUS 1121 Aural Training I*	1
MUS 2221 Introduction to Music Literature I*	2	MUS 1225 Music of the World's Cultures	3
Major Large Instrumental or Vocal Ensemble	1	MUS 1510 Piano I	2
General Education	3	MUS 2222 Introduction to Music Literature II*	2
<b>Semester Total</b>	<b>14</b>	Major Large Instrumental or Vocal Ensemble	1
		<b>Semester Total</b>	<b>15</b>

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 1112 Theory II*	3	MUS 1095 Keyboard Ensemble	1
MUS 1122 Aural Training II*	1	MUS 1510 Piano I	2
MUS 1510 Piano I	2	MUS 2111 Theory III*	3
MUS 2300 Fundamentals of Conducting*	2	MUS 2121 Aural Training III*	1
MUS 2515 Piano Accompanying (only offered Fall semesters of even numbered years)	2	MUS Electives in the area	3
Major Large Instrumental or Vocal Ensemble	1	Major Large Instrumental or Vocal Ensemble	1
General Education	6	General Education	6
<b>Semester Total</b>	<b>17</b>	<b>Semester Total</b>	<b>17</b>

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 2112 Theory IV*	3	MUS 3060 Junior Recital	1
MUS 2122 Aural Training IV*	1	MUS 3095 Piano Accompanying Practicum	1
MUS 3211 Music History to 1800*	3	MUS 3212 Music History 1800-Present*	3
MUS 3510 Piano II	3	MUS 3510 Piano II	3
MUS 4125 Form & Analysis (only offered Fall semesters of odd numbered years)	3	Major Large Instrumental or Vocal Ensemble	1
MUS 4511 Piano Pedagogy I - Beginner (only offered Fall semesters of odd numbered years)	3	General Education	6
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>15</b>

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 3510 Piano II	3	MUS 3510 Piano II	3
MUS 4201 Piano Literature through Beethoven (only offered Fall semesters of even numbered years)	2	MUS 4060 Senior Recital	2
MUS Electives in the area	2	MUS 4202 Piano Literature Romantic Era-Present (only offered Spring semesters of odd numbered years)	2
Major Large Instrumental or Vocal Ensemble	1	MUS Required Elective**	3
General Education	9	General Education (only 3 hours of General Education are needed here if the other 3 hours were taken in the first semester instead of MUS 1100)	3-6
<b>Semester Total</b>	<b>17</b>	<b>Semester Total</b>	<b>13-16</b>

**Music Major (Area 4 Piano - odd year start), B.M. Degree - 124**

- +MUS 1100 with a grade of C or better may be required as a prerequisite to MUS 1111 if the student does not pass this course by the admission examination.
- \*This course is only offered during the semester listed.
- \*\*For the MUS Required Elective choose among the following two courses: MUS 4101 Counterpoint I (offered fall semester of even numbered years only) or MUS 4115 Instrumentation (offered spring semester).
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Arts, Humanities, and Social Sciences

Department of Music

# MUSIC (AREA 4 PIANO)

## BACHELOR OF MUSIC DEGREE

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### About the Faculty

All Major and Minor music courses are taught by experienced faculty who offer specialized instruction in diverse music disciplines. Most of the full time faculty members have doctoral degrees, and all teach beginning and advanced classes. Besides teaching, many perform recitals, teach master classes and workshops, and adjudicate competitions both on and off campus. Additionally, many pursue other scholarly activities including writing books and articles, and creating compositions and recordings.

### Accreditation

The Department of Music is accredited by the National Association of Schools of Music.

### Career Opportunities

UCM has been successful in placing graduates in prestigious teaching, performing, and other music-related careers including the recording industry. Central Missouri alumni include the concertmaster of the St. Louis Symphony Orchestra, a former member of the U.S. Navy Sea Chanters, a vocal soloist with the New York Philharmonic Orchestra, winners

of national composition contests, employees of major record labels, and highly successful educators.

### Financial Assistance

The Department of Music's Merit Scholarships, Service Awards and Music Foundation Scholarships are awarded based on ability and various combinations of enrollment in applied lessons and ensemble participation. Any student that participates is eligible for most of these awards. There are a few awards reserved specifically for music majors. Additionally, the University awards academic scholarships based on previous academic performance and test scores. Auditions are held in November, on Presidents Day weekend each February, or by appointment.

### Performing Groups

UCM offers a wide range of performing experiences from the University Symphony Orchestra and Opera Workshop to the Jazz-Rock Combos and Vocal Jazz Ensemble. Many of these ensembles are also open to the avocational musician and all groups present periodic performances for the public.

Vocal large ensembles include the university Concert Choir and Collegiate Choir as well as Women's Chorus. Students can also join the Opera Workshop for staged scenes and full productions of opera repertoire. The Vocal Jazz Ensemble concentrates on jazz and popular music standards.

Instrumental Ensembles are also numerous and varied. The University Symphony Orchestra presents at least four concerts a year including an Oratorio performance with the choirs in the Spring. The orchestra includes a full wind and percussion section. The Wind Ensemble and Symphonic

Band perform traditional concert band repertoire as well as recently written works. The Marching Mules perform at all home football games. The two Jazz ensembles perform a diverse range of music for large Jazz band and the Guitar Ensemble performs music in the classical guitar style.

Other instrumental ensemble opportunities include Jazz-Rock Combos, and various like-instrument chamber ensembles. There is also a Pep Band that performs for the Basketball games and a Pit Orchestra for the fall musical presented in conjunction with the Theatre Department.

Keyboard students can participate in any of the large ensembles as well as Keyboard Ensemble and numerous chamber music and accompanying opportunities.

### Curriculum

The Music curriculum is geared toward creating literate musicians. It starts with a solid foundation of basic materials and instruction and then builds on that foundation with advanced courses taught by specialists in those areas. The curriculum is supported by well-equipped classrooms and recording studios.

### To Learn More

For more information, contact the Department of Music, UCM, Warrensburg, MO 64093, or call 660-543-4530. The department's home page address is [ucmo.edu/music](http://ucmo.edu/music).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Music Major (Area 4 Piano - even year start), B.M. Degree (44-04472)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 1100 Fundamentals of Music+* or General Education	3	MUS 1111 Theory I*	3
MUS 1510 Piano I	2	MUS 1121 Aural Training I*	1
MUS 2221 Introduction to Music Literature I*	2	MUS 1225 Music of the World's Cultures	3
Major Large Instrumental or Vocal Ensemble	1	MUS 1510 Piano I	2
General Education	3	MUS 2222 Introduction to Music Literature II*	2
<b>Semester Total</b>	<b>14</b>	Major Large Instrumental or Vocal Ensemble	1
		<b>Semester Total</b>	<b>15</b>

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 1112 Theory II*	3	MUS 1095 Keyboard Ensemble	1
MUS 1122 Aural Training II*	1	MUS 1510 Piano I	2
MUS 1510 Piano I	2	MUS 2111 Theory III*	3
MUS 2300 Fundamentals of Conducting*	2	MUS 2121 Aural Training III*	1
Major Large Instrumental or Vocal Ensemble	1	MUS Electives in the area	3
General Education	6	Major Large Instrumental or Vocal Ensemble	1
<b>Semester Total</b>	<b>15</b>	General Education	6
		<b>Semester Total</b>	<b>17</b>

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 2112 Theory IV*	3	MUS 3060 Junior Recital	1
MUS 2122 Aural Training IV*	1	MUS 3095 Piano Accompanying Practicum	1
MUS 2515 Piano Accompanying (only offered Fall semesters of even numbered years)	2	MUS 3212 Music History 1800-Present*	3
MUS 3211 Music History to 1800*	3	MUS 3510 Piano II	3
MUS 3510 Piano II	3	MUS 4202 Piano Literature Romantic Era-Present (only offered Spring semesters of odd numbered years)	2
MUS 4201 Piano Literature through Beethoven (only offered Fall semesters of even numbered years)	2	Major Large Instrumental or Vocal Ensemble	1
General Education	3	General Education	6
<b>Semester Total</b>	<b>17</b>	<b>Semester Total</b>	<b>17</b>

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 3510 Piano II	3	MUS 3510 Piano II	3
MUS 4125 Form & Analysis (only offered Fall semesters of odd numbered years)	3	MUS 4060 Senior Recital	2
MUS 4511 Piano Pedagogy I - Beginner (only offered Fall semesters of odd numbered years)	3	MUS Required Elective**	3
MUS Electives in the area	2	General Education (only 6 hours of General Education are needed here if the other 3 hours were taken in the first semester instead of MUS 1100)	6-9
Major Large Instrumental or Vocal Ensemble	1	<b>Semester Total</b>	<b>14-17</b>
General Education	3		
<b>Semester Total</b>	<b>15</b>		

**Music Major (Area 4 Piano - even year start), B.M. Degree - 124**

- +MUS 1100 with a grade of C or better may be required as a prerequisite to MUS 1111 if the student does not pass this course by the admission examination.
- \*This course is only offered during the semester listed.
- \*\*For the MUS Required Elective choose among the following two courses: MUS 4101 Counterpoint I (offered fall semester of even numbered years only) or MUS 4115 Instrumentation (offered spring semester).
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Arts, Humanities, and Social Sciences

Department of Music

# MUSIC (AREA 5 PIANO PEDAGOGY)

## BACHELOR OF MUSIC DEGREE

The Bachelor of Music degree with a major in music allows students to select an emphasis in performance, piano pedagogy, jazz-commercial music or music technology. Music programs at UCM offer a balanced curriculum of classroom studies and practical experiences. Music is an essential part of the academic, social and cultural life at UCM. Each year more than 100 student and faculty recitals, concerts and other musical performances delight campus audiences and provide academic experiences for students.

### About the Faculty

All Major and Minor music courses are taught by experienced faculty who offer specialized instruction in diverse music disciplines. Most of the full time faculty members have doctoral degrees, and all teach beginning and advanced classes. Besides teaching, many perform recitals, teach master classes and workshops, and adjudicate competitions both on and off campus. Additionally, many pursue other scholarly activities including writing books and articles, and creating compositions and recordings.

### Accreditation

The Department of Music is accredited by the National Association of Schools of Music.

### Career Opportunities

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of national composition contests, employees of major record labels, and highly successful educators.

### Financial Assistance

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### Performing Groups

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Vocal large ensembles include the university Concert Choir and Collegiate Choir as well as Women's Chorus. Students can also join the Opera Workshop for staged scenes and full productions of opera repertoire. The Vocal Jazz Ensemble concentrates on jazz and popular music standards.

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Band perform traditional concert band repertoire as well as recently written works. The Marching Mules perform at all home football games. The two Jazz ensembles perform a diverse range of music for large Jazz band and the Guitar Ensemble performs music in the classical guitar style.

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### Curriculum

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**Music Major (Area 5 Piano Pedagogy - odd year start), B.M. Degree (44-05472)**

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<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 1100 Fundamentals of Music+* or General Education	3	MUS 1111 Theory I*	3
MUS 1510 Piano I	2	MUS 1121 Aural Training I*	1
PSY 1100 General Psychology	3	MUS 1225 Music of the World's Cultures	3
Major Large Instrument or Vocal Ensemble	1	MUS 1510 Piano I	2
General Education	3	MUS 2222 Introduction to Music Literature II*	2
<b>Semester Total</b>	<b>15</b>	Major Large Instrument or Vocal Ensemble	1
		<b>Semester Total</b>	<b>15</b>

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 1112 Theory II*	3	MUS 1510 Piano I	2
MUS 1122 Aural Training II*	1	MUS 2111 Theory III*	3
MUS 1510 Piano I	2	MUS 2121 Aural Training III*	1
MUS 4201 Piano Literature through Beethoven (only offered Fall semesters of even numbered years)	2	MUS 4202 Piano Literature Romantic Era - Present*	2
Major Large Instrument or Vocal Ensemble	1	Major Large Instrument or Vocal Ensemble	1
General Education	6	General Education	9
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>18</b>

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 2112 Theory IV*	3	MUS 1095 Keyboard Ensemble or MUS 3095 Piano Accompanying Practicum	1
MUS 2122 Aural Training IV*	1	MUS 3212 Music History 1800-Present*	3
MUS 2515 Piano Accompanying	2	MUS 3510 Piano II	3
MUS 3510 Piano II	1.5	MUS 4512 Piano Pedagogy II - The Intermediate Student (only offered Spring semesters of even numbered years)	3
MUS 4125 Form & Analysis (only offered Fall semesters of odd numbered years)	3	MUS 4515 Practice Teaching in Piano*	3
MUS 4511 Piano Pedagogy I - The Beginner (only offered Fall semesters of odd numbered years)	3	General Education	3
General Education	3	<b>Semester Total</b>	<b>16</b>
<b>Semester Total</b>	<b>16.5</b>		

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 1095 Keyboard Ensemble or MUS 3095 Piano Accompanying Practicum	1	MUS 1095 Keyboard Ensemble or MUS 3095 Piano Accompanying Practicum	1
MUS 2300 Fundamentals of Conducting*	2	MUS 3510 Piano II	3
MUS 3211 Music History to 1800*	3	MUS 4060 Senior Recital	2
MUS 3510 Piano II	3	MUS 4514 Piano Pedagogy IV - Seminar*	3
MUS 4101 Counterpoint I (only offered Fall semesters of even numbered years)	3	MUS 4515 Practice Teaching in Piano*	3
MUS 4513 Piano Pedagogy III - The Advanced Student (only offered Fall semesters of even numbered years)	3	General Education	6
General Education (0 hours of General Education are needed here if 3 hours were taken in the first semester instead of MUS 1100)	0-3	<b>Semester Total</b>	<b>18</b>
<b>Semester Total</b>	<b>15</b>		

**Music Major (Area 5 Piano Pedagogy - odd year start), B.M. Degree - 128.5**

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- This guide is based on entrance during odd numbered years (2013, 2015, etc.). The suggested order of courses will vary for students beginning in even numbered years.
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## College of Arts, Humanities, and Social Sciences

Department of Music

# MUSIC (AREA 5 PIANO PEDAGOGY)

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<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 1100 Fundamentals of Music+* or General Education	3	MUS 1111 Theory I*	3
MUS 1510 Piano I	2	MUS 1121 Aural Training I*	1
PSY 1100 General Psychology	3	MUS 1225 Music of the World's Cultures	3
Major Large Instrument or Vocal Ensemble	1	MUS 1510 Piano I	2
General Education	3	MUS 2222 Introduction to Music Literature II*	2
<b>Semester Total</b>	<b>15</b>	Major Large Instrument or Vocal Ensemble	1
		<b>Semester Total</b>	<b>15</b>

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 1112 Theory II*	3	MUS 1510 Piano I	2
MUS 1122 Aural Training II*	1	MUS 2111 Theory III*	3
MUS 1510 Piano I	2	MUS 2121 Aural Training III*	1
MUS 2300 Fundamentals of Conducting*	2	MUS 4512 Piano Pedagogy II - The Intermediate Student (only offered Spring semesters of even numbered years)	3
MUS 4511 Piano Pedagogy I - The Beginner (only offered Fall semesters of odd numbered years)	3	Major Large Instrument or Vocal Ensemble	1
Major Large Instrument or Vocal Ensemble	1	General Education	6
General Education	6	<b>Semester Total</b>	<b>16</b>
<b>Semester Total</b>	<b>18</b>		

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 2112 Theory IV*	3	MUS 1095 Keyboard Ensemble or MUS 3095 Piano Accompanying Practicum	1
MUS 2122 Aural Training IV*	1	MUS 3510 Piano II	3
MUS 2515 Piano Accompanying	2	MUS 4202 Piano Literature Romantic Era - Present*	2
MUS 3510 Piano II	1.5	MUS 4514 Piano Pedagogy IV - Seminar*	3
MUS 4101 Counterpoint I (only offered Fall semesters of even numbered years)	3	MUS 4515 Practice Teaching in Piano*	3
MUS 4201 Piano Literature through Beethoven (only offered Fall semesters of even numbered years)	2	General Education	6
MUS 4513 Piano Pedagogy III - The Advanced Student (only offered Fall semesters of even numbered years)	3	<b>Semester Total</b>	<b>18</b>
<b>Semester Total</b>	<b>15.5</b>		

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 1095 Keyboard Ensemble or MUS 3095 Piano Accompanying Practicum	1	MUS 1095 Keyboard Ensemble or MUS 3095 Piano Accompanying Practicum	1
MUS 3211 Music History to 1800*	3	MUS 3212 Music History 1800-Present*	3
MUS 3510 Piano II	3	MUS 3510 Piano II	3
MUS 4125 Form & Analysis (only offered Fall semesters of odd numbered years)	3	MUS 4060 Senior Recital	2
General Education (only 3 hours of General Education are needed here if the other 3 hours were taken in the first semester instead of MUS 1100)	3-6	MUS 4515 Practice Teaching in Piano*	3
<b>Semester Total</b>	<b>13-16</b>	General Education	6
		<b>Semester Total</b>	<b>18</b>

**Music Major (Area 5 Piano Pedagogy - even year start), B.M. Degree - 128.5**

- +MUS 1100 with a grade of C or better may be required as a prerequisite to MUS 1111 if the student does not pass this course by the admission examination.
- \*This course is only offered during the semester listed.
- This guide is based on entrance during even numbered years (2014, 2016, etc.). The suggested order of courses will vary for students beginning in odd numbered years.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Arts, Humanities, and Social Sciences

Department of Music

# MUSIC (AREA 6 VOCAL)

## BACHELOR OF MUSIC DEGREE

The Bachelor of Music degree with a major in music allows students to select an emphasis in performance, piano pedagogy, jazz-commercial music or music technology. Music programs at UCM offer a balanced curriculum of classroom studies and practical experiences. Music is an essential part of the academic, social and cultural life at UCM. Each year more than 100 student and faculty recitals, concerts and other musical performances delight campus audiences and provide academic experiences for students.

### About the Faculty

All Major and Minor music courses are taught by experienced faculty who offer specialized instruction in diverse music disciplines. Most of the full time faculty members have doctoral degrees, and all teach beginning and advanced classes. Besides teaching, many perform recitals, teach master classes and workshops, and adjudicate competitions both on and off campus. Additionally, many pursue other scholarly activities including writing books and articles, and creating compositions and recordings.

### Accreditation

The Department of Music is accredited by the National Association of Schools of Music.

### Career Opportunities

UCM has been successful in placing graduates in prestigious teaching, performing, and other music-related careers including the recording industry. Central Missouri alumni include the concertmaster of the St. Louis Symphony Orchestra, a former member of the U.S. Navy Sea Chanters, a vocal soloist with the New York Philharmonic Orchestra, winners

of national composition contests, employees of major record labels, and highly successful educators.

### Financial Assistance

The Department of Music's Merit Scholarships, Service Awards and Music Foundation Scholarships are awarded based on ability and various combinations of enrollment in applied lessons and ensemble participation. Any student that participates is eligible for most of these awards. There are a few awards reserved specifically for music majors. Additionally, the University awards academic scholarships based on previous academic performance and test scores. Auditions are held in November, on Presidents Day weekend each February, or by appointment.

### Performing Groups

UCM offers a wide range of performing experiences from the University Symphony Orchestra and Opera Workshop to the Jazz-Rock Combos and Vocal Jazz Ensemble. Many of these ensembles are also open to the avocational musician and all groups present periodic performances for the public.

Vocal large ensembles include the university Concert Choir and Collegiate Choir as well as Women's Chorus. Students can also join the Opera Workshop for staged scenes and full productions of opera repertoire. The Vocal Jazz Ensemble concentrates on jazz and popular music standards.

Instrumental Ensembles are also numerous and varied. The University Symphony Orchestra presents at least four concerts a year including an Oratorio performance with the choirs in the Spring. The orchestra includes a full wind and percussion section. The Wind Ensemble and Symphonic

Band perform traditional concert band repertoire as well as recently written works. The Marching Mules perform at all home football games. The two Jazz ensembles perform a diverse range of music for large Jazz band and the Guitar Ensemble performs music in the classical guitar style.

Other instrumental ensemble opportunities include Jazz-Rock Combos, and various like-instrument chamber ensembles. There is also a Pep Band that performs for the Basketball games and a Pit Orchestra for the fall musical presented in conjunction with the Theatre Department.

Keyboard students can participate in any of the large ensembles as well as Keyboard Ensemble and numerous chamber music and accompanying opportunities.

### Curriculum

The Music curriculum is geared toward creating literate musicians. It starts with a solid foundation of basic materials and instruction and then builds on that foundation with advanced courses taught by specialists in those areas. The curriculum is supported by well-equipped classrooms and recording studios.

### To Learn More

For more information, contact the Department of Music, UCM, Warrensburg, MO 64093, or call 660-543-4530. The department's home page address is [ucmo.edu/music](http://ucmo.edu/music).

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**Music Major (Area 6 Vocal - odd year start), B.M. Degree (44-06472)**

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<b>Freshman Year - Fall Semester</b>		<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>		<b>Hrs.</b>
ENGL 1020 Composition I		3	ENGL 1030 Composition II		3
FREN 1201 Elem. French I or GER 1301 Elem. German I*		3	FREN 1202 Elem. French II or GER 1302 Elem. German II*		3
MUS 1000 Recital Attendance		0	MUS 1000 Recital Attendance		0
MUS 1100 Fundamentals of Music+** or General Education		3	MUS 1111 Theory I**		3
MUS 1610 Voice I		2	MUS 1121 Aural Training I**		1
MUS 2221 Introduction to Music Literature I**		2	MUS 1610 Voice I		2
Major Large Vocal Ensemble		1	MUS 2222 Introduction to Music Literature II**		2
(Piano Class I)***		(1)	Major Large Vocal Ensemble		1
<b>Semester Total</b>		<b>14-15</b>	<b>Semester Total</b>		<b>15-16</b>

<b>Sophomore Year - Fall Semester</b>		<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>		<b>Hrs.</b>
MUS 1000 Recital Attendance		0	MUS 1000 Recital Attendance		0
MUS 1112 Theory II**		3	MUS 1610 Voice I		2
MUS 1122 Aural Training II**		1	MUS 2111 Theory III**		3
MUS 1610 Voice I		2	MUS 2121 Aural Training III**		1
MUS 2300 Fundamentals of Conducting**		2	Major Large Vocal Ensemble		1
Major Large Vocal Ensemble		1	(Piano Class IV)***		(1)
(Piano Class III)***		(1)	General Education		9
General Education		6	<b>Semester Total</b>		<b>16-17</b>
<b>Semester Total</b>		<b>15-16</b>			

<b>Junior Year - Fall Semester</b>		<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>		<b>Hrs.</b>
MUS 1000 Recital Attendance		0	MUS 1000 Recital Attendance		0
MUS 2112 Theory IV**		3	MUS 1225 Music of the World's Cultures		3
MUS 2122 Aural Training IV**		1	MUS 1615 Opera Theatre**		2
MUS 3211 Music History to 1800**		3	MUS 2632 Diction for Singers (only offered Spring semesters of even numbered years)		3
MUS 3610 Voice II		3	MUS 3060 Junior Recital		1
MUS 4125 Form & Analysis (only offered Fall semesters of odd numbered years)		3	MUS 3212 Music History 1800 - Present**		3
MUS 4235 Vocal Literature (only offered Fall semesters of odd numbered years)		3	MUS 3610 Voice II		3
Major Large Vocal Ensemble		1	General Education		3
<b>Semester Total</b>		<b>17</b>	<b>Semester Total</b>		<b>18</b>

<b>Senior Year - Fall Semester</b>		<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>		<b>Hrs.</b>
MUS 1000 Recital Attendance		0	MUS 1000 Recital Attendance		0
MUS 3610 Voice II		3	MUS 3610 Voice II		3
MUS Required Elective#		3	MUS 4060 Senior Recital		2
Major Large Vocal Ensemble		1	MUS 4600 Vocal Pedagogy (only offered Spring semesters of odd numbered years)		2
General Education		9	MUS Electives		3
<b>Semester Total</b>		<b>16</b>	General Education (only 3 hours of General Education are needed here if the other 3 hours were taken in the first semester instead of MUS 1100)		3-6
			<b>Semester Total</b>		<b>13-16</b>

**Music Major (Area 6 Vocal - odd year start), B.M. Degree - 124**

- \*Student's initial placement in foreign language coursework will be determined by examination. If a student begins in FREN 1202 or GER 1302 and earns a grade of C or higher, the student will earn 3 hours of validated credit for FREN 1201 or GER 1301.
- +MUS 1100 with a grade of C or better may be required as a prerequisite to MUS 1111 if the student does not pass this course by the admission examination.
- \*\*This course is only offered during the semester listed.
- \*\*\*Keyboard competency is required for this degree program. Private piano lessons may be required to reach competency.
- #For the MUS Required Elective choose among the following two courses: MUS 4101 Counterpoint I (offered fall semester of even numbered years only) or MUS 4115 Instrumentation (offered spring semester).
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Arts, Humanities, and Social Sciences

Department of Music

# MUSIC (AREA 6 VOCAL)

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**Music Major (Area 6 Vocal - even year start), B.M. Degree (44-06472)**

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<b>Freshman Year - Fall Semester</b>		<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>		<b>Hrs.</b>
ENGL 1020 Composition I		3	ENGL 1030 Composition II		3
FREN 1201 Elem. French I or GER 1301 Elem. German I*		3	FREN 1202 Elem. French II or GER 1302 Elem. German II*		3
MUS 1000 Recital Attendance		0	MUS 1000 Recital Attendance		0
MUS 1100 Fundamentals of Music+** or General Education		3	MUS 1111 Theory I**		3
MUS 1610 Voice I		2	MUS 1121 Aural Training I**		1
MUS 2221 Introduction to Music Literature I**		2	MUS 1610 Voice I		2
Major Large Vocal Ensemble (Piano Class I)***		1	MUS 2222 Introduction to Music Literature II**		2
		(1)	Major Large Vocal Ensemble		1
			(Piano Class II)***		(1)
<b>Semester Total</b>		<b>14-15</b>	<b>Semester Total</b>		<b>15-16</b>

<b>Sophomore Year - Fall Semester</b>		<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>		<b>Hrs.</b>
MUS 1000 Recital Attendance		0	MUS 1000 Recital Attendance		0
MUS 1112 Theory II**		3	MUS 1610 Voice I		2
MUS 1122 Aural Training II**		1	MUS 2111 Theory III**		3
MUS 1610 Voice I		2	MUS 2121 Aural Training III**		1
MUS 2300 Fundamentals of Conducting**		2	MUS 2632 Diction for Singers (only offered Spring semesters of even numbered years)		3
Major Large Vocal Ensemble (Piano Class III)***		1	Major Large Vocal Ensemble		1
General Education		(1)	(Piano Class IV)***		(1)
		6	General Education		6
<b>Semester Total</b>		<b>15-16</b>	<b>Semester Total</b>		<b>16-17</b>

<b>Junior Year - Fall Semester</b>		<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>		<b>Hrs.</b>
MUS 1000 Recital Attendance		0	MUS 1000 Recital Attendance		0
MUS 2112 Theory IV**		3	MUS 1225 Music of the World's Cultures		3
MUS 2122 Aural Training IV**		1	MUS 1615 Opera Theatre**		2
MUS 3211 Music History to 1800**		3	MUS 3060 Junior Recital		1
MUS 3610 Voice II		3	MUS 3212 Music History 1800 - Present**		3
Major Large Vocal Ensemble		1	MUS 3610 Voice II		3
General Education		6	MUS 4600 Vocal Pedagogy (only offered Spring semesters of odd numbered years)		2
		17	General Education		3
<b>Semester Total</b>		<b>17</b>	<b>Semester Total</b>		<b>17</b>

<b>Senior Year - Fall Semester</b>		<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>		<b>Hrs.</b>
MUS 1000 Recital Attendance		0	MUS 1000 Recital Attendance		0
MUS 3610 Voice II		3	MUS 3610 Voice II		3
MUS 4125 Form & Analysis (only offered Fall semesters of odd numbered years)		3	MUS 4060 Senior Recital		2
MUS 4235 Vocal Literature (only offered Fall semesters of odd numbered years)		3	MUS Electives		3
MUS Required Elective#		3	General Education (only 6 hours of General Education are needed here if the other 3 hours were taken in the first semester instead of MUS 1100)		6-9
Major Large Vocal Ensemble		1	<b>Semester Total</b>		<b>14-17</b>
General Education		3			
<b>Semester Total</b>		<b>16</b>			

**Music Major (Area 6 Vocal - even year start), B.M. Degree - 124**

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## College of Arts, Humanities, and Social Sciences

Department of Music

# MUSIC EDUCATION

## INSTRUMENTAL MUSIC OPTION, BACHELOR OF MUSIC EDUCATION DEGREE

Undergraduate students who want to teach music may earn a Bachelor of Music Education degree with options in instrumental music, vocal music, or dual certification. The BME provides certification to teach either instrumental or vocal music in grades pre-kindergarten through 12.

### About the Faculty

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**Music Education Major (Instrumental Option), B.M.E. Degree (45-440)**

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**Freshman Year - Fall Semester****ENGL 1020 Composition I**

MUS 1000 Recital Attendance	3
MUS 1100 Fundamentals of Music+* or General Education Instrument Techniques Class**	0
Instrument Techniques Class**	3
Instrument Techniques Class**	1
Major Instrument, 1000 Level	1
Major Large Instrumental Ensemble (Piano)	1

**POLS 1510 American Government****General Education MATH****Semester Total****Hrs.**

3  
0  
3  
1  
1  
1  
1  
(1)  
3  
3  
3  
**16-17**

**Freshman Year - Spring Semester****ENGL 1030 Composition II**

MUS 1000 Recital Attendance	3
MUS 1111 Theory I*	0
MUS 1121 Aural Training I*	3
MUS 1225 Music of the World's Cultures	1
Instrument Techniques Class**	3
Major Instrument, 1000 Level	1
Major Large Instrumental Ensemble (Piano)	1

**General Education Science w/lab****Semester Total****Hrs.**

3  
0  
3  
1  
3  
1  
1  
(1)  
4  
4  
**17-18**

**Sophomore Year - Fall Semester**

EDFL 2100 Foundations of Education	2
FLDX 2150 Introductory Field Experience	1
EDFL 2240 Educational Psychology	3
HIST 1350 or HIST 1351 History of the United States	3
MUS 1000 Recital Attendance	0
MUS 1112 Theory II*	3
MUS 1122 Aural Training II*	1
Instrument Techniques Class**	1
Major Instrument, 1000 Level	1
Major Large Instrumental Ensemble (Piano)	1

**Semester Total****Hrs.**

2  
1  
3  
3  
0  
3  
1  
1  
1  
1  
(1)  
**16-17**

**Sophomore Year - Spring Semester**

MUS 1000 Recital Attendance	2
MUS 1601 Voice Class I (Spring only)	0
MUS 2111 Theory III*	1
MUS 2121 Aural Training III*	3
EDSP 2100 Education of the Exceptional Child	1
Instrument Techniques Class**	2
Major Large Instrumental Ensemble	1
Major Instrument, 1000 Level (Piano)	1
General Education	(1)

**Semester Total****Hrs.**

0  
1  
3  
1  
2  
1  
1  
1  
6  
**16-17**

**Junior Year - Fall Semester**

EDFL 4300 Educational Measurement & Evaluation	2
MUS 1000 Recital Attendance	0
MUS 2112 Theory IV*	3
MUS 2122 Aural Training IV*	1
MUS 2300 Fundamentals of Conducting*	2
MUS 3211 Music History to 1800*	3
MUS 3308 Marching Band Techniques*	1
PSY 4230 Psychology of Adolescence	3
Instrument Techniques Class**	1
Major Instrument, 3000 Level	1.5
Major Large Instrumental Ensemble	1

**Semester Total****Hrs.**

2  
0  
3  
1  
2  
3  
1  
3  
1  
1.5  
1  
**18.5**

**Junior Year - Spring Semester**

MUS 1000 Recital Attendance	2
MUS 3212 Music History 1800-Present*	0
MUS 3306 Methods of Teaching Instrumental Music*	3
MUS 3320 Instrumental Conducting & Rehearsal Tech.*	3
MUS 4115 Instrumentation*	3
Instrument Techniques Class**	1
Major Instrument, 3000 Level	1.5
Major Large Instrumental Ensemble	1

**Semester Total****Hrs.**

0  
3  
3  
3  
3  
1  
1.5  
1  
**15.5**

**Senior Year - Fall Semester**

EDFL 3500 Secondary Teaching & Behavioral Management	3
FLDX 3550 Practicum in Secondary Instruction	1
EDFL 4210 The Teaching of Reading in the Secondary School	2
MUS 1000 Recital Attendance	0
MUS 4381 Jazz Pedagogy* (Fall only)	2
Major Instrument, 3000 Level	1.5
Major Large Instrumental Ensemble	1
General Education	8

**Semester Total****Hrs.**

3  
1  
2  
0  
2  
1.5  
1  
8  
**18.5**

**Senior Year - Spring Semester**

FLDX 4595 Student Teaching Secondary I	5
ICAP 4468 Student Teaching Secondary II	4
MUS 4310 Methods of Teaching Music	2
MUS 4350 Secondary Field Experience II	1
General Education (not needed if taken in first semester instead of MUS 1100, if needed choose an online course)	(3)

**Semester Total****Hrs.**

5  
4  
2  
1  
(3)  
**12-15**

**Music Education Major (Instrumental Option), B.M.E. Degree – 129.5-137.5 hours**

- +MUS 1100 with a grade of C or better may be required as a prerequisite to MUS 1111 if the student does not pass this course by the admission examination.
- \*This course is only offered during the semester listed.
- \*\*Instrument Techniques Classes include the following (all courses are worth one credit hour): MUS 1701 (taken twice), 2801, 2802, 2901, 2902, and 2950.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before student teaching. The application for student teaching is due approximately one year in advance.



## College of Arts, Humanities, and Social Sciences

Department of Music

# MUSIC EDUCATION (odd year start plan)

## VOCAL MUSIC OPTION, BACHELOR OF MUSIC EDUCATION DEGREE

Undergraduate students who want to teach music may earn a Bachelor of Music Education degree with options in instrumental music, vocal music, or dual certification. The BME provides certification to teach either instrumental or vocal music in grades pre-kindergarten through 12.

### About the Faculty

All Major and Minor music courses are taught by experienced faculty who offer specialized instruction in diverse music disciplines. Most of the full time faculty members have doctoral degrees, and all teach beginning and advanced classes. Besides teaching, many perform recitals, teach master classes and workshops, and adjudicate competitions both on and off campus. Additionally, many pursue other scholarly activities including writing books and articles, and creating compositions and recordings.

### Career Opportunities

UCM has been successful in placing graduates in prestigious teaching, performing, and other music-related careers including the recording industry. Central Missouri alumni include the concertmaster of the St. Louis Symphony Orchestra, a former member of the U.S. Navy Sea Chanters, a vocal soloist with the New York Philharmonic Orchestra, winners of national composition contests, employees of major record labels, and highly successful educators.

### Financial Assistance

The Department of Music's Merit Scholarships, Service Awards and Music Foundation Scholarships are awarded based on ability and various combinations of enrollment in applied lessons and ensemble participation. Any student that participates is eligible for most of these awards. There are a few awards reserved specifically for music majors. Additionally, the University awards academic scholarships based on previous academic performance and test scores. Auditions are held in November, on Presidents Day weekend each February, or by appointment.

### Performing Groups

UCM offers a wide range of performing experiences from the University Symphony Orchestra and Opera Workshop to the Jazz-Rock Combos and Vocal Jazz Ensemble. Many of these ensembles are also open to the avocational musician and all groups present periodic performances for the public.

Vocal large ensembles include the university Concert Choir and Collegiate Choir as well as Women's Chorus. Students can also join the Opera Workshop for staged scenes and full productions of opera repertoire. The Vocal Jazz Ensemble concentrates on jazz and popular music standards.

Instrumental Ensembles are also numerous and varied. The University Symphony Orchestra presents at least four concerts a year including an Oratorio performance with the choirs in the Spring. The orchestra includes a full wind and percussion section. The Wind Ensemble and Symphonic Band perform traditional concert band repertoire as well as recently written

works. The Marching Mules perform at all home football games. The two Jazz ensembles perform a diverse range of music for large Jazz band and the Guitar Ensemble performs music in the classical guitar style.

Other instrumental ensemble opportunities include Jazz-Rock Combos, and various like-instrument chamber ensembles. There is also a Pep Band that performs for the Basketball games and a Pit Orchestra for the fall musical presented in conjunction with the Theatre Department.

Keyboard students can participate in any of the large ensembles as well as Keyboard Ensemble and numerous chamber music and accompanying opportunities.

### Curriculum

The Music curriculum is geared toward creating literate musicians. It starts with a solid foundation of basic materials and instruction and then builds on that foundation with advanced courses taught by specialists in those areas. The curriculum is supported by well-equipped classrooms and recording studios.

### To Learn More

For more information, contact the Department of Music, UCM, Warrensburg, MO 64093, or call 660-543-4530. The department's home page address is [ucmo.edu/music](http://ucmo.edu/music).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Music Education Major (Vocal Option - odd year start plan), B.M.E Degree (45-441)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
<b>ENGL 1020 Composition I</b>	3	<b>ENGL 1030 Composition II</b>	3
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 1100 Fundamentals of Music+* or General Education 3	3	MUS 1111 Theory I*	3
MUS 1610 Voice 1	1	MUS 1121 Aural Training I*	1
MUS 1225 Music of the World's Cultures	3	MUS 1610 Voice 1	1
Major Large Vocal Ensemble	1	Major Large Vocal Ensemble	1
(Piano)	(1)	(Piano)	(1)
<b>General Education Science w/lab</b>	<b>4</b>	<b>POLS 1510 American Government</b>	<b>3</b>
<b>Semester Total</b>	<b>15-16</b>	<b>General Education MATH</b>	<b>3</b>
		General Education (technology)	2
		<b>Semester Total</b>	<b>17-18</b>

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
EDFL 2100 Foundations of Education	2	HIST 1350 or 1351 History of the United States	3
FLDX 2150 Introductory Field Experience	1	MUS 1000 Recital Attendance	0
EDFL 2240 Educational Psychology	3	MUS 1610 Voice 1	1
MUS 1000 Recital Attendance	0	MUS 1615 Opera Theatre (spring only) or	
MUS 1112 Theory II*	3	MUS 1620 Music Theatre Practicum I* (fall only)	(1)
MUS 1122 Aural Training II*	1	MUS 2111 Theory III*	3
MUS 1610 Voice 1	1	MUS 2121 Aural Training III*	1
MUS 2221 Introduction to Music Literature I*	2	MUS 2222 Introduction to Music Literature II*	2
MUS 2300 Fundamentals of Conducting*	2	Major Large Vocal Ensemble	1
Major Large Vocal Ensemble	1	(Piano)	(1)
(Piano)	(1)	General Education	6
<b>Semester Total</b>	<b>16-17</b>	<b>Semester Total</b>	<b>17-19</b>

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
MUS 1000 Recital Attendance	0	EDFL 4210 The Teaching of Reading in the Secondary School	2
MUS 1615 Opera Theatre (spring only) or		MUS 1000 Recital Attendance	0
MUS 1620 Music Theatre Practicum I* (fall only)	(1)	MUS 2632 Diction for Singers* (Spring of even years only)	2
MUS 2112 Theory IV*	3	MUS 3212 Music History 1800-Present*	3
MUS 2122 Aural Training IV*	1	MUS 3610 Voice II	1.5
MUS 3211 Music History to 1800*	3	MUS 4230 Choral Literature*	2
MUS 3310 Choral Conducting*	2	PSY 4230 Psychology of Adolescence	3
MUS 3610 Voice II	1.5	Major Large Vocal Ensemble	1
MUS 4320 Methods of Teach Middle School Music*#		General Education	3
(offered fall semester of odd numbered years only)	2	<b>Semester Total</b>	<b>17.5</b>
EDSP 2100 Education of the Exceptional Child	2		
Major Large Vocal Ensemble	1		
<b>Semester Total</b>	<b>15.5-16.5</b>		

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
EDFL 3500 Sec. Teaching & Behavioral Management	3	FLDX 4595 Student Teaching Secondary I	5
FLDX 3550 Practicum in Secondary Instruction	1	ICAP 4468 Student Teaching Secondary II	4
EDFL 4300 Educational Measurement & Evaluation	2	MUS 4310 Methods of Teaching Music	2
MUS 1000 Recital Attendance	0	MUS 4350 Secondary Field Experience II	1
MUS 3305 Methods of Teaching Elementary School Music		General Education (only 3 hours needed if a gen ed is taken	
(offered fall semester of even numbered years only)	3	in first semester instead of MUS 1100)	3-6
MUS 3315 Choral Techniques*	2	<b>Semester Total</b>	<b>15-18</b>
MUS 3610 Voice II	1.5		
MUS 4130 Choral Arranging* (offered fall semester of			
even numbered years only)	2		
Major Large Vocal Ensemble	1		
General Education	3		
<b>Semester Total</b>	<b>18.5</b>		

**Music Education Major (Vocal Option), B.M.E. Degree – 129.5-136.5 hours**

- +MUS 1100 with a grade of C or better may be required as a prerequisite to MUS 1111 if the student does not pass this course by the admission examination.
- \*This course is only offered during the semester listed.
- #Permission of instructor required for enrollment without prerequisite (MUS 3305 or 3306).
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before student teaching. The application for student teaching is due approximately one year in advance.

## College of Arts, Humanities, and Social Sciences

Department of Music

# MUSIC EDUCATION (EVEN YEAR START PLAN)

## VOCAL MUSIC OPTION, BACHELOR OF MUSIC EDUCATION DEGREE

Undergraduate students who want to teach music may earn a Bachelor of Music Education degree with options in instrumental music, vocal music, or dual certification. The BME provides certification to teach either instrumental or vocal music in grades pre-kindergarten through 12.

### About the Faculty

All Major and Minor music courses are taught by experienced faculty who offer specialized instruction in diverse music disciplines. Most of the full time faculty members have doctoral degrees, and all teach beginning and advanced classes. Besides teaching, many perform recitals, teach master classes and workshops, and adjudicate competitions both on and off campus. Additionally, many pursue other scholarly activities including writing books and articles, and creating compositions and recordings.

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UCM offers a wide range of performing experiences from the University Symphony Orchestra and Opera Workshop to the Jazz-Rock Combos and Vocal Jazz Ensemble. Many of these ensembles are also open to the avocational musician and all groups present periodic performances for the public.

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### To Learn More

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**Music Education Major (Vocal Option - even year start plan), B.M.E Degree (45-441)**

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<b>Freshman Year - Fall Semester</b>		<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>		<b>Hrs.</b>
<b>ENGL 1020 Composition I</b>		3	<b>ENGL 1030 Composition II</b>		3
MUS 1000 Recital Attendance		0	MUS 1000 Recital Attendance		0
MUS 1100 Fundamentals of Music+* or General Education		3	MUS 1111 Theory I*		3
MUS 1610 Voice 1		1	MUS 1121 Aural Training I*		1
MUS 1225 Music of the World's Cultures		3	MUS 1610 Voice 1		1
Major Large Vocal Ensemble (Piano)		1 (1)	Major Large Vocal Ensemble (Piano)		1 (1)
<b>General Education Science w/lab</b>		4	<b>POLS 1510 American Government</b>		3
<b>Semester Total</b>		<b>15-16</b>	<b>General Education MATH</b>		3
			General Education (technology)		2
			<b>Semester Total</b>		<b>17-18</b>

<b>Sophomore Year - Fall Semester</b>		<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>		<b>Hrs.</b>
EDFL 2100 Foundations of Education		2	HIST 1350 or 1351 History of the United States		3
FLDX 2150 Introductory Field Experience		1	MUS 1000 Recital Attendance		0
EDFL 2240 Educational Psychology		3	MUS 1610 Voice 1		1
MUS 1000 Recital Attendance		0	MUS 1615 Opera Theatre (spring only) or MUS 1620 Music Theatre Practicum I* (fall only)		2
MUS 1112 Theory II*		3	MUS 2632 Diction for Singers* (Spring of even years only)		3
MUS 1122 Aural Training II*		1	MUS 2111 Theory III*		3
MUS 1610 Voice 1		1	MUS 2121 Aural Training III*		1
MUS 2221 Introduction to Music Literature I*		2	MUS 2222 Introduction to Music Literature II*		2
MUS 2300 Fundamentals of Conducting*		2	Major Large Vocal Ensemble (Piano)		1 (1)
Major Large Vocal Ensemble (Piano)		1 (1)	General Education		3
<b>Semester Total</b>		<b>16-17</b>	<b>Semester Total</b>		<b>19-20</b>

<b>Junior Year - Fall Semester</b>		<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>		<b>Hrs.</b>
MUS 1000 Recital Attendance		0	EDFL 4210 The Teaching of Reading in the Secondary School		2
MUS 1615 Opera Theatre (spring only) or MUS 1620 Music Theatre Practicum I* (fall only)		1 (1)	MUS 1000 Recital Attendance		0
MUS 2112 Theory IV*		3	MUS 3212 Music History 1800-Present*		3
MUS 2122 Aural Training IV*		1	MUS 3610 Voice II		1.5
MUS 3211 Music History to 1800*		3	MUS 4230 Choral Literature*		2
MUS 3305 Methods of Teaching Elementary School Music (offered fall semester of even numbered years only)		3	PSY 4230 Psychology of Adolescence		3
MUS 3310 Choral Conducting*		2	Major Large Vocal Ensemble		1
MUS 3610 Voice II		1.5	General Education		6
MUS 4130 Choral Arranging* (offered fall semester of even numbered years only)		2	<b>Semester Total</b>		<b>17.5-18.5</b>
Major Large Vocal Ensemble		1			
<b>Semester Total</b>		<b>16.5-17.5</b>			

<b>Senior Year - Fall Semester</b>		<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>		<b>Hrs.</b>
EDFL 3500 Sec. Teaching & Behavioral Management		3	FLDX 4595 Student Teaching Secondary I		5
FLDX 3550 Practicum in Secondary Instruction		1	ICAP 4468 Student Teaching Secondary II		4
EDFL 4300 Educational Measurement & Evaluation		2	MUS 4310 Methods of Teaching Music		2
MUS 1000 Recital Attendance		0	MUS 4350 Secondary Field Experience II		1
MUS 3315 Choral Techniques*		2	General Education (only 3 hours needed if a gen ed is taken in first semester instead of MUS 1100)		3-6
MUS 3610 Voice II		1.5	<b>Semester Total</b>		<b>15-18</b>
MUS 4320 Methods of Teach Middle School Music* (offered fall semester of odd numbered years only)		2			
EDSP 2100 Education of the Exceptional Child		2			
Major Large Vocal Ensemble		1			
General Education		3			
<b>Semester Total</b>		<b>17.5</b>			

**Music Education Major (Vocal Option), B.M.E. Degree – 129.5-136.5 hours**

- +MUS 1100 with a grade of C or better may be required as a prerequisite to MUS 1111 if the student does not pass this course by the admission examination.
- \*This course is only offered during the semester listed.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
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**College of Arts, Humanities, and Social Sciences**  
*Department of Theatre and Dance*

# MUSICAL THEATRE

## BACHELOR OF FINE ARTS DEGREE

The Bachelor of Fine Arts in Musical Theatre is an exciting blend of theatre, music, and dance classes. The degree provides students with training and production opportunities in the areas of acting, music, and dance to prepare them for entry into the well-established and fast expanding profession of musical theatre performance. The performance market in the United States today and in the future, for entry level professional theatre positions, is primarily in the area of musical theatre. The Broadway stage is dominated by musicals, theme parks throughout Missouri and the region focus on musical theatre entertainment, the Branson area has a myriad of musical theatre venues, Las Vegas has over one hundred musical theatre events, summer theatre companies around the nation offer musical theatre productions, and casinos and cruise lines have expanded into these areas as well.

### Program Admission

To be accepted into the program, students must meet the admission requirements for UCM and must complete an audition process which requires singing, acting and dancing. Audition requirements are listed on the department website.

### Production Opportunities

The Theatre and Dance Program at Central places the spotlight on undergraduates. Students begin working immediately in a busy and varied program. Performance opportunities are available in 30-35 productions each school year in both the theatre and music departments.

Students have the opportunity to perform in mainstage musicals, opera theatre, choirs, children's theatre musical productions, dance concerts, mainstage productions, studio theatre productions, and BlackBox experimental theatre productions. Several original musicals have been written and performed in the BlackBox series. Central Missouri Summer Repertory also provides performance

opportunities for students. The University Concert Choir has appeared on national television and toured extensively in the U.S. and abroad. The Collegiate Choir combines with the University Concert Choir annually to perform a major oratorio with the orchestra as well as presenting campus concerts.

### Facilities

Musical Theatre students work in one of the most beautiful and modern theatre buildings in the Midwest, the James L. Highlander Theatre. The 442 seat continental wedge-shaped auditorium has excellent sight lines and faces a large, fully rigged stage. The theatre is equipped with the latest sound equipment, body microphones, and a computerized lighting system. A motorized orchestra apron lift allows for flexible staging and houses a full orchestra for musicals. Well-equipped costume and scenic shops adjoin the stage area.

University Housing has worked with the department to create a Theatre Special Housing Interest Program (SHIP) living area in Nickerson Hall designed for students majoring in theatre and musical theatre. The SHIP provides close proximity to the department's BlackBox Theatre, also located in Nickerson Hall. This flexible theatre is used for performance classes, rehearsals and serves as a performance space for Studio Theatre, and BlackBox Experimental Theatre productions. This space can be configured for proscenium, thrust or arena staging, seating approximately 100 audience members.

The Dance Studio in Wood 108 is a state of the art facility with a sprung wooden floor, full-length mirrors, ballet bars, and complete sound system. The music choirs perform in either Hendricks Hall in the Administration Building or in Hart Recital Hall in the UTT Building.

### About the Faculty

At Central Missouri you will work side by side with a faculty of extraordinary

educators and professional theatre, dance and music artists. The faculty at UCM are dedicated to providing students with the opportunity to find their unique voice as artists and share their visions, curiosities, bravery, and talents with a collaborative team that is the heart and soul of any theatrical, dance, and music production. Our faculty are leaders whose experience and professional work has a strong voice in state, regional and the national arenas. They are active members of Actors Equity Association, Screen Actors Guild, USITT, Speech and Theatre Association of Missouri, Kennedy Center American College Theatre Festival and the Association for Theatre in Higher Education. Our faculty teach and supervise courses in private voice, piano, music theory, acting, stage voice, stage movement, directing, musical theatre history, choreography, and all levels of dance. Students are assigned to a music theatre faculty member who personally assists in the planning of their programs.

### Scholarships

The Department of Theatre and Dance offers several scholarships and awards to both incoming freshmen and transfer students as well as returning students. These scholarships include: Theatre Ambassador Awards, Highlander, Kuhn, See, New Theatre Guild, Muller, Devenny, Pearce, Ulrich, Schwartz, and Bergman Scholarships. In the department, students can both learn through student employment opportunities in the scenic and costume shops.

### To Learn More

For more information, contact the Department of Music, UCM, Warrensburg, MO 64093, or call 660-543-4530. The department's home page address is [ucmo.edu/music](http://ucmo.edu/music).

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**Musical Theatre Major, B.F.A. Degree (47-586)**

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<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
DANC 1140 Jazz Dance I	1	DANC 1130 Tap Dance I	1
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
MUS 1055, 3050, 3070, or 3077*	1	MUS 1055, 3050, 3070, or 3077*	1
MUS 1100 Fundamentals of Music	3	MUS 1111 Theory I	3
MUS 1610 Voice I	1	MUS 1121 Aural Training I	1
THEA 1400 Script Analysis	3	MUS 1610 Voice I	1
THEA 1500 Acting	3	THEA 1100 Oral Interpretation	3
<b>Semester Total</b>	<b>15</b>	THEA 1600 Stagecraft	3
AE 1400 Freshman Seminar**	1	<b>Semester Total</b>	<b>16</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
DANC 1110, 1120, 3110, or 3120***	1	DANC 3210 Musical Theatre Dance	3
DANC 3140 Jazz Dance II	1	MUS 1610 Voice I	1
MUS 1055, 3050, 3070, or 3077*	1	THEA 1520 Stage Voice	3
MUS 1610 Voice I	1	THEA 1610 Stage Makeup	3
THEA 1510 Stage Movement	3	General Education	6
THEA 2610 Design Fundamentals	3	<b>Semester Total</b>	<b>16</b>
General Education	6		
<b>Semester Total</b>	<b>16</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
DANC 1110, 1120, 3110, or 3120**	1	MUS 1502 Piano Class II	1
DANC 4310 Choreography I	3	MUS 1615 Opera Theatre	1
MUS 1501 Piano Class I	1	THE 4430 American Musical Theatre	3
THEA 3700 Directing	3	THEA 4500 Advanced Acting	3
General Education	9	General Education	6
<b>Semester Total</b>	<b>17</b>	<b>Semester Total</b>	<b>14</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
IGEN 3116, 3224, 3232, 4234, or 4244	3	DANC 3120 Tap Dance II	1
MUS 3610 Voice II	1.5	MUS 3610 Voice II	1.5
THEA 4400 Literature & History of the Theatre I	3	THEA 4420 Literature & History of the Theatre II	3
THEA 4510 Period Acting Styles	3	THEA 4910 Senior Showcase	1
General Education	3	General Education	6
<b>Semester Total</b>	<b>13.5</b>	<b>Semester Total</b>	<b>12.5</b>

**Musical Theatre Major, B.F.A. Degree - 124 hours**

- \*Select three hours from the following list: MUS 1055 Collegiate Choir, 3050 University Concert Choir, 3070 Chamber Singers, or 3077 Vocal Jazz Ensemble. All three hours may be from the same course or a combination of different courses.
- \*\*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective, however, this program does not require free choice electives.
- \*\*\*Select two different courses from the following list: DANC 1110 Modern Dance I, 1120 Ballet Dance I, 3110 Modern Dance II, and 3120 Ballet Dance II.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Health, Science, and Technology

Department of Nursing

# NURSING

## BACHELOR OF SCIENCE DEGREE

A bachelor's degree in nursing from UCM can be the beginning of the most flexible, challenging and rewarding career in health care. While earning their degrees, Central Missouri's nursing students receive experience in both rural and urban environments. Two semesters are offered on the main campus in Warrensburg with clinical practica at nearby agencies. Two semesters of courses are offered at the Central Summit Center with clinical practica in several Kansas City area health care facilities including Children's Mercy Hospital, St. Joseph Medical Center, St. Luke's Medical Center, and North Kansas City Hospital.

Upon completing UCM's four-year nursing program, nursing graduates are eligible to take the National Council Licensure Examination (NCLEX-RN) for Registered Nurses. After passing this exam, graduates are qualified to practice as registered nurses.

Professionals can upgrade from RN to a bachelor's degree through Central Missouri's "RN-BS" option within the nursing major. Registered nurses face increasingly complex demands that require a broad-based bachelor's degree preparation. The "RN -BS" option enhances a nurse's ability to think critically, to demonstrate leadership skills, and to understand the complexity of professional nursing. Upon earning the Bachelor of Science degree, a nurse is eligible to continue his or her education at the master's degree level, further enhancing career opportunities.

### Career Opportunities

UCM's nursing graduates choose from a wide range of options, from working with newborns to being a flight nurse on a helicopter to forensic nursing with a BS(N).

Undergraduate nursing majors from Central Missouri often continue their education in our graduate nursing program featuring two diverse specialty areas. Advancing one's nursing education at UCM can open up new career opportunities in administration, private practice, research, consultation, and many other careers.

### Job Outlook

Career opportunities in nursing are expected to grow. More than 1.2 million nurses will be needed nationwide by 2014. As our population becomes more diverse, there is a need for nurses of all ethnic and racial backgrounds. Earnings are above average when compared to other professions. Schedules are flexible with work available part time, full time or any time of day anywhere worldwide.

### Special Facilities

Once admitted to the nursing program, our junior nursing students attend classes located in the nursing department in Warrensburg and receive diverse clinical experiences in a rural environment. Senior nursing students attend classes located at UCM Summit Center in Lee's Summit and receive diverse clinical experiences in an urban environment. Upon graduation, our nursing students have developed the flexibility to perform well in any environment in which they choose to practice.

### Admission Requirements

Students entering UCM as freshmen or by transfer should indicate a pre-nursing major and have a program-scheduling appointment with an adviser in the Department of Nursing when enrolled in NUR 1700. This appointment is made by calling 660-543-4775.

Students are admitted into the program twice a year following Department of Nursing acceptance and satisfactory completion of prerequisite courses. Students apply for admission to the nursing program as sophomores, a year in advance. The application through NursingCAS is due July 1 for spring admission and by January 1 for fall admission. Requirements to be met are completing nursing prerequisites and General Education requirements; minimum grade point average of 2.75; minimum of a "C" in prerequisite courses.

### To Learn More

Individuals interested in UCM's Nursing Program are invited to visit the department's web pages at [ucmo.edu/nursing](http://ucmo.edu/nursing); call the Department of Nursing at 660-543-4775; or contact the Department of Nursing, UCM, University Health Center 106, Warrensburg, MO 64093.

You may also call Central Missouri's Central Summit Center Department of Nursing at 816-282-1100; or contact UCM's Central Summit Center Department of Nursing, 850 N.W. Chipman Road Lee's Summit, MO 64063.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Nursing Major, B.S. Degree (43-133)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>		<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>		<b>Hrs.</b>
CHEM 1104 Introduction to the Sciences: Chemistry*		4	BIOL 3401 Human Anatomy*		3
ENGL 1020 Composition I		3	ENGL 1030 Composition II		3
NUR 1700 Introduction to Professional Nursing**		1	PSY 1100 General Psychology*		3
SOC 1800 General Sociology*		3	General Education		6
General Education		3	<b>Semester Total</b>		<b>15</b>
<b>Semester Total</b>		<b>14</b>			

<b>Sophomore Year - Fall Semester</b>		<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>		<b>Hrs.</b>
BIOL 3402 Human Physiology*		5	BIOL 3610 Microbiology*		3
D&N 3340 Nutrition*		3	NUR 2700 Professional Nursing Seminar**		1
General Education		8-9	Nursing Elective***		2
<b>Semester Total</b>		<b>16-17</b>	General Education		9
			<b>Semester Total</b>		<b>15</b>

**-- ENTER NURSING PROGRAM --**

<b>Junior Year - Fall Semester</b>		<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>		<b>Hrs.</b>
NUR 3200 Pathophysiology#		4	NUR 3510 Concepts of Gerontic Nursing		2
NUR 3210 Pharmacological Therapeutics		3	NUR 3610 Concepts of Adult & Older Adult Nursing I		3
NUR 3304 Assessment Across the Lifespan		2	NUR 3611 Concepts of Adult & Older Adult Nrsng. I Prac.		4
NUR 3305 Assessment Across the Lifespan Lab		1	NUR 3612 Technical Nursing Applications II		2
NUR 3410 Concepts of Nursing in Wellness		3	NUR 4012 Evidence-based Practice		2
NUR 3411 Concepts of Nursing in Wellness Practicum		2	NUR 4013 Health Policy & Ethics		2
NUR 3412 Technical Nursing Applications I		1	<b>Semester Total</b>		<b>15</b>
<b>Semester Total</b>		<b>16</b>			

**-- TO KANSAS CITY LAST TWO SEMESTERS --**

<b>Senior Year - Fall Semester</b>		<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>		<b>Hrs.</b>
ICAP 4111 Socio-Economic Factors Impacting Health		3	NUR 4600 Con. of Nursing Leadership in Mgmt CH/MH		6
NUR 4410 Concepts of Maternal-Child Nursing		3	NUR 4601 Concepts of Nursing Leadership in Management & Community Health/Mental Health Practicum		6
NUR 4411 Concepts of Maternal-Child Nursing Practicum		2	NUR 4602 Synthesis of Nursing Concepts		1
NUR 4510 Concepts of Adult & Older Adult Nursing II		3	<b>Semester Total</b>		<b>13</b>
NUR 4511 Concepts of Adult & Older Adult Nrsng. II Practicum		3			
NUR 4512 Advanced Tech. & Pharmacological Nursing Apps.		2			
<b>Semester Total</b>		<b>16</b>			

**Nursing Major, B.S. Degree - 120 hours**

- \*Nursing Program Prerequisite Courses (must be taken prior to admission to the program). Preference for admission into the Nursing major will be given to students taking ALL prerequisites at UCM.
- \*\*Lower Level Required Nursing Courses (must be taken prior to admission to the program).
- \*\*\*Nursing electives may be taken anytime after sophomore standing is achieved. One Nursing elective course is required from the following: NUR 2000 e-Health and Cyber Wellness; NUR 4020 Grief and Loss; NUR 4030 Human Sexuality; NUR 4040 Nursing Informatics; NUR 4405 Aging of Self and Others.
- #NUR 3200 may be taken prior to entry into the program or in the Nursing program.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Education

Department of Career and Technology Education

# OCCUPATIONAL EDUCATION

## BACHELOR OF SCIENCE DEGREE

The University of Central Missouri's Bachelor of Science in Occupational Education degree program is ideal for mid-career professionals who have worked in an occupation and are interested in pursuing a teaching career. The degree provides students with a blend of academic coursework, career education courses, and additional learning in students' teaching specialty area.

### Career Preparation

The program is committed to educating participants in comprehensive personal development, which responds to specific occupational updating, professional growth and enhancement, and state-of-the-art information sharing for and with career educators. It advocates a teaching approach, which brings about desired changes in the knowledge, skills, attitudes, and appreciation level of those in training. The program offers flexibility in course planning depending on the objectives of the student.

Students who complete a degree in occupational education may apply for Career Education teacher certification with the Missouri Department of Elementary and Secondary Education (DESE). By doing so, they can teach in comprehensive high schools with career education programs in their specialty area; public post-secondary programs such as career centers, adult evening schools, Federal Job Training Partnership Act (JTPA) programs, and others (completion of a vocational education credential program may be required). Additional opportunities are in private postsecondary settings such as private

proprietary schools and private two-year colleges; community colleges with career education programs; industry and business training programs as trainers, managers, and program designers for adult learners.

Occupational education teachers prepare their students to be successful in their chosen career paths. They teach extensive employability and leadership skills, life skills and enhance their general education skills and knowledge. The teaching specialty areas are too numerous to list, but will generally fall into the skilled technical sciences or health sciences career clusters.

### Academic Program

The occupational education degree can be achieved as a traditional Bachelor of Science four-year degree or as a "2+2" program designed to build upon an Associate's of Applied Sciences degree in occupational education from a participating accredited community college. This degree may also complete Missouri Career Education Teacher Certification requirements for skilled technical sciences and health sciences instructors.

Students obtain job relevance and valid, reliable, career experience through participatory planning and affiliation with industry, career education school practitioners, professional associations, and representatives of UCM.

### Faculty

The program coordinator and lead faculty person for the occupational education major is Lori Cochran. She teaches major courses and supervises

teaching and administrative internships. Other major courses are taught by additional University of Central Missouri full-time and part-time faculty housed in the College of Education. Practitioner adjuncts across the state also teach.

### Facilities

Most courses are delivered in non-traditional format methods. Courses are delivered online, evenings on and off campus, and in regional locations across the state to meet student needs for timely, convenient delivery.

### Professional Organizations

Although there is not a student organization specifically for occupational education students/teachers, many of the participants of this degree program are members of, and carry certification through, professional organizations within their teaching/technical specialty area. For example, most of the automotive technology instructors are members of the Society of Automotive Engineers and welding technology teachers belong to the American Welding Society.

### To Learn More

To learn more, call the Department of Career and Technology Education at 660-543-4452 or visit [ucmo.edu/cte](http://ucmo.edu/cte).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Occupational Education Major, B.S. Degree (43-249)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CTE 2000 Technology & Society	3	ENGL 1030 Composition II	3
ENGL 1020 Composition I	3	Teaching Specialty Area	6
Teaching Specialty Area	3	General Education	6
General Education	6	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
CTE 3060 Technical Writing	3	SOT 4570 Computer Graphics	3
EDFL 2240 Educational Psychology	3	Teaching Specialty Area	6
Teaching Specialty Area	3	General Education	6
General Education	7	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>16</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
CTE 4145 Curriculum Construction in Career & Technical Edu.	3	CTE 4110 Foundations of Career & Technology Education or	
PSY 4200 Psychology of Exceptional Children	2	CTE 4140 New Teacher Institute	3
Teaching Specialty Area	6	CTE 4180 Adult Programs or	
General Education	6	EDFL 3500 Secondary Teaching & Behavioral Management	3
<b>Semester Total</b>	<b>17</b>	Teaching Specialty Area	4-5
		General Education	3
		<b>Semester Total</b>	<b>13-14</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
CTE 4160 Methods of Teaching Career & Technical Education	3	CTE 4022 Occupational Admin./Teaching Internship	3
IGEN 3116 Creative Problem Solving	3	CTE 4150 Vocational Guidance or	
Teaching Specialty Area	6	BTE 4241 Coordination of Cooperative Education Programs	2-3
General Education	3	CTE 4165 Performance Assessment in Career & Technical Edu.	3
<b>Semester Total</b>	<b>15</b>	Teaching Specialty Area	6
		<b>Semester Total</b>	<b>14-15</b>

**Occupational Education Major, B.S. Degree - 120 hours**

- Students completing this program online should seek advice from the department and academic advisors for available online general education classes.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

School of Environmental, Physical, and Applied Sciences

# OCCUPATIONAL SAFETY AND HEALTH

## BACHELOR OF SCIENCE DEGREE

University of Central Missouri's ASAC-ABET accredited Bachelor of Science degree program in occupational safety and health teaches students the legal, professional and ethical responsibilities of safety and health managers in the workplace. In addition, they are grounded in the safety sciences issues faced in local, national and global contexts, and in identifying technical solutions to occupational safety and health problems and scientific solutions to mitigate hazardous exposures.

Billions of dollars are lost each year as a result of avoidable accidents and unhealthy exposures on the job, at home and on the highways. Through the application of science and technology, potential safety, security and health losses are reduced by investigating people in their environments and by applying scientific principles of control. Safety sciences professionals are in demand, and the occupational safety and health program prepares individuals for rewarding careers in this field.

### Career Opportunities

Career placement rates for safety science graduates are very high. Graduating students may receive multiple job offers prior to graduation, and entry-level compensation ranks high in relation to numerous other professional fields. Graduates may seek employment as safety analysts, safety managers, corporate health officers, loss control managers, systems safety analysts

or OSHA/EPA compliance officers, as well as arson investigators, security managers, transportation safety managers, public services administrators, or industrial hygienists and others.

### Scholarships

In addition to achievement awards, the safety programs have several scholarships available to students including MEM Outstanding Student Scholarships, the Tieszen, Goetz, Phillips Petroleum Company, Key Safety, Brueske Industrial Safety, Freeman Transportation, Goldberg St. Louis Risk and Insurance Management Society, St. Louis ASSE Chapter scholarships, and the Construction Safety Group of Kansas City Scholarship program.

### About the Faculty

The safety programs have a highly qualified faculty, known for stimulating student achievement in departmental programs and projects. UCM's 17 to 1 student-faculty ratio allows for personalized attention and mentoring. In addition to diverse backgrounds and experience, they are also active participants in research and scholarly activity. Faculty members are active in professional organizations and have presented at national and international conferences.

Other sources of program strength include working relationships with the Occupational Safety and Health Administration, Environmental

Protection Agency, Department of Transportation, Mine Safety and Health Administration, American Society of Safety Engineers, and American Industrial Hygiene Association.

### Student Involvement

Safety students are encouraged to participate in professional organizations. Student chapters of the American Society of Safety Engineers, the American Industrial Hygiene Association, Rho Sigma Kappa Honor Society, Collegiate Firefighters Association, and the Air and Waste Management Association are available in the department. The safety programs also offer an internship program to qualified students. Internships allow students to gain practical experience in the operation of various components of the safety science field. Internships are available with business, industry and government.

### To Learn More

For more information, contact the OSH program coordinator, Humphreys 327A, UCM, Warrensburg, MO 64093, or call 660-543-4626. The department's web address is [ucmo.edu/ss](http://ucmo.edu/ss).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Occupational Safety and Health Major, B.S. Degree (43-276)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	CHEM 1104 Introduction to the Sciences: Chemistry	4
MATH 1111 College Algebra*	3	ENGL 1030 Composition II	3
SAFE 1000 Exploring Safety Sciences	1	PSY 1100 General Psychology	3
SAFE 3000 Accident Causation & Prevention	3	General Education	6
General Education	3	<b>Semester Total</b>	<b>16</b>
<b>Semester Total</b>	<b>13</b>		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
BIOL 2010 Human Biology	3	CHEM 1604 Elementary Organic & Biochemistry*	4
PHYS 1104 Introduction to the Sciences: Physics*	4	SAFE 3430 Industrial Hazard Control	3
Departmentally Approved Elective**	3	SAFE 4000 Ergonomics in Safety & Health	3
General Education	6	General Education	5-6
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>15-16</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
SAFE 3120 Introduction to Industrial Hygiene	3	SAFE 4020 Legal Aspects of Safety & Health	3
SAFE 4425 Safety & Health Legislation & Standards	3	SAFE 4140 Safety & Health Lab	3
General Education	6	SAFE 4430 Workers Compensation Legislation	3
Departmentally Approved Elective**	3	SAFE 4560 Systems Safety	3
<b>Semester Total</b>	<b>15</b>	Free Choice Elective	3
		<b>Semester Total</b>	<b>15</b>
<b>Summer – Between Junior &amp; Senior Year</b>	<b>Hrs.</b>		
SAFE 4990 Internship in Safety Sciences***	3		
<b>Semester Total</b>	<b>3</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
SAFE 4010 Accident Investigation	3	ICAP 4115 Safety & Health Management	3
SAFE 4035 Safety Program Management	3	SAFE 4160 Industrial Ventilation for Envir. Safety & Health	3
SAFE 4850 Industrial Fire Protection	3	SAFE 4435 Environmental Compliance	3
SAFE 4940 Statistical Analysis for Risk Management	3	Free Choice Elective	3
Free Choice Elective	3	<b>Semester Total</b>	<b>12</b>
<b>Semester Total</b>	<b>15</b>		

**Occupational Safety and Health Major, B.S. Degree - 120 hours**

- \*A grade of C or higher is required in these courses for graduation in this major.
- \*\*This major requires 6 hours of Departmentally Approved Electives. You must have these courses pre-approved by the major program coordinator before enrolling in them. Course substitutions will be required before graduation to have these courses appropriately reflected on your degree audit.
- \*\*\*SAFE 4990 Internship in Safety Sciences (3 hrs) is taken the summer after the junior year.
- Students seeking to graduate from this program must have a minimum 2.20 cumulative grade-point average and have completed CHEM 1604, PHYS 1104, and MATH 1111 with a grade of C or higher.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Arts, Humanities, and Social Sciences

Department of English and Philosophy

# PHILOSOPHY

## BACHELOR OF ARTS DEGREE

The Philosophy major in the Department of English and Philosophy offers a Bachelor of Arts degree program. Philosophy majors are taught how to think, not what to think. Consequently they will be better able to meet societal needs for they will have the following knowledge and skills: conduct independent research, think, write, and communicate with clarity and precision, identify assumptions and presuppositions in their own and other's reasoning, problem solving skills in many different areas, make conceptual distinctions that others may not see, think logically, thus objectively, about social problems, which is important in an age of increasing technology in all areas. Furthermore, philosophy graduates are increasingly finding employment in the fields of finance, property development, health, social work and a wide array of government and private sector companies.

### About the Faculty

The Philosophy Program at UCM has three Ph.D. qualified faculty members with varied areas of specialization, one of whom also has a decade of clinical nursing experience. This latter qualification is important to meet the demand for courses in applied ethics, such as biomedical ethics and business ethics. All of our faculty pursue their intellectual interests by research, publication, and presentations at regional, national, and international conferences. In addition, faculty encourage students to present their research at student philosophy

conferences around the country. Our faculty are fully committed to students and this personal attention is embraced by UCM's 18 to 1 student-faculty ration. Students who major in philosophy will be assigned a faculty member to assist them in planning their degree program.

### Student Involvement

Philosophy students, owing to the nature of philosophical studies and its intersection with other disciplines, have numerous opportunities to actively participate in student organizations such as the Philosophy Club. The Philosophy Club is organized by students under the sponsorship of a faculty member. While the activities of the club are determined by the interests of the students involved, they generally include such activities as discussion groups, reading groups, informal presentations of student and faculty research. In addition, because of varied nature of philosophical studies, students who have political interests may join the College Democrats of College Republicans organizations; students interested in issues in the philosophy of mind might consider joining the Psychology Club; students interested in philosophy of religion might join any of the several religious clubs on campus.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide assistance with writing cover letters and resumes and offer a

career library, mock interviews, and career counseling. The office also serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students](http://ucmo.edu/career/students).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information contact the Philosophy Program, Department of English and Philosophy, Martin Building, UCM, Warrensburg, MO, 64093; phone 660-543-4425, or visit the Philosophy Program's web site at [ucmo.edu/engphil/philosophy.cfm](http://ucmo.edu/engphil/philosophy.cfm).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Philosophy Major, B.A. Degree (42-325)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
PHIL 1000 Introduction to Philosophy	3	PHIL 2300 Ethics	3
Modern Language Requirement*	3	Modern Language Requirement*	3
General Education	6	General Education	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
AE 1400 Freshman Seminar**	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs</b>
PHIL 1400 Deductive Logic or PHIL 1410 Critical Thinking	3	ENGL 2220 World Masterpieces*	3
PHIL 3130 History of Philosophy II: Enlightenment Thought	3	PHIL 3120 History of Philosophy I: Ancient Thought	3
General Education	3	General Education	6
Free Choice Electives	6	Free Choice Electives	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs</b>
PHIL 3600 Special Topics in Philosophy	3	PHIL 3660 Studies in Literature & Philosophy	3
PHIL Major Elective***	3	PHIL Major Elective***	3
General Education	3	General Education	3
Free Choice Electives	6	Free Choice Electives	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs</b>
PHIL 4710 Philosophy of Religion	3	PHIL 4250 Special Projects in Philosophy	3
General Education (IGEN/ICAP)	3	Free Choice Electives	12
Free Choice Electives	9	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		

**Philosophy Major, B.A. Degree - 120 hours**

- \*Refer to the Bachelor's Degree Requirements section of the catalog for the BA Modern Language requirements. This plan is based on 6 hours of modern language and 3 hours of ENGL 2220.
- \*\*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*\*Six hours of PHIL Major Electives are required. See the 2013 Undergraduate Catalog for list of appropriate choices.
- This major does not build in the minimum number (30) of upper-level credit hours required for graduation. Be sure to include upper-level choices (3000/4000) in your major electives, general education, and/or free choice electives.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

Department of Nutrition and Kinesiology

# PHYSICAL EDUCATION

BACHELOR OF SCIENCE DEGREE - OPTION 1 ELEMENTARY-SECONDARY CERTIFICATION K-12

Students who major in physical education may select a specialization in elementary-secondary physical education. The program is fully accredited through the Missouri Department of Elementary and Secondary Education (DESE), the National Association for Sport and Physical Education (NASPE) and the National Council for Accreditation of Teacher Education (NCATE).

The physical education teacher education program has strong practical experiences associated with coursework that provides students with real life experiences before they graduate. In addition to meeting rigorous academic standards, physical education teacher education majors must complete and pass a state certification examination and submit a teacher work sample to meet certification requirements.

During the final semester, candidates complete their student teaching experience in high-quality physical education programs typically within 60-70 miles of Warrensburg. All students are specially trained in the use of technology (heart rate monitors, iPads, pedometers, grade book systems, web pages) specific to the discipline of physical education.

Physical education graduates from University of Central Missouri have more than a 90 percent placement rate in public and private schools.

### Scholarships

Scholarships are available to outstanding students majoring in physical education, including the Jessie B. Jutten Physical Education

Scholarship, the M. Ruth Sevy Memorial Scholarship, the Clarence and Christine Whiteman Scholarship, and the Dr. Robert Tompkins Memorial Scholarship, and the William and Dorothy Brewster Scholarship.

### About the Faculty

In addition to a wide a range of academic and professional experience, 90 percent of the department's faculty members have earned doctorates in their fields. Active research, workshops and seminars keep faculty members current in their disciplines.

### Student Organizations

The Physical Education Club is designed to bring together students who have an interest in physical education and related fields, increasing their understanding of the various specialty areas in the profession.

### About the Department

The Department of Nutrition and Kinesiology's mission is to develop successful professionals in Nutrition and Kinesiology, instilling an appreciation for helping all people lead healthy and physically active lifestyles. The department emphasizes technology in all areas of its curriculum, and students become well versed in the use of multimedia and electronic University Library & Research Skills. They also develop Internet expertise through a wide variety of classroom and laboratory assignments.

### Special Facilities

Physical education students benefit from the human performance laboratory located in Morrow 151. The lab is utilized for specific classes in several of the department's curricula. Students have the opportunity to assist with many of the research projects conducted in the facility. The lab is equipped with a ParvoMedics diagnostic metabolic system, Peak Motus video digitizing system, Kistler mobile force platform, a Life Measurement BOD POD, 12-lead ECG monitoring system, research grade treadmill, mechanical and electromechanically braked cycle ergometers, spirometer for pulmonary function assessment, pulse oximeter, bone densitometer, lactate analyzer, and various flexibility and muscle strength assessment devices.

### To Learn More

For more information about majoring in physical education at Central Missouri, contact the Department of Nutrition and Kinesiology, Morrow 125, UCM, Warrensburg, MO 64093 or call 660-543-4256. You can visit the department's web page at [ucmo.edu/nutrition](http://ucmo.edu/nutrition).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Physical Education Major - Option 1 Elementary-Secondary Certification K-12, B.S. Degree (43-01817)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
<b>ENGL 1020 Composition I</b>	3	<b>ENGL 1030 Composition II</b>	3
<b>HIST 1350 or 1351 History of the United States</b>	3	PE 1450 Growth & Development in Elementary Physical Educ.	3
PE 1100 Physical Education Orientation, History, & Philosophy	2	PE 1800 Functional Anatomy	3
PE 1206 Lifetime Fitness	3	<b>General Education Science w/lab</b>	4
<b>General Education MATH</b>	3	<b>General Education</b>	3
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>16</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
EDFL 2100 Foundations of Education	2	EDSP 2100 Education of the Exceptional Child	2
FLDX 2150 Introductory Field Experience	1	PE 2450 Motor Learning and Control	3
EDFL 2240 Educational Psychology	3	PE 2850 Foundations of Exercise Physiology	3
PE 2100 Foundations of Teaching Physical Education	3	POLS 1510 American Government	3
General Education	8	General Education	6
<b>Semester Total</b>	<b>17</b>	<b>Semester Total</b>	<b>17</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
AT 3610 Care & Prevention of Injuries	2	EDFL 4210 The Teaching of Reading in the Secondary School	2
PE 2800 Biomechanics	3	PE 3320 Analysis & Teaching of Elementary Skills	3
PE 3310 Analysis & Teaching of Physical Training	3	PE 3330 Analysis & Teaching of Secondary Skills	3
PE 4340 Adapted Physical Education	3	PE 3340 Analysis & Teaching of Lifetime Activities	3
PSY 4230 Psychology of Adolescence	3	PE 4740 Legal Liability in F/W, PE, Rec. & Sport Settings	2
General Education	3	PE 4830 Psychological Aspects of Physical Education	2
<b>Semester Total</b>	<b>17</b>	PE 4840 Social Aspects of Physical Activity	2
		<b>Semester Total</b>	<b>17</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester**</b>	<b>Hrs.</b>
PE 3500 Teaching and Management in PreK-12 Physical Educ.*	3	FLDX 4495 Student Teaching Elementary I	5
PE 3550 Practicum in PreK-12 Physical Education*	1	ICAP 4468 Student Teaching Secondary II	4
PE 4450 Tech. of Teaching PE Activities in the Elem. Schools*	3	PE 4880 Methods of Teaching Physical Education	2
PE 4460 Tech. of Teaching PE Act. in Middle Schools & HS*	3	PE 4885 Secondary Field Experience	1
PE 4760 Curriculum & Assessment in Physical Education	4	<b>Semester Total</b>	<b>12</b>
<b>Semester Total</b>	<b>14</b>		

**Physical Education Major - Option 1 Elementary-Secondary Certification K-12, B.S. Degree  
124 hours**

- Option 1 students must maintain a 3.00 GPA in all PE prefix courses, a 2.75 cumulative GPA, and a 3.00 in all Professional Education classes with no grade lower than a C in these classes.
- \*These courses are only offered during fall semester.
- \*\*The courses listed for this semester constitute the professional education (student teaching) block. The student should not take any other courses during this semester.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before enrollment in professional education classes and student teaching. The application for student teaching is due approximately one year in advance.

## College of Health, Science, and Technology

Department of Nutrition and Kinesiology

# PHYSICAL EDUCATION

## BACHELOR OF SCIENCE DEGREE - OPTION 2 FITNESS/WELLNESS I (CORPORATE FITNESS)

During the past 20 years, there has been a continual growth in the fitness and health promotion industry. As a result of this growth, alternate careers within physical education have increased in popularity and viability. University of Central Missouri is helping to meet needs for these new professionals by offering a program of study in corporate fitness. Coursework has been designated to relate directly to the needs of fitness and wellness professionals.

### Opportunities for Graduates

Agencies are now publishing data which indicate they have healthier employees and verify that their fitness and health promotion programs have provided cost saving in medical expenses and employee absenteeism. It is anticipated that corporations, hospitals and communities will expand fitness and wellness programs in the future. As a result, there will be an increase in demand for better educated and qualified professionals in fitness and wellness, and programs preparing students for careers in corporate fitness are vital to the state, region and nation. A graduate in corporate fitness is well prepared to function as an exercise leader, exercise specialist, wellness instructor, fitness specialist, and or personal trainer in a hospital, private, corporate or non-profit agency.

### About the Faculty

In addition to a wide range of academic and professional experience, 90 percent of the department's faculty members have earned doctorates in their fields. Active research, workshops and seminars keep faculty members current in their disciplines.

### Student Organizations

The Health/Fitness Association is designed to bring together students who have an interest in exercise science and related fields, increasing their understanding of the various specialty areas in the profession.

### About the Department

The Department of Nutrition and Kinesiology's mission is to develop successful professionals in Nutrition and Kinesiology, instilling an appreciation for helping all people lead healthy and physically active lifestyles. The department emphasizes technology in all areas of its curriculum, and students become well versed in the use of multimedia and electronic University Library & Research Skills. Students learn to use specialized software to conduct nutritional analysis, front office operations and other essential functions. They also develop Internet expertise through a wide variety of classroom and laboratory assignments.

### Facilities

Corporate fitness students will benefit from the human performance laboratory located in Morrow 151. The lab is utilized for specific classes in several of the department's curricula. Students have the opportunity to assist with many of the research projects conducted in the facility. The lab is equipped with a ParvoMedics diagnostic metabolic system, Peak Motus video digitizing system, Kistler mobile force platform, 12-lead ECG monitoring system, a Life Measurement BOD POD, research grade treadmill,

mechanical and electromechanically braked cycle ergometers, spirometer for pulmonary function assessment, pulse oximeter, bone densitometer, lactate analyzer, and various body composition, flexibility and muscle strength assessment devices.

### Internships

Internships are completed as part of the program requirements and are typically performed during the student's last or next-to-last academic semester. Recently, UCM students have interned in hospitals, corporate fitness facilities, fitness centers, government agencies as well as with college and professional sports teams.

### Scholarships

Several departmental scholarships are awarded to students in the program who have shown strong grade point average, leadership, and in specific scholarship applications, can demonstrate financial need. Awards include the Clarence and Christine Whiteman Scholarship, Dr. Robert Tompkins Memorial Scholarship and the William and Dorothy Brewster Scholarship.

### To Learn More

For more information about this physical education major, contact the Department of Nutrition and Kinesiology, Morrow 125, UCM, Warrensburg, MO 64093 or call 660-543-4256. You can visit the department's web page at [ucmo.edu/nutrition](http://ucmo.edu/nutrition).

For admission information, call 877-SAY-UCMO (877-729-8266) or visit [ucmo.edu](http://ucmo.edu).

**Physical Education Major - Option 2 Fitness/Wellness I (Corporate Fitness), B.S. Degree (43-02817)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
PE 1101 Introduction to Exercise Science*	3	PE 1800 Functional Anatomy*	3
PE 1206 Lifetime Fitness	3	PSY 1100 General Psychology	3
General Education	6	General Education	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
AE 1400 Freshman Seminar**	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
HED 1350 Responding to Emergencies*	3	ACCT 2101 Principles of Financial Accounting*	3
PE 2850 Foundations Exercise Physiology*	3	AT 3610 Care & Prevention of Injuries*	2
General Education	9	HED 4300 Nutrition & Human Performance*	2
<b>Semester Total</b>	<b>15</b>	PE 2900 Essentials of Personal Training*	3
		General Education	6
		<b>Semester Total</b>	<b>16</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
BLAW 2720 Legal Environment of Business*	3	MKT 3420 Principles Advertising*	3
MKT 3405 Marketing Policy*	3	PE 4341 Physical Activity & Special Populations*	3
PE 2800 Biomechanics*	3	PE 4740 Legal Liability in F/W, PE, Rec., & Sport Settings*	2
PE 4340 Adapted Physical Education*	3	General Education	6
PE 4850 Assessment & Evaluation of Fitness/Wellness*	3	<b>Semester Total</b>	<b>14</b>
<b>Semester Total</b>	<b>15</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
MKT 3430 Professional Sales*	3	PE 4765 Internship*#	3
PE 4860 Fitness Programming & Implementation*	3	PE 4870 Clinical Exercise Physiology*	2-4
General Education (IGEN/ICAP)	3	Free Choice Electives##	8-10
Free Choice Electives	6	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		

**Physical Education Major - Option 2 Fitness/Wellness I (Corporate Fitness), B.S. Degree - 120 hours**

- \*A grade of C or better is required in these courses.
- \*\*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- #The internship can also be taken the semester after all other coursework is completed.
- ##The number of free choice electives required will vary between 14 and 16 hours and will depend on the choices made for the general education technology requirement and the hours of internship selected.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Health, Science, and Technology

Department of Nutrition and Kinesiology

# PHYSICAL EDUCATION

## BACHELOR OF SCIENCE DEGREE - OPTION 3 FITNESS/WELLNESS II (EXERCISE SCIENCE)

During the past 20 years, there has been a continual growth in the fitness and health promotion industry.

As a result of this growth, alternate careers within physical education have increased in popularity and viability. University of Central Missouri is helping to meet needs for these new professionals by offering a program of study in exercise science. Coursework has been designated to relate directly to the needs of fitness and wellness professionals.

### Opportunities for Graduates

Agencies are now publishing data which indicate they have healthier employees and verify that their fitness and health promotion programs have provided cost saving in medical expenses and employee absenteeism. It is anticipated that corporations, hospitals and communities will expand fitness and wellness programs in the future. As a result, there will be an increase in demand for better educated and qualified professionals in fitness and wellness, and programs preparing students for careers in exercise science are vital to the state, region and nation. A graduate in exercise science is well prepared to function as an exercise leader, exercise specialist, wellness instructor, fitness specialist, and or personal trainer in a hospital, private, corporate or non-profit agency. Graduates may also consider pursuing graduate work or professional schools such as occupational therapy, physical therapy, or physician's assistant.

### About the Faculty

In addition to a wide a range of academic and professional experience, 90 percent of the department's faculty members have earned doctorates in

their fields. Active research, workshops and seminars keep faculty members current in their disciplines.

### Student Organizations

The Health/Fitness Association is designed to bring together students who have an interest in exercise science and related fields, increasing their understanding of the various specialty areas in the profession.

### About the Department

The Department of Nutrition and Kinesiology's mission is to develop successful professionals in Nutrition and Kinesiology, instilling an appreciation for helping all people lead healthy and physically active lifestyles. The department emphasizes technology in all areas of its curriculum, and students become well versed in the use of multimedia and electronic University Library & Research Skills. Students learn to use specialized software to conduct nutritional analysis, front office operations and other essential functions. They also develop Internet expertise through a wide variety of classroom and laboratory assignments.

### Facilities

Exercise science students will benefit from the human performance laboratory located in Morrow 151. The lab is utilized for specific classes in several of the department's curricula. Students have the opportunity to assist with many of the research projects conducted in the facility. The lab is equipped with a ParvoMedics diagnostic metabolic system, Peak Motus video digitizing system, Kistler mobile force platform, 12-lead ECG monitoring system, a Life Measurement BOD POD, research grade treadmill,

mechanical and electromechanically braked cycle ergometers, spirometer for pulmonary function assessment, pulse oximeter, bone densitometer, lactate analyzer, and various body composition, flexibility and muscle strength assessment devices.

### Internships

Internships are completed as part of the program requirements and are typically performed during the student's last or next-to-last academic semester. Recently, UCM students have interned in hospitals, corporate fitness facilities, fitness centers, doctors' offices, government agencies as well as with college and professional sports teams.

### Scholarships

Several departmental scholarships are awarded to students in the program who have shown strong grade point average, leadership, and in specific scholarship applications, can demonstrate financial need. Awards include the Clarence and Christine Whiteman Scholarship, Dr. Robert Tompkins Memorial Scholarship, and the William and Dorothy Brewster Scholarship.

### To Learn More

For more information about this physical education major, contact the Department of Nutrition and Kinesiology, Morrow 125, UCM, Warrensburg, MO 64093 or call 660-543-4256. You can visit the department's web page at [ucmo.edu/nutrition](http://ucmo.edu/nutrition).

For admission information, call 877-SAY-UCMO (877-729-8266) or visit [ucmo.edu](http://ucmo.edu).

**Physical Education Major - Option 3 Fitness/Wellness II (Exercise Science), B.S. Degree (43-03817)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	CHEM 1104 Introduction to the Science: Chemistry (w/lab)	4
PE 1101 Introduction to Exercise Science*	3	ENGL 1030 Composition II	3
PE 1206 Lifetime Fitness	3	PE 1800 Functional Anatomy*	3
PSY 1100 General Psychology	3	General Education	5-6
General Education	3	<b>Semester Total</b>	<b>15-16</b>
<b>Semester Total</b>	<b>15</b>		
AE 1400 Freshman Seminar**	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
BIOL 3401 Human Anatomy*	3	AT 3610 Care & Prevention of Injuries*	2
HED 1350 Responding to Emergencies*	3	BIOL 3402 Human Physiology*	5
PE 2900 Essentials of Personal Training*	3	PE 2850 Foundations Exercise Physiology*	3
General Education	6	General Education	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>16</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
D&N 3340 Nutrition*	3	CHEM 1604 Elementary Organic & Biochemistry* (4 hrs) or	
PE 2800 Biomechanics*	3	PHYS 1104 Introduction to the Sciences: Physics* (4 hrs) or	
PE 4340 Adapted Physical Education*	3	EDCI 1310 Physics for Teachers* (3 hrs)	3-4
PE 4850 Assessment & Evaluation Fitness/Wellness*	3	PE 4341 Physical Activity & Special Populations*	3
General Education	3	PE 4740 Legal Liability in F/W, PE, Rec., & Sport Settings*	2
<b>Semester Total</b>	<b>15</b>	PSY 4520 Statistics for the Behavioral Sciences*	3
		General Education	3
		<b>Semester Total</b>	<b>14-15</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
HED 4300 Nutrition & Human Performance*	2	PE 4765 Internship*#	2-4
PE 4860 Fitness Program & Implementation*	3	PE 4870 Clinical Exercise Physiology*	3
General Education (IGEN/ICAP)	3	Free Choice Electives###	7-10
Free Choice Electives	7	<b>Semester Total</b>	<b>13-15</b>
<b>Semester Total</b>	<b>15</b>		

**Physical Education Major - Option 3 Fitness/Wellness II (Exercise Science), B.S. Degree - 120 hours**

- \*A grade of C or better is required in these courses.
- \*\*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- #The internship can also be taken the semester after all other coursework is completed.
- ##The number of free choice electives required will vary between 14 and 18 hours and will depend on the choices made for the general education technology requirement, the physical science course chosen in the major, and the hours of internship selected.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

School of Environmental, Physical, and Applied Sciences

# PHYSICS

## BACHELOR OF SCIENCE IN EDUCATION DEGREE

Science students who would like to become teachers may earn a Bachelor of Science in Education degree in physics, which provides certification to teach all levels of physics in grades 9-12.

The physics degree programs at UCM provide a balanced curriculum of classroom instruction and practical laboratory experience. All teacher education programs are accredited by the National Council for Accreditation of Teacher Education and the Missouri Department of Elementary and Secondary Education.

### About the Faculty

Active research, workshop and seminar participation keeps physics and chemistry faculty members current with the ever-advancing field of science. In addition to a wide range of academic and professional experience, all faculty members in Physics have earned doctorates in their fields of expertise.

The program's caring and experienced faculty members support individualized attention for their students, and the university's low student to faculty ratio allows for such personalized activity. Classroom learning is reinforced through practical laboratory experiences, and the use of instrumentation is emphasized.

### Facilities

The Physics offices are located in the W. C. Morris Science Building. The facilities include areas for general instructional use, audio-visual facilities, a library study area and modern laboratories in various areas of specialization. The program also has modern, well-equipped computer laboratories in physics, as well as electronic classrooms.

### Student Involvement

Students are encouraged to supplement their academic programs through participation in campus organizations of special professional, service and academic interest. The Society of Physics Students provides opportunities for members to have personal and informal association with the physics faculty outside the classroom. The society meet regularly, sponsor lectures on contemporary science topics, and provide avenues of participation for campus activities.

Students who merit academic recognition may be invited to join one or more of the honorary societies in science, such as Sigma Pi Sigma.

Students are considered for employment as laboratory or program assistants after completion of a minimum amount of training and study. This opportunity provides valuable teaching, research and technical experience.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They

also provide assistance with writing cover letters and resumes and offer a career library, mock interviews, and career counseling. The office also serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students/](http://ucmo.edu/career/students/).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information call 660-543-4626, or visit the website at [ucmo.edu/chemphys](http://ucmo.edu/chemphys).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Physics Major, B.S. in Ed. Degree (41-486)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
<b>CHEM 1131 General Chemistry I*</b>	5	CHEM 1132 General Chemistry II	5
<b>ENGL 1020 Composition I</b>	3	CS 1100 Computer Programming I	3
<b>MATH 1151 Calculus &amp; Analytical Geometry I*</b>	5	<b>ENGL 1030 Composition II</b>	3
<b>Semester Total</b>	<b>13</b>	MATH 1152 Calculus & Analytical Geometry II	5
AE 1400 Freshman Seminar**	1	<b>Semester Total</b>	<b>16</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
BIOL 1005 Introduction to Environmental Science	3	COMM 1000 Public Speaking or THEA 1100 Oral Interpretation	3
CTE 2000 Technology & Society	3	<b>HIST 1350 OR 1351 History of the United States</b>	3
EDFL 2100 Foundations of Education	2	PHYS 1102 College Physics II or PHYS 2122 Univer. Physics II	4-5
FLDX 2150 Introductory Field Experience	1	PHYS 3020 Special Topics in Physics (Astronomy)	3
EDFL 2240 Educational Psychology	3	POLS 1510 American Government	3
PHYS 1101 College Physics I or PHYS 2121 University Physics I	4-5	<b>Semester Total</b>	<b>16-17</b>
<b>Semester Total</b>	<b>16-17</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs</b>
BIOL 1110 Principles of Biology or BIOL 1111 Plant Biology	3-4	EASC 1004 Introduction to the Sciences: Geology or	
PHYS 4411 Thermodynamics or CHEM 4531		EASC 3114 Meteorology	3-4
Physical Chemistry: Thermodynamics & Kinetics	3-4	EDFL 4210 The Teaching of Reading in the Secondary School	2
EDFL 4300 Educational Measurement & Evaluation	2	PHYS 3080 Advanced Physics Lab and PHYS 3511	
EDSP 2100 Education of the Exceptional Child	2	Modern Physics I or CHEM 4532 Physical Chemistry:	
General Education	6	Quantum Mechanics & Spectroscopy	4
<b>Semester Total</b>	<b>16-18</b>	PSY 4230 Psychology of Adolescence	3
		General Education	3
		<b>Semester Total</b>	<b>15-16</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs</b>	<b>Senior Year - Spring Semester***</b>	<b>Hrs</b>
EDFL 3500 Secondary Teaching & Behavioral Management	3	FLDX 4595 Student Teaching Secondary I	5
FLDX 3550 Practicum in Secondary Instruction	1	ICAP 4468 Student Teaching Secondary II	4
PHYS 3020 Special Topics in Physics or		STCH 4080 Teaching Secondary Science	3
PHYS 4911 Special Problems in Physics	1-3	<b>Semester Total</b>	<b>12</b>
STCH 4050 Science Teaching Methods	3		
General Education	6		
Free Choice Elective**	0-1		
<b>Semester Total</b>	<b>14-17</b>		

**Physics Major, B.S. in Ed. Degree - 120 hours**

- \*Enrollment in CHEM 1131 and MATH 1151 is dependent upon one or more of the following: math placement level, high school math courses completed, ACT/SAT standardized test scores, and/or a possible mathematics placement examination.
- \*\*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, you will not need any additional free choice electives to reach the minimum hours required for graduation (120).
- \*\*\*The courses listed for this semester constitute the professional education (student teaching) block. The student should not take any other courses during this semester.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before enrollment in professional education classes and student teaching. The application for student teaching is due approximately one year in advance.

## College of Arts, Humanities and Social Sciences

Department of Government, International Studies, and Languages

# POLITICAL SCIENCE

## BACHELOR OF ARTS DEGREE

There is more to political science than determining the winner of the next election. Careers for graduates from University of Central Missouri's Department of Government, International Studies, and Languages vary from law and politics to positions in government service, education, military, journalism, public administration and private industry.

Political science programs at UCM offer a balanced curriculum of classroom studies and practical experience. The undergraduate programs are broad and include courses in areas such as national and state government institutions, international relations, political parties and interest groups, public law and the judicial process, comparative government and politics, as well as political theory, public opinion, public policy, international law, foreign policy, data analysis, public administration, constitutional rights and municipal politics and administration.

### About the Faculty

Political science courses are taught by experienced and dynamic faculty members who believe in individualized attention for their students. This personal approach is enhanced by UCM's 18 to 1 student-faculty ratio. Upon declaring a major in the Department of Government, International Studies, and Languages, students may request that a faculty adviser personally assist them in planning their program. In addition to a wide range of academic and professional experience, all of the department's faculty members have

earned doctorates in their fields. Faculty members stay current with their profession through research, writing and participation in regional, national and international conferences.

### Student Involvement

Political science students have many opportunities to become involved on Central Missouri's campus, including membership in the Students for Political Action, an organization that helps members further their professional interests, and the Pre-Law Student Association, an organization that helps members prepare for law school. Qualified students may also pursue membership in Pi Sigma Alpha, the department's honor organization in political science. Students who are active politically may want to join the College Democrats or College Republicans, organizations that develop political awareness and stimulate interest in governmental affairs. The department also offers internships to qualified political science students, allowing them to gain practical experience working within various governmental and political units. Stipends are provided by some participating agencies.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide assistance with writing cover letters and resumes and offer a career library, mock interviews, and career counseling. The office also

serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students](http://ucmo.edu/career/students).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information, contact the Department of Government, International Studies, and Languages, Wood Building, Suite 5, UCM, Warrensburg, MO 64093; call 660-543-8948; or visit the department's Web site at [ucmo.edu/politicalscience](http://ucmo.edu/politicalscience).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Political Science Major, B.A. Degree (42-425)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year -Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
POLS 1500 Introduction to Politics	3	POLS 1510 American Government	3
Modern Language Requirement*	3	Modern Language Requirement*	3
General Education	6	General Education	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
AE 1400 Freshman Seminar**	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
POLS 2520 Comp. Gov't. & Politics or 2530 World Politics	3	POLS 2540 Survey of Political Theory	3
Modern Language Requirement*	3	POLS Elective***	3
General Education	9-10	General Education	9
<b>Semester Total</b>	<b>15-16</b>	<b>Semester Total</b>	<b>15</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
POLS Elective***	3	POLS 3560 Research Methods in Political Science	3
General Education	3	POLS Concentration Area Elective	3
Free Choice Electives	9	Free Choice Electives	9
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
POLS 4601 Senior Seminar in Political Science	3	POLS Concentration Area Elective	3
POLS Concentration Area Elective	3	General Education (IGEN/ICAP)	3
POLS Elective***	3	Free Choice Electives	8-9
Free Choice Electives	6	<b>Semester Total</b>	<b>14-15</b>
<b>Semester Total</b>	<b>15</b>		

**Political Science Major, B.A. Degree – 120 hours**

- \*See the current catalog for B.A. Degree fulfillment options. This plan is based on nine hours of modern language.
- \*\*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*\*For the 9 hours of POLS Electives students must take one class from each of the three areas not chosen for their area of concentration, excluding POLS 1244, 4590, 4591, and 4592.
- Students must earn 12 hours of upper level credits (3000/4000) in the major and 30 hours of upper level credits overall to meet graduation requirements. Make choices in the major electives accordingly.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Arts, Humanities, and Social Sciences

Department of Government, International Studies, and Languages

# POLITICAL SCIENCE

## BACHELOR OF SCIENCE DEGREE

There is more to political science than determining the winner of the next election. Careers for graduates from University of Central Missouri's Department of Government, International Studies, and Languages vary from law and politics to positions in government service, education, military, journalism, public administration and private industry.

Political science programs at UCM offer a balanced curriculum of classroom studies and practical experience. The undergraduate programs are broad and include courses in areas such as national and state government institutions, international relations, political parties and interest groups, public law and the judicial process, comparative government and politics, as well as political theory, public opinion, public policy, international law, foreign policy, data analysis, public administration, constitutional rights and municipal politics and administration.

### About the Faculty

Political science courses are taught by experienced and dynamic faculty members who believe in individualized attention for their students. This personal approach is enhanced by UCM's 18 to 1 student-faculty ratio. Upon declaring a major in the Department of Government, International Studies, and Languages, students may request that a faculty adviser personally assist them in planning their program. In addition to a wide range of academic and professional experience, all of the department's faculty members have

earned doctorates in their fields. Faculty members stay current with their profession through research, writing and participation in regional, national and international conferences.

### Student Involvement

Political science students have many opportunities to become involved on Central Missouri's campus, including membership in the Students for Political Action, an organization that helps members further their professional interests, and the Pre-Law Student Association, an organization that helps members prepare for law school. Qualified students may also pursue membership in Pi Sigma Alpha, the department's honor organization in political science. Students who are active politically may want to join the College Democrats or College Republicans, organizations that develop political awareness and stimulate interest in governmental affairs. The department also offers internships to qualified political science students, allowing them to gain practical experience working within various governmental and political units. Stipends are provided by some participating agencies.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide assistance with writing cover letters and resumes and offer a career library, mock interviews, and career counseling. The office also

serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students](http://ucmo.edu/career/students).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information, contact the Department of Government, International Studies, and Languages, Wood Building, Suite 5, UCM, Warrensburg, MO 64093; call 660-543-8948; or visit the department's Web site at [ucmo.edu/politicalscience](http://ucmo.edu/politicalscience).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Political Science Major, B.S. Degree (43-426)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year -Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
POLS 1500 Introduction to Politics	3	POLS 1510 American Government	3
General Education	9	General Education	9
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
AE 1400 Freshman Seminar*	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
POLS 2520 Comp. Gov't. & Politics or 2530 World Politics	3	POLS 2540 Survey of Political Theory	3
POLS Elective**	3	POLS Elective**	3
General Education	9-10	General Education	6
<b>Semester Total</b>	<b>15-16</b>	Free Choice Elective	3
		<b>Semester Total</b>	<b>15</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
POLS Elective**	3	POLS 3560 Research Methods	3
General Education	3	POLS Concentration Area Elective	3
Free Choice Electives	9	Free Choice Electives	9
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
POLS 4601 Senior Seminar in Political Science	3	POLS Concentration Area Elective	3
POLS Concentration Area Electives	3	General Education (IGEN/ICAP)	3
Free Choice Electives	9	Free Choice Electives	8-9
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>14-15</b>

**Political Science Major, B.S. Degree – 120 hours**

- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*For the 9 hours of POLS Electives students must take one class from each of the three areas not chosen for their area of concentration, excluding POLS 1244, 4590, 4591, and 4592.
- Students must earn 12 hours of upper level credits (3000/4000) in the major and 30 hours of upper level credits overall to meet graduation requirements. Make choices in the major electives accordingly.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

School of Technology

# PROFESSIONAL PHOTOGRAPHY

## BACHELOR OF SCIENCE DEGREE

The Bachelor of Science degree in Professional Photography at the University of Central Missouri is a comprehensive program of study designed to prepare individuals for success in the highly competitive field of professional imaging. This encompasses a diverse array of associated disciplines ranging across the creative and managerial domains. Graduates are trained image makers that have developed a highly refined visual literacy, steeped in both the aesthetic and technical.

### Career Opportunities

Avenues of future employment include professional photographers, digital imaging specialists, managers, sales representatives, estimators, production planners, customer service representatives and production supervisors in the photography industry and allied fields. Employers indicate that the university's photography graduates learn fast, are reliable and creative, and are able to adapt as skilled photographers and productive decision makers. UCM professional photography graduates have careers in custom photo labs and digital imaging service bureaus, in-house photo operations for businesses, and public relations and commercial advertising. They are also fashion and product photographers, photojournalists, bio-medical photographers, photo retail store owners, and operate their own photographic studios. They are also in a number of other areas ranging from teaching photography

in high school and universities to shooting photos aboard cruise ships and for the CIA.

### State-of-the-Art Facilities

The photography classrooms and laboratories at UCM are comprehensive and well-equipped for instruction in all aspects of professional imaging. Using current computer workstations and printers, students learn contemporary digital image capture and manipulation, and more traditional laboratories are provided for learning the important fundamentals of film-based photography.

### About the Faculty

Students learn from experienced full-time faculty members who, in addition to being highly-skilled scholars and teachers, have worked as professionals in a variety of photographic areas. The university's 17 to 1 student-faculty ratio allows students to benefit from personalized attention. Faculty members are active in research, writing, image exhibitions, and they participate in workshops and seminars to stay current in their field.

### Student Involvement

Students are encouraged to supplement their academic programs through participation in campus organizations of special professional, service and academic interest. Photography students are eligible for membership in the UCM Photographic Society

which, in addition to bringing top speakers in the field of photography to campus and providing other intellectual and social opportunities, produces an annual Photo Expo of student work. Valuable learning experiences also occur outside the classroom. Professional meetings, workshops, and conventions offer additional technical information and creative outlets to UCM students. By participating in organizations such as American Society of Media Photographers and the Professional Photographers of Missouri, students are introduced to professionals in the field who may offer internships and employment.

### Scholarships

More than \$7 million in merit-based scholarships and awards offered each year by the university. In addition, various Photography Area Scholarships are awarded periodically.

### To Learn More

For more information contact the School of Technology, Grinstead 9, UCM, Warrensburg, MO 64093, call 660-543-4439, or visit the department's web site: [ucmo.edu/technology](http://ucmo.edu/technology) and [facebook.com/UCMSOT](https://facebook.com/UCMSOT).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Professional Photography Major, B.S. Degree (43-587)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
PHOT 1210 Foundations of Professional Photography	3	PHOT 2200 Editorial Photography	3
PHOT 1211 Image Critique	1	PHOT 2210 Studio Photography	3
PHOT 1216 Photographer's Forum 1	1	General Education	6
PHOT 1230 Digital Imaging	3	<b>Semester Total</b>	<b>15</b>
General Education	3		
<b>Semester Total</b>	<b>14</b>		
AE 1400 Freshman Seminar*	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
PHOT 2216 Photographer's Forum 2	1	PHOT 2215 History of Photography	3
PHOT 2220 Scientific Aesthetics	3	General Education	12
PHOT 2250 Portrait Photography	3	<b>Semester Total</b>	<b>15</b>
General Education	9		
<b>Semester Total</b>	<b>16</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
PHOT 2230 Color Imaging	3	PHOT 3260 Digital Media	3
PHOT 3216 Photographer's Forum 3**	1	PHOT Major Elective	6
PHOT Major Elective	3	Free Choice Electives	5
General Education	6	<b>Semester Total</b>	<b>14</b>
Free Choice Electives	3		
<b>Semester Total</b>	<b>16</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
PHOT 4216 Photographer's Forum 4	1	IGEN 3116 Creative Prob. Solving or IGEN 3232 Media Literacy	3
PHOT 4230 Business Management for Photographers	3	PHOT 4270 Portfolio	3
PHOT Major Elective	3	General Education	3
Free Choice Electives	9	Free Choice Electives	5
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>14</b>

**Professional Photography Major, B.S. Degree - 120 hours**

- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*Mid-Program Review is required before the conclusion of the 3rd Photographer's Forum. Successful completion is required before students can enroll in PHOT 4270 Portfolio.
- This major does not build in the minimum number (30) of upper-level credit hours required for graduation. Be sure to include upper-level choices (3000/4000) in your major electives, general education, and/or free choice electives.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## Harmon College of Business and Professional Studies

Department of Aviation

# PROFESSIONAL PILOT

BACHELOR OF SCIENCE DEGREE

The Department of Aviation offers a Bachelor of Science degree with a major in professional pilot. The mission of the Professional Pilot Program is to provide our graduates with the skills, knowledge, and attitudes required for a successful flying career in the aviation industry. Our graduates possess flying skills and aeronautical knowledge that far exceeds the requirements of the Federal Aviation Administration (FAA). This program has been accredited by the Aviation Accreditation Board International (AABI) and is an FAA Certified Part 141 Flight School.

### Facilities and Equipment

The Department of Aviation has some of the finest facilities available to prepare students for positions in aviation both on campus and at UCM's Max B. Swisher Skyhaven Airport. The university owns 18 flight-ready aircraft including: a fleet of Cessna 172 Skyhawks, multi-engine aircraft, and gliders are available for flight training. In addition, the university has a hot-air balloon, which may be used to earn a rating.

The department's flight simulation equipment includes several advanced aviation flight training devices: including a 737NG AAFD in the TR Gaines Technology Building. This device exposes students to realistic air carrier training scenarios and environment.

### Student Involvement

Several student organizations exist in the department to enhance the development of special interests and talents of students. Alpha Eta Rho, a national aviation fraternity, is dedicated to the professional development of students majoring in aviation. A Chapter of Women in Aviation International (WAI) is a professional organization that promotes training and career awareness.

The National Intercollegiate Flight Team, which promotes excellence in flight performance, has established an enviable record at both regional and national levels. Students who are interested in airport management can join the local chapter of the American Association of Airport Executives.

### Special Services

A number of special aviation services are offered at Central Missouri, including an introductory course in aeronautics and a summer aerospace education class for elementary and secondary teachers. Special training programs and classes are also taught by UCM faculty to serve the aviation industry. FAA computerized tests with immediate results are available through the department's LaserGrade testing center.

### Career Opportunities

Graduates of the professional pilot degree program own the flying skills and aeronautical knowledge that far exceed the requirements of the Federal Aviation Administration. Careers for pilots include those with airlines, corporate flight departments, general aviation and the military. Because of the diverse training, graduates are highly sought after by employers and work in all aspects of the aviation industry. Certificates and Ratings offered: Private Pilot, Commercial Pilot, Instrument Rated Pilot, Multi-Engine Rated Pilot, Airline Transport Pilot, CFI, CFII, and MEI.

### Scholarships

In addition to nearly \$7 million in scholarships provided through a variety of merit-based university scholarship programs, the Department of Aviation also offers an Achievement Award for students displaying exceptional talent in aviation areas.

### To Learn More

For more information about programs in aviation at UCM, contact the Department of Aviation, UCM, Warrensburg, MO 64093, call 660-543-4969, or visit the department's web site at [ucmo.edu/aviation](http://ucmo.edu/aviation).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Professional Pilot Major, B.S. Degree (43-554)**

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<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
AVIA 1020 Aeronautics	2	AVIA 1321 Private Flight B	1
AVIA 1310 FAA Private Requirements	4	AVIA 3310 Commercial Flight A	1
AVIA 1320 Private Flight A	1	ECON 1010 Principles of Macroeconomics	3
BTE 1210 Essentials of Managing Information or LIS 1600 University Library & Research Skills	2	ENGL 1030 Composition II	3
ENGL 1020 Composition I	3	MATH 1131 Applied Calculus	3
MATH 1111 College Algebra	3	PHYS 1104 Introduction to the Sciences: Physics	4
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
AE 1400 Freshman Seminar*	1		

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
AVIA 2310 Propulsion Systems	3	AVIA 3305 FAA COM Regulations	3
AVIA 3313 FAA Instrument Flight A	1	AVIA 3311 Commercial Flight B	1
AVIA 3314 Instrument Flight B	1	AVIA 3312 Commercial Flight C	1
AVIA 3325 FAA Instrument Requirements	4	AVIA 3340 Aircraft Systems & Computers	3
General Education	6	AVIA 4350 Aviation Weather (spring only) or EASC 3114 Meteorology	3
<b>Semester Total</b>	<b>15</b>	General Education	3
		<b>Semester Total</b>	<b>14</b>

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
ATM 4032 Hydraulics/Pneumatics	3	AVIA 3317 Commercial Flight F	1
AVIA 3315 Commercial Flight D	1	AVIA 4250 Flight Management Systems	3
AVIA 3316 Commercial Flight E	1	AVIA 4500 Aviation Safety	3
AVIA 4010 Aerodynamics	3	MGT 3315 Management of Organizations or INDM 4210 Industrial Management	3
AVIA 4220 Transport Aircraft Systems	2	General Education	6
CTE 3060 Technical Writing	3	<b>Semester Total</b>	<b>16</b>
General Education	3		
<b>Semester Total</b>	<b>16</b>		

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
AVIA 3330 Multi Engine	1	AVIA 4090 Aviation Law	3
AVIA 4040 Aviation Management	3	ICAP 4113 Air Operations Management	3
AVIA 4320 Physiology & Flying (fall only)	2	General Education	6
AVIA 4370 Advanced Flight Crew Management	3	Free Choice Electives*	2
AVIA 4420 Air Transportation	3	<b>Semester Total</b>	<b>14</b>
General Education	3		
<b>Semester Total</b>	<b>15</b>		

**Professional Pilot Major, B.S. Degree - 120 hours**

- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Health, Science, and Technology

Department of Psychological Science

# PSYCHOLOGY

## BACHELOR OF ARTS DEGREE

The Bachelor of Arts degree in Psychology offers a balanced curriculum of classroom studies and practical experiences. The department has established four laboratories which include Neurocognition (EEG and psychophysiology), Behavioral Medicine and Biofeedback (behavioral analysis, learning, and relaxation), Experimental Psychology (social and cognitive studies) and Virtual Reality (addiction research and treatment of anxiety and phobic disorders).

To promote scholarship and research activities, the department maintains collaborative relationships with other universities, selected government agencies, and local schools. Whenever possible, students are encouraged to participate in faculty research projects on a voluntary basis. Faculty often present and publish research with students. A department computer laboratory is available to assist faculty and students with research studies, data analysis, and word processing.

### About the Faculty

The student-faculty ratio at UCM is about 17 to 1, which allows for personalized attention for each student. In addition to a wide range of academic and professional experience, all members of the department's tenured faculty have earned doctorates and participate in research, workshops, and seminars. Faculty members also regularly publish research articles, book chapters, and abstracts, as well as submit grant proposals to internal and external funding sources and make research presentations at conventions of major psychological associations/societies.

### Student Involvement

There are many ways for students to become involved with psychology at UCM. Membership in student organizations provides an avenue for active participation with the community, and other psychology students and faculty.

The Psychology Club brings together students who have an interest in the field and facilitates, maintains, and expands student-faculty interactions. Qualified students may be invited to become members of Psi Chi, the psychology honor society. This organization was established to promote and sustain educational excellence in the study of psychology and related areas.

Students are also encouraged to work with faculty on research papers and presentations. Each year, students present their faculty-sponsored research at the Great Plains Student Psychology Conference and the Missouri Undergraduate Psychology Conference, as well as at major professional conferences such as the American Psychology Association and the Association for Psychological Science.

### Career Opportunities

Students with an undergraduate degree in psychology pursue careers with government agencies, private industry or educational institutions. Most employers look for individuals with good analytical abilities, a working knowledge of statistical software packages and effective written and verbal communication skills.

Employers also seek out psychology majors because most have well-developed interpersonal skills and are interested in working with people. Many graduates work in the fields of mental health, rehabilitation, geriatric care, applied research or

corrections. However, employers are often interested in hiring psychology majors for positions in sales, banking, insurance, and management. A number of industries and government agencies recruit psychology majors and train them for specific jobs, most with potential for advancement. A significant number of graduates pursue doctoral studies in areas such as clinical, counseling, school, and experimental psychology. Psychology graduates also have pursued law school and other professional programs.

### Placement

Central Missouri's Office of Career Services can help students who seek employment, as well as serve officials of business, government, industry and education who seek prospective employees. Interviews are conducted on campus throughout the year.

### Scholarships

In addition to \$7 million in university scholarships presented to Central Missouri students each year, the department offers the Jerome M. Sattler Endowment Research Awards, Department of Psychological Science Tuition Awards, the Arthur John Ter Keurst and Robert N. Higgins Scholarships.

### To Learn More

Department of Psychological Science, Lovinger 1111, UCM, Warrensburg, MO 64093, or call 660-543-4185. The department's webpage is [ucmo.edu/psychology/](http://ucmo.edu/psychology/).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Psychology Major, B.A. Degree (42-746)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
PSY 1000 Orientation to Psychology	1	Modern Language Requirement*	3
PSY 1100 General Psychology	3	General Education	9
Modern Language Requirement*	3	<b>Semester Total</b>	<b>15</b>
General Education	6		
<b>Semester Total</b>	<b>16</b>		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
PSY 2110 Research Design & Analysis I (fall only)**	4	PSY 2120 Research Design & Analysis II (spring only)**	4
Modern Language Requirement*	3	PSY 2130 Learning	3
General Education	9	General Education	6
<b>Semester Total</b>	<b>16</b>	Free Choice Electives	2
		<b>Semester Total</b>	<b>15</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
PSY 3130 Physiological Psychology	4	PSY 3340 Social Psychology	3
PSY 3220 Lifespan Development	3	PSY 4440 Abnormal Psychology	3
General Education	3	Free Choice Electives	9
Free Choice Electives	5	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
PSY 4310 Theories of Personality	3	PSY 4110 Systems of Psychology	3
Free Choice Electives	11	General Education (IGEN/ICAP)	3
<b>Semester Total</b>	<b>14</b>	Free Choice Electives	8
		<b>Semester Total</b>	<b>14</b>

**Psychology Major, B.A. Degree - 120 hours**

- \*Refer to the Bachelor's Degree Requirements section in the catalog for the B.A. Modern Language requirement. This plan is based on three modern language courses.
- \*\*These courses are only offered during the semesters indicated.
- This major does not build in the minimum number (30) of upper-level credit hours required for graduation. Be sure to include upper-level choices (3000/4000) in your general education and/or free choice electives.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

Department of Psychological Science

# PSYCHOLOGY

## BACHELOR OF SCIENCE DEGREE

The Department of Psychological Science Bachelor of Science degree program offers a balanced curriculum of classroom studies and practical experiences. The department has established four laboratories which include Neurocognition (EEG and Psychophysiology), Behavioral Medicine and Biofeedback (Behavioral Analysis, Learning, and Relaxation), Experimental Psychology (Social and Cognitive studies) and Virtual Reality (Addictions research and treatment of anxiety and phobic disorders).

To promote scholarship and research activities, the department maintains collaborative relationships with other universities, selected government agencies, and local schools. Whenever possible, students are encouraged to participate in faculty research projects on a voluntary basis. Faculty often present and publish research with students. A department computer laboratory is available to assist faculty and students with research studies, data analysis, and word processing.

### About the Faculty

The student-faculty ratio at UCM is about 17 to 1, which allows for personalized attention for each student. In addition to a wide range of academic and professional experience, all members of the department's tenured faculty have earned doctorates and participate in research, workshops, and seminars. Faculty members also regularly publish research articles, book chapters, and abstracts, as well as submit grant proposals to internal and external funding sources and makes research presentations at conventions of major psychological associations.

### Student Involvement

There are many ways for students to become involved with psychology at UCM. Membership in student organizations provides an avenue for active participation with the community, and other psychology students and faculty.

The Psychology Club brings together students who have an interest in the field and facilitates, maintains, and expands student-faculty interactions. Qualified students may be invited to become members of Psi Chi, the psychology honor society. This organization was established to promote and sustain educational excellence in the study of psychology and related areas.

Students are also encouraged to work with faculty on research papers and presentations. Each year, students present their faculty-sponsored research at the Great Plains Student Psychology Conference and the Missouri Undergraduate Psychology Conference, as well as at major professional conferences such as the American Psychology Association and the Association for Psychological Science.

In recent years, our students have received awards for their poster and paper presentations. The Department of Psychological Science and UCM hosted the 26<sup>th</sup> annual Great Plains Students' Psychology Conference in March, 2006.

### Career Opportunities

Students with an undergraduate degree in psychology pursue careers with government agencies, private industry or educational institutions. Most employers look for individuals with good analytical abilities, a working knowledge of statistical software packages and effective written and verbal communication

skills. Employers also seek out psychology majors because most have well-developed interpersonal skills and are interested in working with people. Many graduates work in the fields of mental health, rehabilitation, geriatric care, applied research or corrections. However, employers are often interested in hiring psychology majors for positions in sales, banking, insurance, and management. A number of industries and government agencies recruit psychology majors and train them for specific jobs, most with potential for advancement. A significant number of graduates pursue doctoral studies in areas such as clinical, counseling, school, and experimental psychology. Psychology graduates also have pursued law school and other professional programs.

### Scholarships

In addition to \$7 million in university scholarships presented to Central Missouri students each year, the department offers the Jerome M. Sattler Endowment Research Awards, Department of Psychological Science Tuition Awards, the Arthur John Ter Keurst and Robert N. Higgins Scholarships.

### To Learn More

For more information contact the Department of Psychological Science, Lovinger 1111, UCM, Warrensburg, MO 64093, or call 660-543-4185. The department's webpage is [ucmo.edu/psychology](http://ucmo.edu/psychology).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Psychology Major, B.S. Degree (43-747)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs.</b>	<b>Freshman Year</b> - Spring Semester	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
PSY 1000 Orientation to Psychology	1	General Education	12
PSY 1100 General Psychology	3	<b>Semester Total</b>	<b>15</b>
General Education	9		
<b>Semester Total</b>	<b>16</b>		
<b>Sophomore Year</b> - Fall Semester	<b>Hrs.</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs.</b>
PSY 2110 Research Design & Analysis I (fall only)**	4	PSY 2120 Research Design & Analysis II (spring only)**	4
General Education	9	PSY 2130 Learning	3
Free Choice Electives	2	General Education	6
<b>Semester Total</b>	<b>15</b>	Free Choice Electives	2
		<b>Semester Total</b>	<b>15</b>
<b>Junior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Junior Year</b> - Spring Semester	<b>Hrs.</b>
PSY 3130 Physiological Psychology	4	PSY 3340 Social Psychology	3
PSY 3220 Lifespan Development	3	PSY 4440 Abnormal Psychology	3
General Education (IGEN/ICAP)	3	Free Choice Electives	9
Free Choice Electives	5	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		
<b>Senior Year</b> - Fall Semester	<b>Hrs.</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs.</b>
PSY 4310 Theories of Personality	3	PSY 4110 Systems of Psychology	3
PSY Major Electives*	6	PSY Major Electives*	3
Free Choice Electives	5	Free Choice Electives	9
<b>Semester Total</b>	<b>14</b>	<b>Semester Total</b>	<b>15</b>

**Psychology Major, B.S. Degree - 120 hours**

- \*See the 2013 Undergraduate Catalog for a list of courses that fulfill major electives for the degree.
- \*\*These courses are only offered during the semesters indicated.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Arts, Humanities, and Social Sciences

Department of Communication and Sociology

# PUBLIC RELATIONS

## BACHELOR OF SCIENCE DEGREE

What do the following industries have in common: entertainment, sports, large and small companies, non-profit organizations, health care, higher education, government organizations, aviation, financial institutions, creative agencies? The answer: They employ UCM public relations graduates.

Public relations is one of the top-10 fastest growing industries nationwide (see the Bureau of Labor Statistics at [bls.gov/oco/ocos086.htm](http://bls.gov/oco/ocos086.htm)). Similarly, Money Magazine's "50 Best Jobs in America" article states that public relations professionals earn an average annual salary of nearly \$85,000, with an earning potential of nearly \$250,000 a year. Additionally, there are more than 9,000 annual job openings, with a projected 23 percent 10-year growth rate increase.

Public relations is, without question, the most comprehensive; sought after; and, on average, the highest paid; field of strategic communication. What does this mean for you as a UCM public relations graduate? It means you will possess the most comprehensive set of communication skills (strategic planning, written and oral communication, counseling management, media relations, image and issues management, research, etc.) that will help you foster organizational success and sustainability. You will be among the most sought after communication professionals in the industry and your starting salary will be higher than most of your communication colleagues.

### UCM Public Relations Program

UCM's bachelor of science in public relations readies students for the professional world of image

development, strategic planning, issues management, professional and promotional communication, media relations, and development, just to name a few. It is known among industry leaders for equipping its graduates with the skills needed to succeed in today's competitive public relations world.

UCM graduates have attained executive-level positions with major organizations such as Dell computers, American Airlines, and professional sports teams. Others work in the non-profit and government sectors for such organizations as the American Red Cross, Children's Mercy Hospitals & Clinics, for higher education institutions, and the state legislature. More have taken positions with agencies such as Bernstein-Rein, Kuhn & Wittenborn, Weber-Shandwick, and Fleishman-Hillard. Graduates find employment all over the world.

The strategic development of the public relations program is guided by the Public Relations Society of America's "Report of the Commission on Public Relations Education." Each graduate is equipped with beyond-the-classroom experience through service-learning and at least one supervised internship. The program is designed to develop public relations professionals who take a public-focused approach to results-driven strategic communication.

### Professional Development and Student Involvement

Public relations students are encouraged to take part in co-curricular activities that relate to their major. Involvement in the Robert Kendall Chapter of Public Relations Student Society of America, the second-oldest campus chapter in the

nation, is highly valuable.

Students are also encouraged to take part in the award-winning student-led public relations firm, *Innovative PR*. The firm employs one Account Coordinator and five PR Specialists each semester.

Other communication organizations open to students include the International Association of Business Communicators, Lambda Pi Eta, and Pi Kappa Delta. Many also take part in SIFE, DECA or AMA.

PR students are encouraged to participate in UCM's study abroad program and have traveled to and studied in Japan, Australia, Taiwan, Wales, England and many other countries.

### Campus Media

Additional experience for public relations majors can be gained at the Department of Communication and Sociology's student newspaper, the *Muleskinner*. Paid editorial and advertising positions are available, as well as practical experience for course credit. Students can also get involved in the online community newspaper, the *digitalBurg* or UCM's *Media Network*.

### To Learn More

For more information contact the department at Martin 136, UCM, Warrensburg, MO 64093; call 660-543-4840; e-mail [publicrelationsprogram@ucmo.edu](mailto:publicrelationsprogram@ucmo.edu) or visit the program's home page at [ucmo.edu/pr](http://ucmo.edu/pr) and its faculty at Martin 132, the PR Suite.

For admission information, call 1-877-SAY-UCMO (877-729-8266). UCM's website is [ucmo.edu](http://ucmo.edu).

**Public Relations Major, B.S. Degree (43-351)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs</b>
COMM 1000 Public Speaking*	3	COMM 2625 Writing & Editing for Public Relations*	3
COMM 1100 Introduction to Communication*	1	ENGL 1030 Composition II*	3
COMM 2620 Introduction to Public Relations*	3	General Education	9
ENGL 1020 Composition I*	3	<b>Semester Total</b>	<b>15</b>
General Education	3		
<b>Semester Total</b>	<b>13</b>		

<b>Sophomore Year - Fall Semester</b>	<b>Hrs</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs</b>
COMM 2100 Introduction to Communication Theory	3	COMM 3010 Interpersonal Communication	3
COMM 3000 Film Appreciation	3	COMM 3100 Communication Research Methods	3
COMM 3620 Strategic Planning & Research for PR*	3	COMM 3625 Design & Layout for Publications	3
General Education	6	General Education	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
		<b>(**Apply for admission to the major during this semester.)</b>	

<b>Junior Year - Fall Semester</b>	<b>Hrs</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs</b>
COMM 3640 Integrated Strategic Communication	3	COMM 4610 PR Management & Industry Practices	3
COMM 4250 The Law & Digital Media	3	COMM 4685 Strategic Planning through PR Case Analysis	3
COMM 4680 Advanced PR Writing	3	COMM Major Elective***	3
General Education	6	Free Choice Electives	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

<b>Junior/Senior Year - Summer Semester</b>	<b>Hrs</b>
COMM 4605 PR Internship	3
<b>Semester Total</b>	<b>3</b>

<b>Senior Year - Fall Semester</b>	<b>Hrs</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs</b>
COMM 4630 Electronic & Social Media for PR	3	COMM 4690 Campaigns	3
IGEN 3224 or 3232 or 4224	3	COMM Major Elective***	3
COMM Major Elective***	3	Free Choice Electives	8
Free Choice Electives	6	<b>Semester Total</b>	<b>14</b>
<b>Semester Total</b>	<b>15</b>		

**Public Relations Major, B.S. Degree - 120 hours**

- \*A grade of C or higher is required in these courses.
- \*\*Admission to this major is required. Students should apply for admission after meeting the following requirements: completion of 30 credits hours with a 2.25 or higher cumulative and UCM GPA, a grade of C or higher in COMM 1000, COMM 1100, ENGL 1020, and ENGL 1030 (a C or higher in ENGL 1080 may substitute for 1020/1030).
- \*\*\*This major requires 9 hours of COMM major electives. See the 2013 Undergraduate Catalog for appropriate course choices.
- To graduate with this major, students must have a 2.25 cumulative and UCM gpa and a 2.50 major GPA. A grade of C or higher is also required in COMM 2620, 2625, and 3620 in addition to the four pre-admissions courses.
- During the capstone course taken in the senior year, all graduates must satisfactorily complete a final assessment project before graduating. See department advisor for requirements.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Health, Science, and Technology

Department of Biology and Earth Science

# RADIOLOGIC TECHNOLOGY

## BACHELOR OF SCIENCE DEGREE

Radiologic Technology offers exciting educational and career opportunities for students wishing to combine an interest in the sciences with diagnostic imaging. As vital members of the health care team, radiologic technologists perform diagnostic imaging tests used to prevent, diagnose, and treat disease. The practice of modern medicine would not be possible without diagnostic imaging.

Radiologic Technologists have diverse career opportunities in hospital, clinic, university, and government laboratories. They can pursue advanced imaging such as MRI and CT certifications. Graduates are qualified to enter graduate programs leading to master's and doctoral degrees. Radiologic technology is a very good choice of undergraduate major for those interested in professional school because it provides an excellent foundation in diagnostic medicine.

Classroom learning is reinforced in most courses through practical laboratory experiences. Before admission to the radiologic

technology training program at Central's affiliated hospitals, a student must first earn a minimum of 66 semester hours of college credit. After a satisfactory completion of the training program, students are awarded a degree and are eligible and expected to take the national certification examination.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide assistance with writing cover letters and resumes and offer a career library, mock interviews, and career counseling. The office also serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students](http://ucmo.edu/career/students).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### To Learn More

For more information, contact the Department of Biology and Earth Science, W.C. Morris Building room 306, UCM, Warrensburg, MO 64093, or call 660-543-4933.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Radiologic Technology, B.S. Degree (43-609)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year</b> - Fall Semester	<b>Hrs</b>	<b>Freshman Year</b> -Spring Semester	<b>Hrs</b>
BIOL 1110 Principles of Biology	3	BIOL 3215 Medical Terminology	2
CHEM 1131 General Chemistry I	5	BIOL 3401 Human Anatomy	3
ENGL 1020 Composition I	3	COMM 1000 Public Speaking	3
MATH 1111 College Algebra	3	ENGL 1030 Composition II	3
SOC 1800 General Sociology	3	HIST 1350 or 1351 American History	3
<b>Semester Total</b>	<b>17</b>	PSY 1100 General Psychology	3
		<b>Semester Total</b>	<b>17</b>
<b>Sophomore Year</b> - Fall Semester	<b>Hrs</b>	<b>Sophomore Year</b> - Spring Semester	<b>Hrs</b>
BIOL 3213 Embryology of Vertebrates	3	ANTH 1820 Cultural Anthropology	3
BIOL 3402 Human Physiology	5	BIOL 3611 Microbiology	4
COMM 3000 Film Appreciation	3	ENGL 2200, 2205, 2210, or 2215 (Literature)	3
PHYS 1101 College Physics I	4	PHIL 2300 Ethics	3
ART 1800 Ideas and the Visual Arts or MUS 1210 Experiencing Music	3	General Education Technology	2-3
<b>Semester Total</b>	<b>18</b>	<b>Semester Total</b>	<b>15-16</b>
<b>Junior Year</b> - Fall Semester - Clinicals	<b>Hrs</b>	<b>Junior Year</b> - Spring Semester - Clinicals	<b>Hrs</b>
BIOL 3211 Comparative Anatomy	4	BIOL 4516 Hematology/Virology	3
BIOL 3410 Forensic Science	3	ICAP 4222 The Biological Perspectives	3
BIOL 4000 Biology Colloquium	1	Radiologic Technology Special Credit	9
Radiologic Technology Special Credit	7	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		
<b>Senior Year</b> - Fall Semester - Clinicals	<b>Hrs</b>	<b>Senior Year</b> - Spring Semester	<b>Hrs</b>
Radiologic Technology Special Credit	12	BIOL 4011 Special Problems in Biology*	4
<b>Semester Total</b>	<b>12</b>	BIOL 4012 Special Projects in Biology*	4
		BIOL 4014 Internship in Biology*	4
		<b>Semester Total</b>	<b>12</b>

**Radiologic Technology, B.S. Degree - 121 hours**

- Candidates for this degree must maintain a minimum cumulative grade-point average of 2.50 and have a minimum grade of C or better in listed program courses.
- Candidates for this degree must successfully complete at least 4 hours of shadowing in a diagnostic area of Radiologic Technology.
- Students must meet with a departmental advisor within enrolling in 30 credit hours to obtain specific course information, program and learning assessment goals, and the Prospective Student Information Guide. This helps ensure success in the program.
- Coursework completed in the junior and senior years are transferred to UCM as the listed course equivalencies.
- \*Concurrent enrollment in UCM courses while taking clinicals during the last twelve semester hours.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

School of Environmental, Physical, and Applied Sciences

# SAFETY MANAGEMENT

## BACHELOR OF SCIENCE DEGREE

Students pursuing University of Central Missouri's Bachelor of Science in Safety Management degree may concentrate in the areas of industrial and occupational loss prevention, which include fire science, security, emergency management and health.

Billions of dollars are lost each year as a result of avoidable accidents and unhealthy exposures on the job, at home and on the highways. Through the application of science and technology, potential safety, security and health losses are reduced by investigating people in their environments and by applying scientific principles of control. Safety sciences professionals are in demand, and the safety management program prepares individuals for rewarding careers in this field.

### Career Opportunities

Career placement rates for safety graduates are very high. Graduating students may receive multiple job offers prior to graduation, and entry-level compensation ranks high in relation to numerous other professional fields. Graduates may seek employment as safety analysts, safety managers, corporate health officers, loss control managers, systems safety analysts or OSHA/EPA compliance officers, as well as arson investigators, security managers, transportation safety managers, public services administrators, or industrial hygienists and others.

### About the Faculty

The safety programs have a highly qualified faculty, known for stimulating student achievement in departmental programs and projects.

UCM's 17 to 1 student-faculty ratio allows for personalized attention and mentoring. In addition to diverse backgrounds and experience, they are also active participants in research and scholarly activity. Faculty members are active in professional organizations and have presented at national and international professional conferences.

Other sources of program strength include working relationships with the Occupational Safety and Health Administration, Environmental Protection Agency, Department of Transportation, Mine Safety and Health Administration, American Society of Safety Engineers, and American Industrial Hygiene Association.

### Student Involvement

Safety students are encouraged to participate in professional organizations. Student chapters of the American Society of Safety Engineers, the American Industrial Hygiene Association, Collegiate Firefighters Association, Air & Waste Management Association, and Rho Sigma Kappa Honor Society are available in the department. The Safety programs also offer an internship program to qualified students. Internships allow students to gain practical experience in the operation of various components of the safety science field. Internships are available with business, industry and government.

### Scholarships

In addition to achievement awards, the safety programs have several scholarships available to students including the MEM Outstanding

Student Scholarship, the Tieszen, Goetz, Phillips Petroleum Company, Key Safety, Brueske Industrial Safety, Freeman Transportation, Goldberg St. Louis Risk and Insurance Management Society, St. Louis ASSE Chapter scholarships, and the Construction Safety Group of Kansas City Scholarship program.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide assistance with writing cover letters and resumes and offer a career library, mock interviews, and career counseling. The office also serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students](http://ucmo.edu/career/students).

### To Learn More

For more information, contact the Safety Management program coordinator, Humphreys 329C, UCM, Warrensburg, MO 64093, at 660-543-4626. The department's web address is [ucmo.edu/ss](http://ucmo.edu/ss).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Safety Management Major, B.S. Degree (43-243)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	CHEM 1104 Introduction to the Sciences: Chemistry*	4
MATH 1111 College Algebra	3	ENGL 1030 Composition II	3
SAFE 1000 Exploring Safety Sciences	1	PSY 1100 General Psychology	3
SAFE 3000 Accident Causation & Prevention	3	General Education	5-6
General Education	6	<b>Semester Total</b>	<b>15-16</b>
<b>Semester Total</b>	<b>16</b>		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
PHYS 1103 Introduction to the Sciences: Physics*	3	SAFE 3430 Industrial Hazard Control	3
SAFE 3070 Safety Leadership	3	SAFE 4510 Loss Control	3
SAFE 4020 Legal Aspects of Safety & Health	3	SAFE 4520 Safety & Risk Analysis	3
Minor Coursework	3	Minor Coursework	3
General Education	3	General Education	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
SAFE 3120 Introduction to Industrial Hygiene	3	SAFE 4430 Workers Compensation Legislation	3
SAFE 4000 Ergonomics in Safety & Health	3	SAFE 4560 Systems Safety	3
SAFE 4010 Accident Investigation	3	SAFE 4850 Industrial Fire Protection	3
SAFE 4425 Safety & Health Legislation & Standards	3	Minor Coursework	3
General Education	3	General Education	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Summer – Between Junior &amp; Senior Year</b>	<b>Hrs.</b>		
SAFE 4990 Internship in Safety Sciences** or Departmentally Approved Elective	3		
<b>Semester Total</b>	<b>3</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
SAFE 4035 Safety Program Management	3	ICAP 4115 Safety & Health Management	3
SAFE 4140 Safety & Health Laboratory	3	SAFE 4435 Environmental Compliance	3
SAFE 4940 Statistical Analysis for Risk Management	3	Minor Coursework	6
Minor Coursework	3	<b>Semester Total</b>	<b>12</b>
General Education	3		
<b>Semester Total</b>	<b>15</b>		

**Safety Management Major, B.S. Degree - 121 hours**

- \*A grade of C or higher is required in these courses for graduation in this major.
- \*\*SAFE 4990 should be taken during the summer.
- Students seeking to graduate from this program must have a minimum 2.20 cumulative grade-point average and have completed chemistry with lab (CHEM 1104) and physics (PHYS 1103) with a grade of C or higher.
- This plan is based on an 18-hour minor.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Arts, Humanities, and Social Sciences

Department of History and Anthropology

# SOCIAL STUDIES

## BACHELOR OF SCIENCE IN EDUCATION DEGREE

The Department of History and Anthropology at the University of Central Missouri provides opportunities for students interested in studying the human experience, cultures, and civilization.

Social studies education is a prescribed course of study designed to train future social studies teachers. Students in the program will take a variety of social science courses in the disciplines of anthropology, economics, geography, history, political science, psychology, and sociology as well as the requisite education curriculum. Upon completion of the requirements, the Department of Elementary and Secondary Education (DESE) will certify the graduate to teach social studies in the secondary schools (grades 9-12).

On another level, social studies education has a broader social mission. According to the National Council for the Social Studies (NCSS), the primary purpose of social studies education is the promotion of civic competence among young students. The task, then, of the social studies education program is to prepare future teachers.

To accomplish this goal, the social studies program at University of Central Missouri will provide its majors with the coursework necessary to acquire the knowledge (social science content) and the skills (education theory and methods) to succeed as a classroom teacher of social studies. The social science coursework consists of 60 credit hours (20 courses) and the education coursework consists of 28 credit hours (11 courses).

### About the Faculty

UCM's Department of History and Anthropology has a distinguished reputation. Its faculty is dedicated to the growth and professional development of their students, in addition to being actively involved in research, writing and public service. Faculty members have published many books and articles, participated in regional, national and international conferences, and received numerous grants and awards for study and research. In addition to their wide range of academic and professional experience, all members of the department's faculty have earned doctorates in their fields of expertise. UCM's 17 to 1 student-faculty ratio allows for personalized attention for each student.

### Student Involvement

Students are encouraged to supplement their academic programs through international study and participation in campus organizations of special professional, service and academic interest. The History and Anthropology Clubs provide opportunities for members to have personal and informal association with the department's faculty and other history and anthropology students outside the classroom. Qualified students may also seek membership in Phi Alpha Theta, the national history honor society, which encourages excellence in the study of history.

### Special Facilities

UCM houses some extraordinary collections. History and anthropology faculty members are dedicated curators of the university's archives and museum, located in the James C. Kirkpatrick Library. In addition to the

museum's many collections and other historical items on display, various exhibits are featured throughout the year for public inspection.

Students may also enhance their education through learning experiences at local facilities, such as Blind Boone Park, the Howard School, and Pertle Springs, and through international opportunities.

### Internships

Students have the opportunity to pursue internships that will enhance their knowledge skills and provide real world experiences. Interns have been placed at the Truman Library in Independence, Midwest Center for Holocaust Education, and at archives/museums in Jefferson City, Johnson County and Henry County, to name just a few.

### Scholarships

The Department of History and Anthropology presents Semester Achievement Awards to students who excel academically. Other scholarships available include the Demand Scholarship in history, A.E. Twomey Scholarship in history, and A.F. McClure Scholarship in archives.

### To Learn More

For more information contact the Department of History and Anthropology, Wood 136, UCM, Warrensburg, MO 64093, call 660-543-4404, or fax 660-543-4535. The department's home page is [ucmo.edu/history](http://ucmo.edu/history).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Social Studies Major, B.S. in Ed. Degree (41-264)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
<b>ENGL 1020 Composition I</b>	3	ECON 1010 Principles of Macroeconomics	3
<b>HIST 1350 History of the United States to 1877</b>	3	<b>ENGL 1030 Composition II</b>	3
SOC 1800 General Sociology	3	HIST 1351 History of the United States from 1877	3
<b>General Education Science w/lab</b>	4	POLS 1510 American Government	3
General Education	3	<b>General Education Math</b>	3
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>15</b>

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
CTE 2000 Technology and Society*	3	ECON 1011 Principles of Microeconomics	3
EDFL 2100 Foundations of Education	2	HIST 2400 History of the Early World or HIST 2402 History of the Modern World**	3
FLDX 2150 Introductory Field Experience	1	POLS 2511 State Government	3
EDFL 2240 Educational Psychology	3	General Education	9
GEOG 2212 World Geography	3	<b>Semester Total</b>	<b>18</b>
HIST 2401 History of the Early Modern World	3		
<b>Semester Total</b>	<b>15</b>		

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
EDFL 4300 Educational Measurement & Evaluation	2	EDFL 4210 The Teaching of Reading in the Secondary School	2
EDSP 2100 Education of the Exceptional Child	2	HIST Upper-Level Electives***	6
HIST Upper-Level Electives***	6	PSY 4230 Psychology of Adolescence	3
SOSC 3010 Writing in the Social Sciences	3	Upper-Level Elective in SOC or ANTH	3
General Education	3	General Education	3
<b>Semester Total</b>	<b>16</b>	<b>Semester Total</b>	<b>17</b>

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester++</b>	<b>Hrs.</b>
EDFL 3500 Secondary Teaching & Behavioral Management	3	FLDX 4595 Student Teaching Secondary I	5
FLDX 3550 Practicum in Secondary Instruction	1	ICAP 4468 Student Teaching Secondary II	4
SOSC 4050 The Social Studies	3	SOSC 4020 Secondary Field Experience II	1
Upper-Level Electives in Major+	6	SOSC 4074 Methods of Teaching Social Studies	2
Upper-Level Elective in GEOG	3	<b>Semester Total</b>	<b>12</b>
<b>Semester Total</b>	<b>16</b>		

**Social Studies Major, B.S. in Ed. Degree - 125 hours**

- \*CTE 2000 will fulfill 3 hours of General Education Division II Area A Part II.
- \*\*If selected, HIST 2402 will fulfill 3 hours of General Education Division II Area D. If not selected, an additional three hour course must be taken to fulfill that requirement.
- \*\*\*See catalog for a list of History classes to fulfill the upper-level electives in American History (HIST 43XX) and World History (HIST 44XX) requirements.
- +Students choose upper-level electives from at least two of the following prefixes: GEOG, HIST, POLS, SOC, ANTH, or ECON.
- ++The courses listed for this semester constitute the professional education (student teaching) block. The student should not take any other courses during this semester.
- This program must include at least one course that focuses on a non-western society, nation or region or on the non-western world. A list of the courses which fulfill this requirement is available from the Department of History and Anthropology and is on file with the academic advisors.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before enrollment in professional education classes and student teaching. The application for student teaching is due approximately one year in advance.



## Harmon College of Business and Professional Studies

Department of Communication Disorders and Social Work

# SOCIAL WORK

## BACHELOR OF SOCIAL WORK DEGREE

The social work program at UCM prepares students to enter a helping profession. Required coursework and the social work field practicum equip students with the knowledge, skills, and values for entry-level (generalist) social work practice and for advancement to graduate-level study.

Social workers engage various size client systems to identify needs or concerns and solutions that improve challenges. Social services are for everyone. Those without problems can benefit from strategies to maintain wellness and to function at an optimal level. Social workers are involved in helping people to resolve emotional, social, and economic problems, and engage in political advocacy. Professional social work education prepares students to work with individuals, families, groups, organizations, and communities at all ages of the life span and in various fields of practice. Social work students are expected to follow the National Association of Social Workers (NASW) Code of Ethics, and to demonstrate the core values of the profession, which include service, social justice, dignity and worth of the person, the importance of human relationships, integrity, and competence.

### Career Prospects

Social workers are employed in a wide variety of community agencies and social institutions. Child welfare or family services social workers may help single parents find needed resources and strengthen social supports, arrange for homemaker services during a parent's illness, and locate foster homes for abused, abandoned, or neglected children. Mental health social workers provide social rehabilitation, crisis intervention, and training in skills of everyday living for persons with mental or emotional problems. They may work with members of a multidisciplinary team

to support optimum functioning within the community. Health care social workers teach patients and their families to cope with serious illnesses and injuries. They often help to facilitate needed services for continuing care or rehabilitation. Gerontology social workers specialize in providing services to elderly individuals and their families to maximize the quality of life through individualized planning and coordination of services. New and different fields of practice continue to emerge and currently include social work with new immigrants, economic social work, military social work, social work and law, and veterinarian social work. Social workers are the largest providers of mental health and the VA is the largest employer of Clinical Social Workers. An MSW degree, two years of supervision and passing the appropriate ASWB exam(s) are required to become a Licensed Clinical Social Worker.

### Curriculum

Most of the required social work courses are taken during the junior and senior years. Classes are offered during the daytime on campus in Warrensburg and an evening program is offered at the UCM Summit Center in Lee's Summit. Students are assigned to a social work faculty member for advisement to ensure timely progress through the requirements for the degree, to explore the match between the student and the profession, to engage in career planning which may include graduate education, and to answer questions. Students are required to complete forty hours of volunteer work in an agency during the first semester of the junior year, and a 500-hour practicum in the last semester of the program. A formal admissions procedure is required which includes an application accompanied by an autobiographical essay, an updated transcript, three references, and an interview with the admissions committee during the second semester of the junior

year. The program requires effective oral and written communication skills, and courses are writing intensive. All courses required in the social work major must be completed with a grade of C or above.

### Accreditation

The Social Work Program is fully accredited by the Council on Social Work Education. Graduates of accredited programs are generally more desirable to employers, are eligible to apply for a baccalaureate social work license in Missouri and other states, and they are eligible to apply for advanced standing admission to graduate schools of social work.

### Student Organizations

Social work students are encouraged to participate in the Association of Social Work Students, which is open to any student interested in the social work profession, and the Phi Alpha Honor Society, UCM's chapter of the national social work honor society.

### To Learn More

For more information contact the Department of Communication Disorders and Social Work, Wood 005, UCM, Warrensburg, MO 64093; by email [socialwork@ucmo.edu](mailto:socialwork@ucmo.edu) or by phone at 660-543-4407.

For more information about the NASW Code of Ethics, [socialworkers.org/students/default.asp](http://socialworkers.org/students/default.asp)

For information about licensing requirements in Missouri, visit [pr.mo.gov/socialworkers.asp](http://pr.mo.gov/socialworkers.asp).

For information about licensing in other states, or the licensing exams, visit [aswb.org](http://aswb.org).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Social Work Major, B.S.W. Degree (48-847)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
General Education	12	SOC 1800 General Sociology**	3
<b>Semester Total</b>	<b>15</b>	General Education	9
AE 1400 Freshman Seminar*	1	<b>Semester Total</b>	<b>15</b>

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
PSY 1100 General Psychology**	3	BIOL 2010 Human Biology**	3
General Education MATH	3	SOWK 2600 Introduction to Social Welfare & Social Work	3
General Education***	3	General Education	3
Free Choice Electives	6	Free Choice Electives	7
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>16</b>

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
SOC 2805 Introduction to Social Research	3	SOC 3825 Race & Ethnic Relations	3
SOWK 3601 Social Work Practice & the Agency Experience	3	SOWK 3605 Methods of Inquiry & Evaluation for Social Workers	3
SOWK 3612 Human Behavior Across the Lifespan	3	SOWK 3610 Social Work Practice: Basic Skills	3
SOWK 4612 Human Behavior Social Systems	3	SOWK 4640 SW Practice: Intervention w/Communities & Orgs.	3
Free Choice Electives	5	Free Choice Electives#	6
<b>Semester Total</b>	<b>17</b>	<b>Semester Total</b>	<b>18</b>

**Apply for Admission to Social Work Program**

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
PSY 4440 Abnormal Psychology	3	ICAP 4478 Integrative Social Work Practicum Seminar**	3
SOWK 4610 Special Topics in Social Work or SOWK 4620 Social Services and Policy with Older Adults	3	SOWK 4660 Field Practicum	9
SOWK 4630 SW Practice: Intervention with Families & Groups	3	<b>Semester Total</b>	<b>12</b>
SOWK 4650 Social Policy & Economic Justice	3		
<b>Semester Total</b>	<b>12</b>		

**Social Work Major, B.S.W. Degree - 120 hours**

- \*AE 1400 (1 hr) is highly recommended for academic success. AE 1400 is a free choice elective. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*Required general education classes include: SOC 1800 General Sociology, PSY 1100 General Psychology, BIOL 2010 Human Biology, and ICAP 4478 Integrative Social Work Practicum Seminar.
- \*\*\*COMM 1000 Public Speaking is strongly recommended by the department. This course will fulfill the general education requirement for Oral Interpretation.
- #CTE 3060 Technical Writing or MGT 3325 Business Communication is strongly recommended by the department. This course will fulfill three hours of free choice electives.
- All Junior and Senior level courses (3000/4000) in the major are taught at the Summit Center (in Lee's Summit) only one semester each year. Check with the department for course projections if you are interested in taking classes at the Summit Center.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Arts, Humanities, and Social Sciences

Department of Communication and Sociology

# SOCIOLOGY

## BACHELOR OF ARTS DEGREE

Simply stated, sociology studies social life. Sociologists examine institutions such as the family, the economy, and religion. They look at how couples interact with each other and negotiate household chores. They look at the decline of family farms in rural areas. A sociologist might explore sources of social conflict between social classes, racial or ethnic groups, or between gender groups. They ask questions about the relationships between citizen groups and local governments, or between states and nations in the emerging global arena.

Sociologists use a variety of research tools to do their work. Spirituality and gender may be explored by using in-depth interviews. Researchers may study suicide behavior by looking at national statistical trends or conduct surveys to assess people's attitudes towards welfare reform. They may use participant observation to learn about urban gangs. Research specialties may include families, inequality, race and ethnic relations, gender, sports, culture, crime, delinquency, law, social change, work and economy, medicine and gerontology, religion, and communities.

UCM's degree program requires courses in sociological theory, research methods, social institutions or social inequality. Students are assigned to a sociology faculty member for advisement to ensure timely progress through the requirements for the major and to explore questions students may have about graduate study or employment after earning their degree.

Graduates in sociology are able to find positions in a range of areas because of their educational preparation in the field. Graduates in sociology are prepared with an emphasis on creative problem-solving and critical-thinking skills—skills all employers are seeking. Graduates learn about the implications of diversity for the workplace as well as other areas of social action, both nationally and internationally. Their understanding of human relationships within social groups prepares them for employment in various settings. Sociology graduates develop the skills to think abstractly, conduct research on questions of interest, analyze data, organize data, and communicate in both oral and written formats. Employment prospects include:

- human services
- community work
- corrections
- business
- college settings
- health services
- publishing and public relations
- government research

An undergraduate degree in sociology also prepares students for further graduate studies in sociology or other disciplines, such as law and public administration.

To receive a Bachelor of Arts in Sociology degree, students must complete the university's General Education Program requirements and the requirements for the sociology major. While a minor is not required, students are strongly encouraged to pursue a minor in an area of interest and/or as preparation for advanced or graduate study.

### Student Organizations

Two organizations are devoted to the interests and development of students who are pursuing a major or a minor in sociology. The Sociology Club and the Alpha Kappa Delta Honor Society present opportunities to interact with faculty and other students and to participate in academic seminars and conferences.

### Department Scholarships

Annually, the C. James Britton Scholarship is awarded to a departmental undergraduate with at least 90 earned semester hours or a graduate student. Students meeting the eligibility criteria are invited to apply during the fall semester; all applications are reviewed by the Scholarship Committee which makes the selection. In addition, there is the Billy Hu Scholarship which is targeted to International Graduate Students. The deadline for this scholarship is in the spring. Finally, Sociology offers the Pittman Outstanding Undergraduate in Sociology and Outstanding Graduate Students in Sociology awards.

### To Learn More

For more information, contact the Department of Communication and Sociology, Martin 136, University of Central Missouri, Warrensburg, MO 64093, email [sociology@ucmo.edu](mailto:sociology@ucmo.edu) or phone 660-543-4840.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Sociology Major, B.A. Degree (42-755)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
SOC 1800 General Sociology	3	MATH 1300 Basic Statistics	3
Modern Language Requirement*	3	SOC Major Elective	3
General Education	6	Modern Language Requirement*	3
<b>Semester Total</b>	<b>15</b>	General Education	3
AE 1400 Freshman Seminar**	1	<b>Semester Total</b>	<b>15</b>

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
SOC 2805 Introduction to Social Research#	3	SOC 2850 Institutions & Social Action or SOC Major Elective***	3
SOC 2845 Social Inequality or SOC Major Elective***	3	General Education	9
Modern Language Requirement*	3	Free Choice Electives or Minor Coursework+	3
General Education	6	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
SOC Major Elective (3000/4000 level)++	3	SOC 4860 Sociological Thought (spring only)	3
General Education	6	Free Choice Electives or Minor Coursework+	12
Free Choice Electives or Minor Coursework+	6	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
SOC 4890 Social Survey Research (Fall only)	3	General Education (ICAP/IGEN)	3
SOC 4895 Sociology Capstone Seminar (Fall only)	3	Free Choice Electives*** (3000/4000 level)++	12
Free Choice Electives*** (3000/4000 level)++	9	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		

**Sociology Major, B.A. Degree - 120 hours**

- \*Refer to the Bachelor's Degree Requirements section in the Undergraduate Catalog for the B.A. Modern Language requirement. This plan is based on three modern language courses and thus, 42 hours of free choice electives.
- \*\*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*\*Students must complete SOC 2845 or 2850 as part of the major curriculum. If SOC 2845 is not taken in the fall semester, SOC 2850 should be taken in the spring semester. Students are required to take one, but may complete the other as part of the 18 hours of SOC major electives.
- #Students pursuing a double major or minor who have already completed an upper-level research course may substitute that course for SOC 2805 with permission of the program coordinator.
- +This degree program includes 42-48 hours of free choice electives (hours vary due to B.A. Modern Language requirement); a minor is highly recommended by the department but is not required. The number of free choice electives required will vary based on general education choices and if a minor is chosen.
- ++UCM requires 30 hours overall of upper-level credits (3000/4000) for graduation. Twelve hours of upper-level credits are required in the major. This major contains 9 hours of required upper-level courses, students must choose an additional 3 hours of upper-level credits as part of the 18 hours of SOC major electives. To meet the 30 hours overall, be sure to include additional upper-level choices in your major electives, general education, and/or free choice electives.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Arts, Humanities, and Social Sciences

Department of Communication and Sociology

# SOCIOLOGY

## BACHELOR OF SCIENCE DEGREE

Simply stated, sociology studies social life. Sociologists examine institutions such as the family, the economy, and religion. They look at how couples interact with each other and negotiate household chores. They look at the decline of family farms in rural areas. A sociologist might explore sources of social conflict between social classes, racial or ethnic groups, or between gender groups. They ask questions about the relationships between citizen groups and local governments, or between states and nations in the emerging global arena.

Sociologists use a variety of research tools to do their work. Spirituality and gender may be explored by using in-depth interviews. Researchers may study suicide behavior by looking at national statistical trends or conduct surveys to assess people's attitudes towards welfare reform. They may use participant observation to learn about urban gangs. Research specialties may include families, inequality, race and ethnic relations, gender, sports, culture, crime, delinquency, law, social change, work and economy, medicine and gerontology, religion, and communities.

UCM's degree program requires courses in sociological theory, research methods, social institutions or social inequality. Students are assigned to a sociology faculty member for advisement to ensure timely progress through the requirements for the major and to explore questions students may have about graduate study or employment after earning their degree.

Graduates in sociology are able to find positions in a range of areas because of their educational preparation in the field. Graduates in sociology are prepared with an emphasis on creative problem-solving and critical-thinking skills—skills all employers are seeking. Graduates learn about the implications of diversity for the workplace as well as other areas of social action, both nationally and internationally. Their understanding of human relationships within social groups prepares them for employment in various settings. Sociology graduates develop the skills to think abstractly, conduct research on questions of interest, analyze data, organize data, and communicate in both oral and written formats. Employment prospects include:

- human services
- community work
- corrections
- business
- college settings
- health services
- publishing and public relations
- government research

An undergraduate degree in sociology also prepares students for further graduate studies in sociology or other disciplines, such as law and public administration.

To receive a Bachelor of Science in Sociology degree students must complete the university's General Education Program requirements and the requirements for the sociology major. While a minor is not required, students are strongly encouraged to pursue a minor in an area of interest and/or as preparation for advanced or graduate study.

### Student Organizations

Two organizations are devoted to the interests and development of students who are pursuing a major or a minor in sociology. The Sociology Club and the Alpha Kappa Delta Honor Society present opportunities to interact with faculty and other students and to participate in academic seminars and conferences.

### Department Scholarships

Annually, the C. James Britton Scholarship is awarded to a departmental undergraduate with at least 90 earned semester hours or a graduate student. Students meeting the eligibility criteria are invited to apply during the fall semester; all applications are reviewed by the Scholarship Committee which makes the selection. In addition, there is the Billy Hu Scholarship which is targeted to International Graduate Students. The deadline for this scholarship is in the spring. Finally, Sociology offers the Pittman Outstanding Undergraduate in Sociology and Outstanding Graduate Students in Sociology awards.

### To Learn More

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For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Sociology Major, B.S. Degree (43-756)**

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<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
SOC 1800 General Sociology	3	MATH 1300 Basic Statistics	3
General Education	9	SOC Major Elective	3
<b>Semester Total</b>	<b>15</b>	General Education	6
AE 1400 Freshman Seminar*	1	<b>Semester Total</b>	<b>15</b>

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
SOC 2805 Introduction to Social Research#	3	SOC 2850 Institutions & Social Action or SOC Major Elective**3	3
SOC 2845 Social Inequality or SOC Major Elective**	3	General Education	6
General Education	9	Free Choice Electives or Minor Coursework***	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
SOC Major Electives	6	SOC 4860 Sociological Thought (Spring only)	3
General Education	3	SOC Major Elective (3000/4000 level)+	3
Free Choice Electives or Minor Coursework***	6	Free Choice Electives or Minor Coursework***	9
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
SOC 4890 Social Survey Research (Fall only)	3	SOC Major Elective	3
SOC 4895 Senior Seminar in Public Sociology (Fall only)	3	General Education (ICAP/IGEN)	3
Free Choice Electives*** (3000/4000 level)+	9	Free Choice Electives*** (3000/4000 level)+	9
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

**Sociology Major, B.S. Degree - 120 hours**

- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*Students must complete SOC 2845 or 2850 as part of the major curriculum. If SOC 2845 is not taken in the fall semester, SOC 2850 should be taken in the spring semester. Students are required to take one, but may complete the other as part of the 18 hours of SOC major electives.
- \*\*\*This degree program includes 39 hours of free choice electives; a minor is highly recommended by the department but is not required. The number of free choice electives required will vary if a minor is chosen.
- #Students pursuing a double major or minor who have already completed an upper-level research course may substitute that course for SOC 2805 with permission of the program coordinator.
- +UCM requires 30 hours overall of upper-level credits (3000/4000) for graduation. Twelve hours of upper-level credits are required in the major. This major contains 9 hours of required upper-level courses, students must choose an additional 3 hours of upper-level credits as part of the 18 hours of SOC major electives. To meet the 30 hours overall, be sure to include additional upper-level choices in your major electives, general education, and/or free choice electives.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Education

Department of Educational Leadership and Human Development

# SPECIAL EDUCATION

## CROSS-CATEGORICAL DISABILITIES AREA, BACHELOR OF SCIENCE IN EDUCATION DEGREE

Special educators are highly trained professionals who provide specifically designed instruction and services to children and youth with disabilities. A small percentage of graduates work in private schools, residential facilities, hospitals, clinics and student homes. The majority, however, work in the public schools in:

**Self-contained classrooms.** Only 20 percent of students with disabilities spend most of their school day in a classroom specifically set aside for children with disabilities.

**Resource rooms.** Most special education teachers work in resource rooms, where they provide specialized instruction to students with disabilities who come in for part of the school day, either individually or in small groups.

**General education classrooms.** In an increasing number of schools, students with disabilities receive most, if not all, of their instruction in a general education classroom where special educators work closely with general education teachers.

### Occupational Outlook

Employment opportunities in special education teaching are expected to grow 21 to 35 percent through 2015, an increase of more than 150,000 positions. Typical salaries range between \$26,000 to more than \$65,000. A national shortage of well-trained, qualified professional special educators assures our graduates teaching positions in Missouri and across the nation.

### Special Education Requirements

Central Missouri's special education programs are concentrated around the Professional Standards and

Competencies established by the Council for Exceptional Children, the world's largest professional organization for special educators. Specialization options at UCM include early childhood special education, severe developmental disabilities, and mild/moderate cross-categorical disabilities. Although each area of specialization contains coursework specific to that categorical area, several fundamental courses are required of all special education majors as state certification requirements.

A special education program faculty adviser works closely with each student to ensure courses are taken in proper sequence and timely admissions to the program are made. Admission to the special education program entails completion of core foundation courses with at least a "C"; completion of 48 semester hours with at least six hours at UCM; an overall GPA of 2.5; successful completion of the College Basic Academic Skills Exam (C-BASE); and recommendation from the faculty upon successful completion of the program qualifying examination.

### Student Organizations

UCM's Student Council for Exceptional Children chapter is one of the largest and most active student CEC chapters in Missouri. Opportunities for involvement, networking, socialization and leadership abound in this pre-professional group for aspiring special educators.

### Faculty

UCM's special education faculty includes five full-time teacher

educators who have extensive backgrounds in the public schools as teachers and administrators. Actively engaged in research, scholarship and community service, these faculty members bring theory and practice together in classes that are small and interactive. Students get to know faculty from the very first course, and learn how technology and diversity are integral components of contemporary special education classrooms. All faculty members hold positions of leadership in state, regional and national professional organizations related to individuals with disabilities.

### Accreditations

The special education programs at Central Missouri are fully accredited by the National Council of Accreditation of Teacher Education programs (NCATE), the Council for Exceptional Children, the Missouri Department of Elementary and Secondary Education (DESE), and the Higher Learning Commission (formerly North Central Association of Colleges and Schools).

### To Learn More

Contact the coordinator of special education programs, Department of Educational Leadership and Human Development, Lovinger 4101, UCM, Warrensburg, MO 64093; phone 660-543-8497; or email [jneal@ucmo.edu](mailto:jneal@ucmo.edu).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Special Education: Cross Categorical Disabilities, B.S. in Ed. Degree (41-01784)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
<b>ENGL 1020 Composition I</b>	3	<b>ENGL 1030 Composition II</b>	3
<b>MATH 1620 Contemporary Mathematics</b>	3	ECEL 1310 Physics for Teachers or	
<b>POLS 1510 American Government</b>	3	ECEL 1320 Biology for Teachers*	3
<b>General Education Science with lab*</b>	4	EDSP 2100 Education of the Exceptional Child	2
General Education	2-3	HIST 1350 or 1351 History of the United States	3
<b>Semester Total</b>	<b>15-16</b>	General Education	3
AE 1400 Freshman Seminar**	1	<b>Semester Total</b>	<b>14</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ART 3910 Art for Elementary School	2	CD 4402 Language Acq. for Children w/Devel. Disabilities	2
ECEL 2310 Computer/Technology in Education	2	EDFL 3210 Methods of Reading Instruction	3
EDFL 2100 Foundations of Education	2	EDSP 4140 Collaborating with Families	3
FLDX 2150 Introductory Field Experience	1	GEOG 2212 World Geography	3
EDFL 2240 Educational Psychology	3	HED 3310 Methods in Elementary School Health	2
EDSP 4385 Introduction to Cross Categorical		General Education	3
Special Education	3	<b>Semester Total</b>	<b>16</b>
General Education	3		
<b>Semester Total</b>	<b>16</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
EDSP 4620 Evaluation of Ability & Achievement	3	EDFL 4220 Analysis/Correction Reading Disabilities	2
EDSP 4150 Career Development for Student w/Disabilities	2	EDFL 4250 Practicum in Reading	1
EDFL 3215 Teaching Reading Content	2	EDSP 4360 Behavior Management Techniques	2
MATH 3890 Concepts & Methods for Teaching Special Educ.	3	EDSP 4361 Practice in Behavior Management Techniques	1
PSY 2220 Child Psychology***	3	MATH 4890 Math for Special Education	2
Free Choice Electives	2-3	PSY 4230 Adolescent Psychology***	3
<b>Semester Total</b>	<b>16-17</b>	General Education	6
		<b>Semester Total</b>	<b>17</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester+</b>	<b>Hrs.</b>
EDSP 4421 Methods of Cross-Cat I: ID/OHI (fall only)	3	FLDX 4395 Student Teaching in Special Education I	8
EDSP 4422 Methods of Cross-Cat Dis. II: LD (fall only)	3	ICAP 4468 Student Teaching Second II	4
EDSP 4423 Methods of Cross-Cat Dis. III E/BD (fall only)	3	<b>Semester Total</b>	<b>12</b>
EDSP 4700 IEP and the Law	3		
HED 4330 First Aid & CPR for Educators	1		
<b>Semester Total</b>	<b>13</b>		

**Special Education: Cross Categorical Disabilities Major, B.S. in Ed. Degree - 120 hours**

- \*Students must have one biological and one physical science, for a total of seven credit hours. Option 1 = BIOL 1004 and ECEL 1310 or Option 2 = EASC 1004, CHEM 1104, or PHYS 1104 and ECEL 1320
- \*\* AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*\*With permission of advisor, students may substitute PSY 3220 Lifespan Psychology for both PSY 2220 and PSY 4230.
- +The courses listed for this semester constitute the professional education (student teaching) block. The student should not take any other courses during this semester.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before enrollment in professional education classes and student teaching. The application for student teaching is due approximately one year in advance.

## College of Education

Department of Educational Leadership and Human Development

# SPECIAL EDUCATION

## SEVERELY DEVELOPMENTALLY DISABLED AREA, BACHELOR OF SCIENCE IN EDUCATION DEGREE

Special educators are highly trained professionals who provide specifically designed instruction and services to children and youth with disabilities. A small percentage of graduates work in private schools, residential facilities, hospitals, clinics and student homes. The majority, however, work in the public schools in:

**Self-contained classrooms.** Only 20 percent of students with disabilities spend most of their school day in a classroom specifically set aside for children with disabilities.

**Resource rooms.** Most special education teachers work in resource rooms, where they provide specialized instruction to students with disabilities who come in for part of the school day, either individually or in small groups.

**General education classrooms.** In an increasing number of schools, students with disabilities receive most, if not all, of their instruction in a general education classroom where special educators work closely with general education teachers.

### Occupational Outlook

Employment opportunities in special education teaching are expected to grow 21 to 35 percent through 2015, an increase of more than 150,000 positions. Typical salaries range between \$26,000 to more than \$65,000. A national shortage of well-trained, qualified professional special educators assures our graduates teaching positions in Missouri and across the nation.

### Special Education Requirements

Central Missouri's special education programs are concentrated around the Professional Standards and

Competencies established by the Council for Exceptional Children, the world's largest professional organization for special educators. Specialization options at UCM include early childhood special education, severe developmental disabilities, and mild/moderate cross-categorical disabilities. Although each area of specialization contains coursework specific to that categorical area, several fundamental courses are required of all special education majors as state certification requirements.

A special education program faculty adviser works closely with each student to ensure courses are taken in proper sequence and timely admissions to the program are made. Admission to the special education program entails completion of core foundation courses with at least a "C"; completion of 48 semester hours with at least six hours at UCM; an overall GPA of 2.5; successful completion of the College Basic Academic Skills Exam (C-BASE); and recommendation from the faculty upon successful completion of the program qualifying examination.

### Student Organizations

UCM's Student Council for Exceptional Children chapter is one of the largest and most active student CEC chapters in Missouri. Opportunities for involvement, networking, socialization and leadership abound in this pre-professional group for aspiring special educators.

### Faculty

UCM's special education faculty includes five full-time teacher

educators who have extensive backgrounds in the public schools as teachers and administrators. Actively engaged in research, scholarship and community service, these faculty members bring theory and practice together in classes that are small and interactive. Students get to know faculty from the very first course, and learn how technology and diversity are integral components of contemporary special education classrooms. All faculty members hold positions of leadership in state, regional and national professional organizations related to individuals with disabilities.

### Accreditations

The special education programs at Central Missouri are fully accredited by the National Council of Accreditation of Teacher Education programs (NCATE), the Council for Exceptional Children, the Missouri Department of Elementary and Secondary Education (DESE), and the Higher Learning Commission (formerly North Central Association of Colleges and Schools).

### To Learn More

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**Special Education: Severely Developmentally Disabled Major, B.S. in Ed. Degree (41-02784)**

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<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
<b>ENGL 1020 Composition I</b>	3	<b>ENGL 1030 Composition II</b>	3
<b>MATH 1620 Contemporary Mathematics</b>	3	ECEL 1310 Physics for Teachers or	
<b>POLS 1510 American Government</b>	3	ECEL 1320 Biology for Teachers*	3
<b>General Education Science with Lab*</b>	4	EDSP 2100 Education of the Exceptional Child	2
General Education	2-3	GEOG 2212 World Geography	3
<b>Semester Total</b>	<b>15-16</b>	General Education	6
AE 1400 Freshman Seminar**	1	<b>Semester Total</b>	<b>17</b>

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
CD 4402 Language Acquisition for Children w/Dev. Disabilities	2	ART 3910 Art for Elementary School	2
ECEL 2310 Computer/Technology in Education	2	EDSP 4140 Collaborating with Families	3
EDFL 2100 Foundations of Education	2	EDSP 4350 Augmentative & Alternative Communication	3
FLDX 2150 Introductory Field Experience	1	<b>HIST 1350 or 1351 History of the United States</b>	3
EDFL 2240 Educational Psychology	3	PE 4340 Adaptive Physical Education	3
EDSP 4370 Screening, Diagnosing, & Prescribing Instruction	3	<b>Semester Total</b>	<b>14</b>
NUR 4060 Physical & Health of Medically Fragile Child	3		
<b>Semester Total</b>	<b>16</b>		

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
EDSP 4310 Introduction to Students with SDD#	2	EDSP 4360 Behavior Management Techniques	2
EDSP 4330 Curr. & Methods for Teaching Students w/SDD I#	3	EDSP 4361 Practice in Behavior Management Techniques	1
PSY 2220 Child Psychology***	3	EDSP 4450 Curr. & Methods for Teaching Students w/ SDD II#	3
MATH 3890 Concepts & Methods of Teaching for Special Educ.	3	EDSP 4470 Perceptual Motor Training for Students w/Dis.	2
General Education	6	EDSP 4620 Evaluation of Ability & Achievement	3
<b>Semester Total</b>	<b>17</b>	MATH 4890 Math for Special Education	2
		<b>Semester Total</b>	<b>13</b>

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester+</b>	<b>Hrs.</b>
EDFL 3210 Methods of Reading Instruction	3	FLDX 4395 Student Teaching in Special Education I	8
EDSP 4700 IEP and the Law	3	ICAP 4468 Student Teaching II	4
HED 3310 Methods in Elementary School Health	2	<b>Semester Total</b>	<b>12</b>
HED 4330 First Aid and CPR for Educators	1		
PSY 4230 Psychology of Adolescence***	3		
General Education	3		
Free Choice Elective	0-1		
<b>Semester Total</b>	<b>15-16</b>		

**Special Education: Severely Developmentally Disabled Major, B.S. in Ed. - 120 hours**

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- \*\* AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*\*With permission of advisor, students may substitute PSY 3220 Lifespan Psychology for both PSY 2220 and PSY 4230.
- #These SDD courses (EDSP 4310, 4330, and 4450) are only offered every other year. Please contact your faculty advisor to make sure you are planning to take the courses in the appropriate semester to stay on track. EDSP 4310 and 4330 are fall semester only, and EDSP 4450 is spring semester only.
- +The courses listed for this semester constitute the professional education (student teaching) block. The student should not take any other courses during this semester.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before enrollment in professional education classes and student teaching. The application for student teaching is due approximately one year in advance.

## College of Education

Department of Educational Leadership and Human Development

# SPECIAL EDUCATION

## EARLY CHILDHOOD AREA, BACHELOR OF SCIENCE IN EDUCATION DEGREE

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**Self-contained classrooms.** Only 20 percent of students with disabilities spend most of their school day in a classroom specifically set aside for children with disabilities.

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### Occupational Outlook

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educators who have extensive backgrounds in the public schools as teachers and administrators. Actively engaged in research, scholarship and community service, these faculty members bring theory and practice together in classes that are small and interactive. Students get to know faculty from the very first course, and learn how technology and diversity are integral components of contemporary special education classrooms. All faculty members hold positions of leadership in state, regional and national professional organizations related to individuals with disabilities.

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### To Learn More

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**Special Education: Early Childhood Major, B.S. in Ed. Degree (41-03784)**

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<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
<b>ENGL 1020 Composition I</b>	3	ECEL 1310 Physics for Teachers or	
<b>HIST 1350 or 1351 History of the United States</b>	3	ECEL 1320 Biology for Teachers*	3
<b>MATH 1620 Contemporary Mathematics</b>	3	EDSP 2100 Education of the Exceptional Child	2
<b>General Education Science with lab*</b>	4	<b>ENGL 1030 Composition II</b>	3
General Education	2-3	GEOG 2212 World Geography	3
<b>Semester Total</b>	<b>15-16</b>	General Education	6
		<b>Semester Total</b>	<b>17</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
CFD 1220 Child Development	3	D&N 2310 Early Childhood Nutrition & Health	2
CFD 1230 Observation of Children	2	EDSP 3150 Community & Family Resources	2
ECEL 2310 Computer/Technology in Education	2	EDSP 3151 Community & Family Resources Practicum	1
EDFL 2240 Educational Psychology	3	EDSP 4140 Collaborating with Families	3
EDFL 2100 Foundation of Education	2	<b>POLS 1510 American Government</b>	3
FLDX 2150 Introductory Field Experience	1	General Education	6
EDSP 4320 Intro. to Early Childhood Special Educ. (fall only)	3	<b>Semester Total</b>	<b>17</b>
<b>Semester Total</b>	<b>16</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
CD 2000 The Bases of Speech & Language	2	EDFL 3210 Methods of Reading Instruction	3
EDSP 4370 Screening, Diagnosing, & Prescribing Instruction	3	EDSP 4350 Augmentative & Altern. Comm. (spring only)	3
EDSP 4620 Evaluation of Ability & Achievement	3	EDSP 4360 Behavior Management Techniques	2
HED 4330 First Aid & CPR	1	EDSP 4361 Practicum in Behavior Management Techniques	1
MATH 3890 Concepts & Methods for Teaching Special Ed.	3	EDSP 4440 Curriculum & Methods ECSE (spring only)	3
General Education	3	EDSP 4470 Perceptual Motor Training for Students w/Dis. (spring only)	2
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>14</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester**</b>	<b>Hrs.</b>
ART 3910 Art for Elementary School	2	FLDX 4395 Student Teaching in Special Education I	6
ECEL 3220 The Teaching of Language Arts	3	FLDX 4396 Student Teaching in Special Education II	6
EDFL 3410 Children's Literature	2	<b>Semester Total</b>	<b>12</b>
EDSP 4700 IEP and the Law	3		
IGEN 3468 Community, School & Family Connections	3		
General Education	3		
<b>Semester Total</b>	<b>16</b>		

**Special Education: Early Childhood Major, B.S. in Ed. Degree – 122 hours**

- \*Students must have one biological and one physical science, for a total of seven credit hours. Option 1 = BIOL 1004 and ECEL 1310 or Option 2 = EASC 1004, CHEM 1104, or PHYS 1104 and ECEL 1320.
- \*\*The courses listed for this semester constitute the professional education (student teaching) block. The student should not take any other courses during this semester.
- Please contact your faculty advisor to make sure you are planning to take the courses in the appropriate semester to stay on track. EDSP 4320 is fall semester only, and EDSP 4350, 4440, and 4470 are spring semester only.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before enrollment in professional education classes and student teaching. The application for student teaching is due approximately one year in advance.



## College of Arts, Humanities, and Social Sciences

Department of Theatre and Dance

# SPEECH COMMUNICATION AND THEATRE

## BACHELOR OF SCIENCE IN EDUCATION DEGREE

The Bachelor of Science in Education degree program is designed for students who would like to become secondary speech communication and theatre teachers. In addition to providing teacher certification in speech communication and theatre, this program emphasizes the humanities, fine arts, education and forensics. All teacher education programs are accredited by the National Council for Accreditation of Teacher Education and the Missouri Department of Elementary and Secondary Education.

Core requirements for this program include theatre classes such as acting, stagecraft and directing, as well as speech communication classes such as foundations of communication theory, small group communication, argumentation and debate, nonverbal communication, and forensics.

Theatre students at UCM are offered acting and technical experiences in contemporary comedies, dramas, the classics and musicals. Professional experience may be gained through work with the Central Missouri Repertory summer company and through student-oriented workshops, seminars and internships.

### Production Opportunities

The theatre production program places the spotlight on undergraduates. Students begin work immediately in a busy and varied program. Performance opportunities are available in 25 to 30 productions each school year. Countless design, technical and crew positions are offered. Each semester there are two to three Mainstage productions, and students design and direct Studio Theatre one-act plays.

A world premiere of a new Children's Theatre script is staged each year for the public and for area school children. In addition, students may become involved in acting, directing and writing plays for experimental Black Box theatre productions. Each summer Central Missouri Repertory creates

professional opportunities for university theatre students.

### Facilities

Theatre students at UCM work in one of the most beautiful and modern theatre buildings in the Midwest, the James L. Highlander Theatre. The 442-seat continental, wedge-shaped auditorium has excellent acoustics and sight lines and faces a large, fully rigged stage. The theatre is equipped with the latest sound equipment and a 174-dimmer-per-circuit computerized lighting system. A motorized orchestra apron lift allows for flexible staging. Well-equipped costume and scene shops and spacious dressing and makeup rooms adjoin the stage area.

University Housing has worked with the Department of Theatre and Dance to create a Theatre Special Housing Interest Program (SHIP) area in Nickerson Hall designed for students interested in or majoring in theatre. This space includes a Black Box experimental performance space.

### About the Faculty

At Central Missouri you will work side by side with a faculty of extraordinary educators and professional theatre and dance artists. The faculty at UCM are dedicated to providing students with the opportunity to find their unique voice as artists and share their visions, curiosities, bravery, and talents with a collaborative team that is the heart and soul of any theatrical, dance, and music production. Our faculty are leaders whose experience and professional work has a strong voice in state, regional, and the national arenas. They are active members of Actors Equity Association, Screen Actors Guild, USITT, Speech and Theatre Association of Missouri, Kennedy Center American College Theatre Festival and the Association for Theatre in Higher Education. Our faculty teach and supervise courses in performance, directing stagecraft, theatre technology, design, theatre management, playwriting,

theatre history, choreography, and all levels of dance. Students are assigned to a music theatre faculty member who personally assists in the planning of their programs.

### Central Missouri Repertory

Theatre students at UCM have the opportunity to work in a professional summer repertory company that performs on campus and also tours with a children's show throughout west-central Missouri. Providing summer theatre entertainment since 1981, Central Missouri Repertory offers students professional experience working with artists from outside the Department of Theatre and Dance. Auditions and interviews are held during the spring semester for paid, unpaid and university-credit positions.

### Scholarships

The Department of Theatre and Dance offers several scholarships and awards to both incoming freshman and transfer students as well as returning students. Department of Theatre and Dance scholarships include Theatre Achievement Awards, and Theatre Ambassador, Highlander, Kuhn, See, New Theatre Guild, Muller, Devenny, Pearce, Ulrich, and Bergman Scholarships. In the Department of Theatre and Dance, students can both work and learn through student employment opportunities in the scenic and costume shops.

### To Learn More

For more information contact the Department of Theatre and Dance, Martin Building 113, UCM, Warrensburg, MO 64093; call 660-543-4020; or visit the department's web pages at [ucmo.edu/theatre](http://ucmo.edu/theatre).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Speech Communication and Theatre Major, B.S. in Ed. Degree (41-362)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

**Freshman Year - Fall Semester****ENGL 1020 Composition I**

THEA 1100 Oral Interpretation

THEA 1500 Acting

THEA 1600 Stagecraft

**General Education MATH****Semester Total****Hrs.**

3

3

3

3

3

**15****Freshman Year - Spring Semester****ENGL 1030 Composition II****HIST 1350 or 1351 History of the United States**

THEA 2400 Discovering Theatre

THEA 2610 Design Fundamentals

**General Education Science w/lab\*****Semester Total****Hrs.**

3

3

3

3

4

**16****Sophomore Year - Fall Semester**

COMM 2330 Communication in Small Groups/Teams

COMM 2340 Argumentation &amp; Debate (fall only)

EDFL 2100 Foundations of Education

FLDX 2150 Introductory Field Experience

EDFL 2240 Educational Psychology

POLS 1510 American Government

Minor Coursework

**Semester Total****Hrs.**

3

3

2

1

3

3

3

**18****Sophomore Year - Spring Semester**

COMM 1000 Public Speaking

COMM 2100 Introduction to Communication Theory

EDSP 2100 Education of the Exceptional Child

THEA 3700 Directing

Minor Coursework

General Education

**Semester Total****Hrs.****3**

3

2

3

3

2-3

**16-17****Junior Year - Fall Semester**

COMM 3000 Film Appreciation

COMM 3325 Nonverbal Communication (fall only)

THEA 4400 Literature &amp; History of the Theatre I

Minor Coursework

General Education

**Semester Total****Hrs.**

3

2

3

3

6

**17****Junior Year - Spring Semester**

COMM 1200 Introduction to Mass Communication

EDFL 4300 Educational Measurement &amp; Evaluation

PSY 4230 Psychology of Adolescence

THEA 3630 Studio Theatre I

WS 2000 Race, Class, and Gender

Minor Coursework

General Education

**Semester Total****Hrs.**

3

2

3

1

3

3

3

**18****Senior Year - Fall Semester**

EDFL 3500 Secondary Teaching &amp; Behavior Management

FLDX 3550 Practicum in Secondary Instruction

EDFL 4210 The Teaching of Reading in the Secondary School

IGEN 3232 Media Literacy

THEA 4730 Studio Theatre II

THEA 4984 Methods of Teaching Speech &amp; Theatre

Minor Coursework

**Semester Total****Hrs.**

3

1

2

3

1

2

6

**18****Senior Year - Spring Semester\*\***

FLDX 4595 Student Teaching Secondary I

ICAP 4468 Student Teaching Secondary II

THEA 4920 Secondary Field Experience II

THEA 4930 Co-Curricular Practicum

**Semester Total****Hrs.**

5

4

1

2

**12****Speech Communication and Theatre Major, B.S. in Ed. Degree - 130 hours**

- \*Students pursuing a B.S. in Ed. must complete a biology prefix. The second science course must be a different prefix from the list in the Undergraduate Catalog. One of the two courses must have a laboratory.
- \*\*The courses listed for this semester constitute the professional education (student teaching) block. The student should not take any other courses during this semester.
- The above degree plan is based on an 18-hour minor.
- Students must pass the Entry Level General Knowledge and Skills Assessment required by the Missouri Department of Elementary and Secondary Education (DESE) as a requirement for Admission to Teacher Education. Students should plan to take the assessment in the semester they enroll in EDFL 2100 & FLDX 2150.
- See [ucmo.edu/cert](http://ucmo.edu/cert) for statement and information (including application) on admission to teacher education. Full admission is required before enrollment in professional education classes and student teaching. The application for student teaching is due approximately one year in advance.

## Harmon College of Business and Professional Studies

Department of Communication Disorders and Social Work

# SPEECH-LANGUAGE PATHOLOGY

## BACHELOR OF SCIENCE DEGREE

University of Central Missouri's program in communication disorders provides professional education for future speech-language pathologists and audiologists. Students learn about the diagnosis and treatment of human communication disorders, related research, and how to directly and indirectly assist people with communication disabilities.

The program includes theory and practical application coursework, as well as supervised clinical experiences.

Speech-language pathologists evaluate, diagnose and treat human communication disorders in individuals of all ages. These include disorders of articulation, voice, stuttering, language and swallowing. Speech-language pathologists work closely with teachers, physicians, psychologists, social workers, rehabilitation counselors and other members of an interdisciplinary team. In addition to focusing on the evaluation, diagnosis and treatment of communication disorders, speech-language pathologists develop new methods and equipment to evaluate communication disorders, establish more effective treatment programs, and investigate behavioral patterns associated with communication disorders. The entry level degree for a practicing speech-language pathologist is the master's degree. The Department of Communication Disorders and Social Work at UCM has an outstanding graduate program.

Undergraduate requirements include 59 semester hours regarding the study of speech and hearing anatomy and neurology, phonetics, language and articulation development, assessment and intervention in diverse populations,

hearing measurement, aural rehabilitation, and clinical management and treatment for communication disorders.

Undergraduate students in communication disorders participate in clinical practica during their last two semesters, where students provide supervised treatment of individuals with speech and/or hearing disorders. With an undergraduate degree, an individual may pursue a master's degree in fields such as speech-language pathology, audiology, special education, general education, early intervention, rehabilitation, mental health, public health, medical fields or health law. A person holding an undergraduate degree in communication disorders may gain employment as a registered speech-language pathology assistant or may seek careers developing, promoting or selling products for use in the clinical, educational, health care, or rehabilitation fields. Graduates may work in related fields such as rehabilitation counseling, job coaching or academic advising. They may serve as clinical assistants and support staff, clinical intake specialists and technology support staff.

Speech-language pathologists often work with individuals with hearing impairments. A solid knowledge about audiology is important and is reflected in the coursework and clinical training that is taught and supervised by audiology faculty.

### Special Facilities

UCM's Welch-Schmidt Center for Communication Disorders has eight treatment rooms with two-way mirrors, video and audio monitoring, an early childhood preschool for children with speech and language disorders, and a voice and swallowing

laboratory including ridged and flexible endoscopy, a FEES station and instrumentation to measure airflow/pressure, movement, force and voice acoustics. The center also contains a Functional Communication Clinic, an Augmentative and Alternative Communication (ACC) Clinic, containing an array of state-of-the-art AAC devices, and a Feeding and Swallowing Clinic. These clinics provide students with special opportunities to move learning from the classroom to a therapeutic setting.

There are two audiologic suites where assessments, to include hearing evaluations, immittance audiometry, video otoscopy, and otoacoustic emissions, are performed. The hearing aid laboratory is equipped with the latest technology for the fitting and dispensing of hearing instruments.

A variety of current assessment and treatment materials are available for students. Computers and software to support clinical education are located in the treatment rooms, labs, and in the student clinician workroom.

### To Learn More

For more information, contact the Department of Communication Disorders and Social Work, Martin 34 UCM, Warrensburg, MO 64093; call 660-543-4993; email [comdisorders@UCM.edu](mailto:comdisorders@UCM.edu); fax 660-543-8234; or visit the department's web site at [ucmo.edu/comdisorders](http://ucmo.edu/comdisorders).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Speech-Language Pathology Major, B.S. Degree (43-273)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
BIOL 1003 or 1004 Introduction to the Sciences: Ecology	3-4	CD 2301 American Phonetics	3
CD 1000 Introduction to Communication Disorders	3	ENGL 1030 Composition II	3
CD 1800 Observation of Clinical Practicum in CD	1	General Education	9
ENGL 1020 Composition I	3	<b>Semester Total</b>	<b>15</b>
General Education	3		
<b>Semester Total</b>	<b>13-14</b>		
AE 1400 Freshman Seminar (CD Section)*	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
CD 3301 Anatomy & Physiology of Speech & Swallowing	2	CD 3304 Speech Science	3
COMM 1000 Public Speaking	3	General Education	9
PSY 1100 General Psychology	3	Free Choice Elective**	3
General Education	8-9	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>16-17</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
CD 1401 American Sign Language I	3	CD 3503 Principles of Clinical Management	3
CD 4401 Language Development	2	CD 4505 School-age Issues in Language & Literacy	3
CD 4501 Basic Neuroscience for Speech-Language Path.	3	CD 4706 Hearing Measurement	3
CD 4504 Introduction to Articulation & Phonological Disorders	3	HED 3180 Basic First Aid/CPR/AED for Health Care Professionals	1
CD 4701 Introduction to Audiology	3	Free Choice Electives**	6
PSY 3220 Lifespan Development	3	<b>Semester Total</b>	<b>16</b>
<b>Semester Total</b>	<b>16</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
CD 4102 Couns. Persons w/Comm. Disorders & Their Families	2	CD 4512 Best Practices in Early Childhood Intervention	3
CD 4103 Intro. to Evidence Based Practice in Comm. Disorders	2	CD 4803 Undergraduate Clinical Practicum II	1
CD 4510 Multicultural Issues in Communication Disorders	2	PSY 4520 Statistics for the Behavioral Sciences	3
CD 4708 Aural Rehabilitation	3	General Education (IGEN/ICAP)	3
CD 4802 Undergraduate Clinical Practicum I	1	Free Choice Electives**	5
EDSP 4700 IEP and the Law	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>13</b>		

**Speech-Language Pathology Major, B.S. Degree - Minimum hours to graduate 120**

- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*The number of free choice electives required will depend on selections made in the major and general education.
- Students must contact the Undergraduate Advisor in the Communication Disorders program for admission into the program.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Health, Science, and Technology

Department of Nutrition and Kinesiology

# SPORT MANAGEMENT

## BACHELOR OF SCIENCE DEGREE

UCM has an undergraduate degree in Sport Management that meets the demands of the profession and exceeds the expectations of students. The Sport Management degree, developed and administered by the Department of Nutrition and Kinesiology, puts emphasis on effective and successful sport management principles and applications, rather than business concepts applied to sport. Graduates will leave the program well-prepared to pursue career goals as well as additional academic training.

### About the Program

The UCM undergraduate Sport Management degree offers outstanding experiential learning opportunities. Being established in a strategically favorable geographic location, UCM is close to many sport management agencies and practicing professionals. Students have ready-access to many high school and college teams as well as hundreds of independently owned sport-oriented businesses. Students will obtain "real-world" experiences from many of their classes and related experiences. Opportunities to work within sport organizations or interact with agency representatives in a class session, seminar, or workshop will not only assist students in what they know, but also facilitate professional

networking. Sport Management faculty members provide personal attention to students in a way that students not only enjoy the educational journey, but also will advance toward a meaningful career after graduation.

### Worldly Perspective

Students with a desire to study abroad have a variety of opportunities available through the University of Central Missouri. New Zealand and the United Kingdom have opportunities in Sport Management. Students interested in this opportunity are encouraged to visit the International Center (Ward Edwards 1200) and with their major advisor to determine classes compatible with University and major course requirements.

### Career Opportunities

Sport Management jobs, particularly in the Kansas City area, have shown an increase of some 24% since 2008. Not only in Kansas City, but elsewhere around the country, Sport Management jobs include working within professional sports agencies, youth sport organizations, university, college, and high school athletic departments, and a host of related community based health and recreation agencies and programs. Overall, job placement at the

University of Central Missouri has been consistently better than peer institutions. UCM's six-month job-placement rate for all combined undergraduates is 94 percent, and, reflecting our excellent financial support packages, our students benefit from one of the lowest student-debt ratios in the state.

### Scholarships

There are several scholarships available to Sport Management majors in addition to scholarships and aid available to all eligible UCM students. Please enquire with the Department Chair (Dr. Mike Godard) at (660) 543-4256 about applications for additional scholarships available to Sport Management Majors.

### To Learn More

For more information about majoring in sport management, contact the Department of Nutrition and Kinesiology, Morrow 125, UCM, Warrensburg, MO 64093 or call 660-543-4256. You can visit the department's home page at [ucmo.edu/nutrition](http://ucmo.edu/nutrition).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Sport Management Major, B.S. Degree (43-612)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester (apply to major)</b>	<b>Hrs.</b>
CIS 1600 Business Information Management	3	COMM 1000 Public Speaking	3
General Education	12	ECON 1010 Principles of Macroeconomics	3
<b>Semester Total</b>	<b>15</b>	General Education	9
AE 1400 Freshman Seminar*	1	<b>Semester Total</b>	<b>15</b>

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ECON 1011 Principles of Microeconomics	3	PE 4740 Legal Liability in Fitness/Wellness, PE, Rec., & Sprt. Set.	2
SM 3100 Introduction to Sport Management	3	General Education	7
General Education	9	Free Choice Electives	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
MGT 3315 Management of Organizations	3	IGEN 3472 Sport in American Life	3
MKT 3405 Marketing Policy	3	SM 4200 Applied Sport Marketing	3
SM 3300 Leisure, Sport, and Tourism	3	SM 4300 Recreational Sports Management	3
SM 4700 Sport Facility Management	3	Free Choice Electives	6
Free Choice Electives	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
ECON 4054 Sport Economics	3	SM 4220 Sport Sponsorship and Retention	3
SM 4210 Sport and Media	3	SM 4500 Sport Leadership	3
SM 4400 Sport Communication	3	SM 4720 Managing Sporting Events	3
SM 4900 Senior Seminar in Sport Management	3	Free Choice Electives	3
<b>Semester Total</b>	<b>12</b>	<b>Semester Total</b>	<b>12</b>

<b>Senior Year - Summer Semester</b>	<b>Hrs.</b>
PE 4765 Internship	6
<b>Semester Total</b>	<b>6</b>

**Sport Management Major, B.S. Degree - 120 hours**

- AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Arts, Humanities, and Social Sciences

Department of Art & Design

# STUDIO ART: CERAMICS

## BACHELOR OF FINE ARTS DEGREE

University of Central Missouri students majoring in studio art and pursuing the Bachelor of Fine Arts (BFA) in the areas of either Ceramics, Illustration, Painting, Printmaking, or Sculpture will be expected to demonstrate the highest level of ability in foundation art courses and clearly excel in their chosen area of emphasis.

Studio majors who earn the BFA degree in one of these areas often pursue careers as college or university professors by continuing their education and earning the necessary graduate degrees. Others may work as freelance artists, and in related fields that allow for a lifetime of artistic production.

Studio classes emphasize a strong beginning in foundation art. Upper-level courses push students to specialize in their chosen area of emphasis: ceramics, painting, printmaking, or sculpture. Students use traditional and contemporary forms of expression to develop their unique visual language. Studio art majors in ceramics, painting, printmaking, and sculpture pursue exhibiting their works in museums, commercial art galleries, corporate collections and private homes. If they achieve at a high enough level, their artwork may be commissioned on request from clients, or sold either directly by the artist or through private art galleries or dealers.

Employment of artists and related workers is expected to grow as fast as the average for all occupations.

Because the arts attract many talented people with creative ability, the number of aspiring artists continues to grow.

### Facilities

Studio art majors in ceramics, painting, printmaking, and sculpture at UCM find excellent facilities, individualized working spaces and nationally acclaimed faculty mentors. The department beautifully renovated Gallery of Art & Design schedules diverse exhibitions and provides students opportunities to exhibit their own work, and the opportunity to win awards and scholarship funding through competitive exhibitions of student work. UCM offers studio art majors, and others, a solid visual arts foundation in a richly diverse and creative environment.

### Accreditation

University of Central Missouri is accredited by the National Association of Schools of Art and Design (NASAD). UCM is the only state-supported 4-year school in Missouri with such accreditation. UCM has held NASAD accreditation continuously since 1986. Of the approximately 2,000 college art programs nationwide, NASAD has approved less than 15 percent, based on proven rigor and content.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide

assistance with writing cover letters and resumes and offer a career library, mock interviews, and career counseling. The office also serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students](http://ucmo.edu/career/students).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### For more information

To learn more, contact the Department of Art & Design, Art Center 120, UCM, Warrensburg, MO 64093; call 660-543-4481; or visit the department's web site at [ucmo.edu/art](http://ucmo.edu/art).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Studio Art Major (Ceramics Area), B.F.A. Degree (47-263)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ART 1110 Drawing I	3	ART 1120 Drawing II	3
ART 1315 2-D Design	3	ART 1325 Color and Design	3
ART 1800 Ideas & the Visual Arts	3	ART 2412 Ceramics I	3
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
General Education	3	General Education	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ART 1815 Art History Survey I (fall) or ART 1835 Survey of Non-West Art (spring)	3	ART 1825 Art History Survey II (spring)	3
ART 2335 3-D Design	3	ART 2420 Sculpture I	3
ART 3209 Figure Construction	3	ART 2710 Printmaking I	3
ART 3412 Ceramics II	3	ART 3412 Ceramics II	3
General Education	3	General Education	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>18</b>

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
ART 2511 Painting I	3	ART 4412 Ceramics III	3
ART 3110 Drawing III	3	ART 4850 20th Century Art & Architecture (fall) or ART 4860 Contemporary Art & Design (spring)	3
ART 3412 Ceramics II	3	ART Electives*	6
ART Elective*	3	General Education	3
General Education	6	General Education	3
<b>Semester Total</b>	<b>18</b>	<b>Semester Total</b>	<b>15</b>

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
ART 4412 Ceramics III	3	ART 4412 Ceramics III	3
ART Electives*	6	ART 4020 Studio Seminar	3
General Education	6	ICAP 4221 Artists in Contemporary Society	3
<b>Semester Total</b>	<b>15</b>	General Education	6
		<b>Semester Total</b>	<b>15</b>

**Studio Art Major (Ceramics Area), B.F.A. Degree - 126 hours**

- \*Students must choose 15 hours of ART major electives.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Arts, Humanities, and Social Sciences

Department of Art & Design

# STUDIO ART: ILLUSTRATION

## BACHELOR OF FINE ARTS DEGREE

Through the University of Central Missouri's Bachelor of Fine Arts (BFA) degree in Studio Art, with an emphasis in Illustration, students develop their creative talents and technical skills to become illustrators.

Students master creative problem solving, conceptual and aesthetic judgment, and the use of traditional and digital techniques through instruction from highly experienced faculty and from hands-on experience in studios and laboratories.

### Traditional and Electronic Media

The Illustration Emphasis Area stresses mastery of traditional media in drawing and painting, but students are also encouraged to use 3D media when the idea warrants this approach. Students also learn to use the computer as an art tool.

In early program area classes Studio Art, Illustration majors follow the same path as Graphic Design majors, allowing them to learn basic graphic design skills that make intensive use of the computer. In this way students come to better understand how the illustrator's job relates to that of the graphic designer and the teamwork that is an important part of work in both fields.

### Career Opportunities

There are career opportunities available globally and for a wide range of salaries. Work assignments include illustration executed for

printed and web advertising, entertainment, and technical fields. The Illustration program serves the needs of a changing industry and graduates hold fulfilling employment across the nation and in many foreign countries. The combination of talent, motivation, program content, and excellent instruction continues to serve our Illustration students' career objectives well.

### State-of-the Art Facilities

For their work using electronic technology, students utilize labs containing up-to-date Macintosh computers, software, scanners, Wacom tablets, printers and other peripherals that are standard in their career field.

### Accreditation

UCM's Department of Art & Design is accredited by the National Association of Schools of Art and Design (NASAD). UCM is the only state-supported four-year school in Missouri with such accreditation. UCM has held NASAD accreditation since 1986. Of the approximately 2,000 college art programs nationwide, NASAD has approved less than 15 percent, based on proven rigor and content.

### Career Services

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library, mock interviews, and career counseling. The office also serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students/](http://ucmo.edu/career/students/).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### For More Information

To learn more contact the Department of Art & Design, Art Center 120, UCM, Warrensburg, MO 64093; call 660-543-4481; or visit the department's web site at [ucmo.edu/art](http://ucmo.edu/art).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Studio Art Major (Illustration Area), B.F.A. Degree (47-263)**

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<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ART 1110 Drawing I	3	ART 1120 Drawing II	3
ART 1315 2-D Design	3	ART 1325 Color and Design	3
ART 1800 Ideas & the Visual Arts	3	ART Elective*	3
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
General Education	3	General Education	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ART 1815 Art History Survey I (fall only) or ART 1835 Survey of Non-Western Art History (spring only)	3	ART 1825 Art History Survey II	3
ART 2335 3-D Design	3	ART 2511 Painting I	3
ART 2610 Introduction to Graphic Design & Illustration	3	ART 2710 Printmaking I	3
ART 3610 Typography	3	ART 3209 Figure Construction	3
General Education	3	General Education	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>18</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
ART 2420 Sculpture I	3	ART 2412 Ceramics I	3
ART 3110 Drawing III	3	ART 3635 Illustration Concepts	3
ART 3625 Illustration Techniques	3	ART Elective*	3
ART 4850 20th Century Art & Arch. (fall only) or ART 4860 Contemp. Art & Design (spring only)	3	General Education	6
General Education	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
ART 4625 Advanced Illustration I	3	ART 4020 Studio Seminar	3
Art Electives*	6	ART 4635 Advanced Illustration II	3
General Education	6	ART Elective*	3
<b>Semester Total</b>	<b>15</b>	ICAP 4221 Artists in Contemporary Society	3
		General Education	6
		<b>Semester Total</b>	<b>18</b>

**Studio Art Major (Illustration Area), B.F.A. Degree - 126 hours**

- \*Students must choose 15 hours of ART electives.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Arts, Humanities, and Social Sciences

Department of Art & Design

# STUDIO ART: PAINTING

## BACHELOR OF FINE ARTS DEGREE

University of Central Missouri students majoring in studio art and pursuing the Bachelor of Fine Arts (BFA) in the areas of either Ceramics, Illustration, Painting, Printmaking, or Sculpture will be expected to demonstrate the highest level of ability in foundation art courses and clearly excel in their chosen area of emphasis.

Studio majors who earn the BFA degree in one of these areas often pursue careers as college or university professors by continuing their education and earning the necessary graduate degrees. Others may work as freelance artists, and in related fields that allow for a lifetime of artistic production.

Studio classes emphasize a strong beginning in foundation art. Upper-level courses push students to specialize in their chosen area of emphasis: ceramics, painting, printmaking, or sculpture. Students use traditional and contemporary forms of expression to develop their unique visual language. Studio art majors in ceramics, painting, printmaking, and sculpture pursue exhibiting their works in museums, commercial art galleries, corporate collections and private homes. If they achieve at a high enough level, their artwork may be commissioned on request from clients, or sold either directly by the artist or through private art galleries or dealers.

Employment of artists and related workers is expected to grow as fast as the average for all occupations.

Because the arts attract many talented people with creative ability, the number of aspiring artists continues to grow.

### Facilities

Studio art majors in ceramics, painting, printmaking, and sculpture at UCM find excellent facilities, individualized working spaces and nationally acclaimed faculty mentors. The department beautifully renovated Gallery of Art & Design schedules diverse exhibitions and provides students opportunities to exhibit their own work, and the opportunity to win awards and scholarship funding through competitive exhibitions of student work. UCM offers studio art majors, and others, a solid visual arts foundation in a richly diverse and creative environment.

### Accreditation

University of Central Missouri is accredited by the National Association of Schools of Art and Design (NASAD). UCM is the only state-supported 4-year school in Missouri with such accreditation. UCM has held NASAD accreditation continuously since 1986. Of the approximately 2,000 college art programs nationwide, NASAD has approved less than 15 percent, based on proven rigor and content.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide

assistance with writing cover letters and resumes and offer a career library, mock interviews, and career counseling. The office also serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students/](http://ucmo.edu/career/students/).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs).

### For more information

To learn more, write the Department of Art & Design, Art Center 120, UCM, Warrensburg, MO 64093; call 660-543-4481; or visit the department's web site at [ucmo.edu/art](http://ucmo.edu/art).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Studio Art Major (Painting Area), B.F.A. Degree (47-263)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ART 1110 Drawing I	3	ART 1120 Drawing II	3
ART 1315 2-D Design	3	ART 1325 Color and Design	3
ART 1800 Ideas & the Visual Arts	3	ART 2511 Painting I	3
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
General Education	3	General Education	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ART 1815 Art History Survey I (fall) or ART 1835 Survey of Non-West Art (spring)	3	ART 1825 Art History Survey II (spring)	3
ART 2335 3-D Design	3	ART 2412 Ceramics I	3
ART 3209 Figure Construction	3	ART 2710 Printmaking I	3
ART 3511 or 3513 (Painting II or Painting II Plein Air)	3	ART 3511 or 3515 (Painting II or Painting II Figure)	3
General Education	3	General Education	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>18</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
ART 2420 Sculpture I	3	ART 3510 Watercolor	3
ART 3110 Drawing III	3	ART 4511 or 4515 (Painting III or Painting III Figure)	3
ART 3511 or 3513 (Painting II or Painting II Plein Air)	3	ART 4850 20th Century Art & Architecture (fall) or ART 4860 Contemporary Art & Design (spring)	3
ART Elective**	3	ART Elective**	3
General Education	6	General Education	3
<b>Semester Total</b>	<b>18</b>	<b>Semester Total</b>	<b>15</b>
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
ART 4511 or 4513 (Painting III, Painting III Plein Air)	3	ART 4511 or 4515 (Painting III or Painting III Figure)	3
ART Electives**	6	ART Elective**	3
General Education	6	ICAP 4221 Artists in Contemporary Society	3
<b>Semester Total</b>	<b>15</b>	General Education	6
		<b>Semester Total</b>	<b>15</b>

**Studio Art Major (Painting Area), B.F.A. Degree - 126 hours**

- \*Students must complete 9 hours of Painting II (ART 3511, 3513, and/or 3515) and 9 hours of Painting III (ART 4511, 4513, and/or 4515). Plein Air (3513 & 4513) is offered in the fall and Figure (3515 & 4515) is offered in the spring.
- \*\*Students must choose 15 hours of ART major electives.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.



## College of Arts, Humanities, and Social Sciences

Department of Art & Design

# STUDIO ART: PRINTMAKING

## BACHELOR OF FINE ARTS DEGREE

University of Central Missouri students majoring in studio art and pursuing the Bachelor of Fine Arts (BFA) in the areas of either Ceramics, Illustration, Painting, Printmaking, or Sculpture will be expected to demonstrate the highest level of ability in foundation art courses and clearly excel in their chosen area of emphasis.

Studio majors who earn the BFA degree in one of these areas often pursue careers as college or university professors by continuing their education and earning the necessary graduate degrees. Others may work as freelance artists, and in related fields that allow for a lifetime of artistic production.

Studio classes emphasize a strong beginning in foundation art. Upper-level courses push students to specialize in their chosen area of emphasis: ceramics, painting, printmaking, or sculpture. Students use traditional and contemporary forms of expression to develop their unique visual language. Studio art majors in ceramics, painting, printmaking, and sculpture pursue exhibiting their works in museums, commercial art galleries, corporate collections and private homes. If they achieve at a high enough level, their artwork may be commissioned on request from clients, or sold either directly by the artist or through private art galleries or dealers.

Employment of artists and related workers is expected to grow as fast as the average for all occupations.

Because the arts attract many talented people with creative ability, the number of aspiring artists continues to grow.

### Facilities

Studio art majors in ceramics, painting, printmaking, and sculpture at UCM find excellent facilities, individualized working spaces and nationally acclaimed faculty mentors. The department beautifully renovated Gallery of Art & Design schedules diverse exhibitions and provides students opportunities to exhibit their own work, and the opportunity to win awards and scholarship funding through competitive exhibitions of student work. UCM offers studio art majors, and others, a solid visual arts foundation in a richly diverse and creative environment.

### Accreditation

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### For more information

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**Studio Art Major (Printmaking Area), B.F.A. Degree (47-263)**

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<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ART 1110 Drawing I	3	ART 1120 Drawing II	3
ART 1315 2-D Design	3	ART 1325 Color and Design	3
ART 1800 Ideas & the Visual Arts	3	ART 2710 Printmaking I	3
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
General Education	3	General Education	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ART 1815 Art History Survey I (fall) or ART 1835 Survey of Non-West Art (spring)	3	ART 1825 Art History Survey II (spring)	3
ART 2335 3-D Design	3	ART 2412 Ceramics I	3
ART 3209 Figure Construction	3	ART 2511 Painting I	3
ART 3710 Printmaking II	3	ART 3710 Printmaking II	3
General Education	3	General Education	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>18</b>

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
ART 2420 Sculpture I	3	ART 3720 Printmaking III	3
ART 3110 Drawing III	3	ART 4850 20th Century Art & Architecture (fall) or ART 4860 Contemporary Art & Design (spring)	3
ART 3710 Printmaking II	3	ART Electives*	6
ART Elective*	3	General Education	3
General Education	6	General Education	3
<b>Semester Total</b>	<b>18</b>	<b>Semester Total</b>	<b>15</b>

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
ART 3720 Printmaking III	3	ART 3720 Printmaking III	3
ART Electives*	6	ART 4020 Studio Seminar	3
General Education	6	ICAP 4221 Artists in Contemporary Society	3
<b>Semester Total</b>	<b>15</b>	General Education	6
		<b>Semester Total</b>	<b>15</b>

**Studio Art Major (Printmaking Area), B.F.A. Degree - 126 hours**

- \*Students must choose 15 hours of ART major electives.
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## College of Arts, Humanities, and Social Sciences

Department of Art & Design

# STUDIO ART: SCULPTURE

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### Facilities

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### For more information

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**Studio Art Major (Sculpture Area), B.F.A. Degree (47-263)**

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<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ART 1110 Drawing I	3	ART 1120 Drawing II	3
ART 1315 2-D Design	3	ART 1325 Color and Design	3
ART 1800 Ideas & the Visual Arts	3	ART 2420 Sculpture I	3
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
General Education	3	General Education	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
ART 1815 Art History Survey I (fall) or ART 1835 Survey of Non-West Art (spring)	3	ART 1825 Art History Survey II (spring)	3
ART 2335 3-D Design	3	ART 2412 Ceramics I	3
ART 3209 Figure Construction	3	ART 2511 Painting I	3
ART 3420 Sculpture II	3	ART 2710 Printmaking I	3
General Education	3	General Education	6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>18</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
ART 2710 Printmaking II	3	ART 4420 Sculpture III	3
ART 3110 Drawing III	3	ART 4850 20th Century Art & Architecture (fall) or ART 4860 Contemporary Art & Design (spring)	3
ART 3420 Sculpture II	3	ART Electives*	6
ART Elective*	3	General Education	3
General Education	6	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>18</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
ART 4420 Sculpture III	3	ART 4020 Studio Seminar	3
ART Electives*	6	ART 4420 Sculpture III	3
General Education	6	ICAP 4221 Artists in Contemporary Society	3
<b>Semester Total</b>	<b>15</b>	General Education	6
		<b>Semester Total</b>	<b>15</b>

**Studio Art Major (Sculpture Area), B.F.A. Degree - 126 hours**

- \*Students must choose 15 hours of ART electives.
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## College of Health, Science, and Technology

School of Technology

# TECHNOLOGY (TRANSFER PROGRAM)

## BACHELOR OF SCIENCE DEGREE

The Technology (transfer program) at the University of Central Missouri prepares individuals for a professional career in business. This program builds on technical courses of an associate degree in the field of applied sciences and technology. Thirty-eight semester hours of junior/senior division coursework in the major must be taken through UCM.

The Technology curriculum concentrates on technical management courses that include quality supervision, scheduling/control, engineering principles, safety, work design, ergonomics, plant layout, cost estimating, and team problem solving.

In addition to these studies, the transfer student will also need to complete additional general education courses, which can be taken at any accredited two-year or four-year college or university, as long as they are equivalent to UCM's courses. Currently, we have program options in Manufacturing, Management, Construction, Electronics, General Technology, Quality Systems, and Virtual Media.

### Student Involvement

Student Organization of Construction Managers (SOCM), and the Society of Manufacturing Engineers (SME) relate to this degree program.

### Professional Accreditation

University of Central Missouri's baccalaureate programs in automotive management, computer-aided drafting and design, construction management, and electronics are accredited by the Association of Technology, Management, and Applied Engineering (ATMAE).

### Scholarships & Financial Aid

UCM's Student Financial Services Office offers nearly \$7 million in merit-based scholarships each year to students who demonstrate academic excellence, leadership, special talents, or potential in a specific field of study. The primary mission of the office is to help students and their families identify and apply for appropriate financial resources to help pay the educational and living expenses they'll incur to attend UCM. Student Financial Services may be reached at 660-543-8266 or visit their website at [ucmo.edu/sfs](http://ucmo.edu/sfs). In addition, the School of Technology offers a wide variety of scholarships. Students may also compete for School of Technology scholarships, including Dougherty, Kay, Walker, and Weisel scholarships from the Society of Manufacturing Engineers and its foundation, as well as the Grinstead Scholarship.

### Career Services

UCM's Office of Career Services assists students seeking internships, summer and campus jobs, part-time, and full-time employment. They also provide assistance with writing cover letters and resumes and offer a career library, mock interviews, and career counseling. The office also serves representatives of business, government, industry, and education who are looking for prospective employees. Over 700 employers visit UCM each year to conduct interviews on campus. Career Services may be reached at 660-543-4985 or [careers@ucmo.edu](mailto:careers@ucmo.edu). Visit their website at [ucmo.edu/career/students](http://ucmo.edu/career/students).

### To Learn More

For more information, contact the School of Technology, Grinstead 9, UCM, Warrensburg, MO 64093, or call 660-543-4439. The school's web address is [ucmo.edu/technology](http://ucmo.edu/technology) and its fax number is 660-543-4578.

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

No 4-Year Plan Provided



## College of Arts, Humanities, and Social Sciences

Department of Theatre and Dance

# THEATRE

## BACHELOR OF ARTS DEGREE

Students enrolled in the University of Central Missouri's Bachelor of Arts degree program in theatre study subjects such as oral interpretation, script analysis, acting, stage voice, stage movement, stagecraft, design, and directing. Classes in the literature and history of the theatre, studio theatre, and electives in theatre complete the program of study.

Theatre students at UCM are offered acting and technical experiences in contemporary comedies, dramas, the classics and musicals.

### Production Opportunities

The theatre production program at Central Missouri places the spotlight on undergraduates. Students begin work immediately in a busy and varied program. Performance opportunities are available in 25 to 35 productions each school year. Countless design, technical and crew positions are offered. Each semester there are two Mainstage productions, and students design and direct Studio Theatre one-act plays.

A world premiere of a new Children's Theatre script is staged each year for the public and for area school children. The department also produces an annual dance concert. In addition, students may become involved in acting, directing and writing plays for experimental Black Box theatre productions. Each summer Central Missouri Repertory creates professional opportunities for UCM theatre students.

### Facilities

Theatre students at UCM work in one of the most beautiful and modern theatre buildings in the Midwest, the James L. Highlander Theatre. The 442-seat continental, wedge-shaped auditorium has excellent acoustics and sight lines and faces a large, fully rigged stage. The theatre is equipped

with the latest sound equipment and a 174-dimmer-per-circuit computerized lighting system. A motorized orchestra apron lift allows for flexible staging. Well-equipped costume and scene shops and spacious dressing and makeup rooms adjoin the stage area.

University Housing has worked with the department to create a Theatre Special Housing Interest Program (SHIP) area in Nickerson Hall designed for students minoring in or majoring in theatre. This SHIP provides close proximity to the department's Black Box Theatre, also located in Nickerson, convenient class space, a lounge to rehearse lines, blocking, etc., and access to conveniently located dining facilities. In 2011, the department added a fully equipped dance studio.

### About the Faculty

At Central Missouri you will work side by side with a faculty of extraordinary educators and professional theatre and dance artists. The faculty at UCM are dedicated to providing students with the opportunity to find their unique voice as artists and share their visions, curiosities, bravery, and talents with a collaborative team that is the heart and soul of any theatrical, dance, and music production. Our faculty are leaders whose experience and professional work has a strong voice in state, regional, and the national arenas. They are active members of Actors Equity Association, Screen Actors Guild, USITT, Speech and Theatre Association of Missouri, Kennedy Center American College Theatre Festival and the Association for Theatre in Higher Education. Our faculty teach and supervise courses in performance, directing stagecraft, theatre technology, design, theatre management, playwriting, theatre history, choreography, and all levels of dance.

### Central Missouri Repertory

Theatre students at Central Missouri have the opportunity to work in a professional summer repertory company that performs on campus and also tours with a children's show throughout west-central Missouri. Providing summer theatre entertainment since 1981, Central Missouri Repertory offers students professional experience. Auditions and interviews are held during the spring semester for paid, unpaid and university-credit positions.

### Scholarships

The Department of Theatre and Dance offers several scholarships and awards to both incoming freshman and transfer students as well as returning students. Department of Theatre and Dance scholarships include Theatre Ambassador awards, Highlander, Kuhn, See, New Theatre Guild, Muller, Devenny, Pearce, Ulrich, Schwartz, and Bergman Scholarships. In the Department of Theatre and Dance, students can both work and learn through student employment opportunities in the scenic and costume shops.

### To Learn More

For more information contact the Department of Theatre and Dance, Martin Building 113, UCM, Warrensburg, MO 64093; call 660-543-4020; or visit the department's web pages at [ucmo.edu/theatre](http://ucmo.edu/theatre).

For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Theatre Major, B.A. Degree (42-364)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year -Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
THEA 1400 Script Analysis	3	THEA 1100 Oral Interpretation	3
THEA 1500 Acting	3	THEA 1600 Stagecraft	3
Modern Language Requirement*	3	Modern Language Requirement*	3
General Education	3	General Education	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
AE 1400 Freshman Seminar**	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
THEA 1510 Stage Movement	3	THEA 1520 Stage Voice	3
THEA 2610 Design Fundamentals	3	General Education	12
Modern Language Requirement*	3	<b>Semester Total</b>	<b>15</b>
General Education	6		
<b>Semester Total</b>	<b>15</b>		
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
THEA 3600 Scene Design, THEA 3610 Costume Design, or THEA 3620 Lighting Design	3	Minor Coursework	6
THEA 3700 Directing	3	General Education	9
Minor Coursework	6	<b>Semester Total</b>	<b>15</b>
Free Choice Elective	3		
<b>Semester Total</b>	<b>15</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
THEA 3630 Studio Theatre I	1	IGEN 3116, 3224, 3232, 4234, or 4244	3
THEA 4400 Literature & History of the Theatre I	3	THEA 4420 Literature & History of the Theatre II	3
Theatre Elective	3	THEA 4730 Studio Theatre II	1
Minor Coursework	6	Minor Coursework	6
Free Choice Electives	4	Free Choice Elective	4
<b>Semester Total</b>	<b>17</b>	<b>Semester Total</b>	<b>17</b>

**Theatre Major, B.A. Degree - 124 hours**

- \* Refer to the Bachelor's Degree Requirements section for fulfillment options of the BA Modern Language requirements. This plan is based on nine hours of modern language.
- \*\*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- This plan is based on a 24-hour minor.
- This major does not build in the minimum number (30) of upper-level credit hours required for graduation. Be sure to include upper-level choices (3000/4000) in your major electives, minor, general education, and/or free choice electives.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.

## College of Arts, Humanities, and Social Sciences

Department of Theatre and Dance

# THEATRE

## BACHELOR OF FINE ARTS DEGREE (PERFORMANCE CONCENTRATION)

Students pursuing a Bachelor of Fine Arts major in theatre select a concentration in either performance or design and theatre technology. In addition to classes in acting, directing, design, theatre management and script analysis, students learn about the literature and history of the theatre, stagecraft, studio theatre, and advanced technical theatre courses. Electives in departmentally approved supporting courses and theatre courses in the student's area of concentration round out the program of study.

A concentration in performance includes classes such as stage voice, stage movement, advanced acting, period acting styles, advanced scene study, stage makeup and advanced directing, as well as electives from technical concentration courses.

### Production Opportunities

The theatre production program at Central Missouri places the spotlight on undergraduates. Students begin work immediately in a busy and varied program. Performance opportunities are available in 25 to 35 productions each school year. Countless design, technical and crew positions are offered. Each semester there are two Mainstage productions, and students design and direct Studio Theatre one-act plays.

A world premiere of a new Children's Theatre script is staged each year for the public and for area school children. The department also produces an annual dance concert. In addition, students may become involved in acting, directing and writing plays for experimental Black Box theatre productions. Each summer Central Missouri Repertory creates professional opportunities for UCM theatre students.

### Facilities

Theatre students at Central Missouri work in one of the most beautiful and modern theatre buildings in the

Midwest, the James L. Highlander Theatre. The 442-seat continental, wedge-shaped auditorium has excellent acoustics and sight lines and faces a large, fully rigged stage. The theatre is equipped with the latest sound equipment and a 174-dimmer-per-circuit computerized lighting system. A motorized orchestra apron lift allows for flexible staging. Well-equipped costume and scene shops and spacious dressing and makeup rooms adjoin the stage area.

University Housing has worked with the department to create a Theatre Special Housing Interest Program (SHIP) area in Nickerson Hall designed for students interested in or majoring in theatre. This SHIP provides close proximity to the department's Black Box Theatre, also located in Nickerson, convenient class space, a lounge to rehearse lines, blocking, etc., and access to conveniently located dining facilities. In 2011, the department added a fully equipped dance studio.

### About the Faculty

At Central Missouri you will work side by side with a faculty of extraordinary educators and professional theatre and dance artists. The faculty at UCM are dedicated to providing students with the opportunity to find their unique voice as artists and share their visions, curiosities, bravery, and talents with a collaborative team that is the heart and soul of any theatrical, dance, and music production. Our faculty are leaders whose experience and professional work has a strong voice in state, regional, and the national arenas. They are active members of Actors Equity Association, Screen Actors Guild, USITT, Speech and Theatre Association of Missouri, Kennedy Center American College Theatre Festival and the Association for Theatre in Higher Education. Our faculty teach and supervise courses

in performance, directing stagecraft, theatre technology, design, theatre management, playwriting, theatre history, choreography, and all levels of dance.

### Central Missouri Repertory

Theatre students at UCM have the opportunity to work in a professional summer repertory company that performs on campus and also tours with a children's show throughout west-central Missouri. Providing summer theatre entertainment since 1981, Central Missouri Repertory offers students professional experience. Auditions and interviews are held during the spring semester for paid, unpaid, and university-credit positions.

### Scholarships

The Department of Theatre and Dance offers several scholarships and awards to both incoming freshman and transfer students as well as returning students. Department of Theatre and Dance scholarships include Theatre Ambassador awards, Highlander, Kuhn, See, New Theatre Guild, Muller, Devenny, Pearce, Ulrich, Schwartz, and Bergman Scholarships. In the department, students can both work and learn through student employment opportunities in the scenic and costume shops.

### To Learn More

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[ucmo.edu](http://ucmo.edu) | 1-877-SAY-UCMO

**Theatre Major (Performance Concentration), B.F.A. Degree (47-366)**

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<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
THEA 1400 Script Analysis	3	THEA 1100 Oral Interpretation	3
THEA 1500 Acting	3	THEA 1520 Stage Voice	3
THEA 1600 Stagecraft	3	THEA 1610 Stage Makeup	3
General Education	3	General Education	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
AE 1400 Freshman Seminar*	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
THEA 1510 Stage Movement	3	THEA 3700 Directing	3
THEA 2610 Design Fundamentals	3	Technical Theatre Course Elective	3
General Education	9	General Education	9
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
THEA 3500 or 4500 or 4510	3	THEA 3500 or 4500 or 4510	3
THEA 4310 Principles of Theatre Management	3	THEA 4300 Professional Practices	1
THEA 4300 Professional Practices	1	Department-Approved Support Course	3
THEA 4400 Literature & History of the Theatre I	3	Technical Theatre Course Elective	3
Department-Approved Support Course	3	General Education	6
General Education	3	<b>Semester Total</b>	<b>16</b>
<b>Semester Total</b>	<b>16</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
THEA 3630 Studio Theatre I	1	IGEN 3116, 3224, 3232, 4234, or 4244	3
THEA 4300 Professional Practices	1	THEA 4420 Literature & History of the Theatre II	3
Department-Approved Support Course	3	THEA 4710 Advanced Directing	3
Technical Theatre Course Elective	3	THEA 4730 Studio Theatre II	1
General Education	3	THEA 4910 Senior Showcase	1
Free Choice Electives	6	Free Choice Electives	4
<b>Semester Total</b>	<b>17</b>	<b>Semester Total</b>	<b>15</b>

**Theatre Major (Performance Concentration), B.F.A. Degree - 124 hours**

- \* AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
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## College of Arts, Humanities, and Social Sciences

Department of Theatre and Dance

# THEATRE

## BACHELOR OF FINE ARTS DEGREE (DESIGN/TECHNOLOGY CONCENTRATION)

Students pursuing a Bachelor of Fine Arts degree in theatre select a concentration in either performance or design and theatre technology. In addition to classes in acting, directing, design, theatre management and script analysis, students learn about the literature and history of the theatre, stagecraft, studio theatre, and advanced technical theatre courses.

A concentration in design/technical theatre includes classes in design fundamentals, costume technology, scene design, costume design, lighting design, advanced technical theatre, advanced stage lighting and sound, and electives from performance concentration courses.

### Production Opportunities

The theatre production program at Central Missouri places the spotlight on undergraduates. Students begin work immediately in a busy and varied program. Performance opportunities are available in 25 to 35 productions each school year. Countless design, technical and crew positions are offered. Each semester there are two Mainstage productions, and students design and direct Studio Theatre one-act plays.

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For information about admission to UCM, contact the Office of Admissions, Ward Edwards 1400, UCM, Warrensburg, MO 64093. Call toll free 877-SAY-UCMO (877-729-8266), or visit the web site [ucmo.edu](http://ucmo.edu).

**Theatre Major (Design/Technology Concentration), B.F.A. Degree (47-366)**

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<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year -Spring Semester</b>	<b>Hrs.</b>
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
THEA 1400 Script Analysis	3	THEA 1100 Oral Interpretation	3
THEA 1500 Acting	3	THEA 2610 Design Fundamentals	3
THEA 1600 Stagecraft	3	General Education	6
General Education	3	<b>Semester Total</b>	<b>15</b>
<b>Semester Total</b>	<b>15</b>		
AE 1400 Freshman Seminar*	1		
<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
THEA 2620 Costume Technology	3	THEA 3700 Directing	3
THEA Performance Elective	3	THEA Performance Elective	3
General Education	9	General Education	9
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>
<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
THEA 3610 Costume Design	3	THEA 3600 Scenic Design	3
THEA 4300 Professional Practices	1	THEA 4300 Professional Practices	1
THEA 4310 Principles of Theatre Management	3	THEA Performance Elective	3
THEA 4400 Literature & History of the Theatre I	3	Department-Approved Support Course	3
THEA 4600 Advanced Technical Theatre	3	General Education	6
Dept. Approved Support Course	3	<b>Semester Total</b>	<b>16</b>
<b>Semester Total</b>	<b>16</b>		
<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
THEA 3630 Studio Theatre I	1	IGEN 3116, 3224, 3232, 4234, or 4244	3
THEA 4300 Professional Practices	1	THEA 3620 Lighting Design	3
THEA 4610 Advanced Stage Lighting & Sound	3	THEA 4420 Literature & History of the Theatre II	3
Department-Approved Support Course	3	THEA 4730 Studio Theatre II	1
General Education	3	THEA 4910 Senior Showcase	1
Free Choice Electives	6	Free Choice Electives	4
<b>Semester Total</b>	<b>17</b>	<b>Semester Total</b>	<b>15</b>

**Theatre Major (Design/Technology Concentration), B.F.A. Degree - 124 hours**

- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
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