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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CIS 1600 Business Information Management (GE)* ECON 1010 Principles of Macroeconomics (GE)* ENGL 1020 Composition I (GE) MATH 1111 College Algebra (GE)* General Education Semester Total AE 1400 or BADM 1400 Freshman Seminar**	Hrs 3 3 3 3 1 5	Freshman Year - Spring Semester COMM 1000 Public Speaking or COMM 1050 Fundamentals of Oral Communication Competency (GE) ECON 1011 Principles of Microeconomics* ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 3 3 3 6 15
Sophomore Year - Fall Semester ACCT 2101 Principles of Financial Accounting*# BLAW 2720 Legal Environment of Business* General Education Semester Total	Hrs 3 3 10 16	Sophomore Year - Spring Semester ACCT 2102 Principles of Managerial Accounting *# ACCT 3110 Intermediate Financial Accounting *** # FIN 2801 Business Statistics * General Education Semester Total Note: Complete all B.S.B.A. admission requirements. *	Hrs 3 3 3 6 15
Junior Year - Fall Semester ACCT 3111 Intermediate Financial Accounting II# ACCT 3120 Cost & Managerial Accounting# FIN 3801 Business Statistics II MGT 3315 Management of Organizations MKT 3405 Marketing Policy Semester Total	Hrs 3 3 3 3 3 1 5	Junior Year - Spring Semester ACCT 3112 Intermediate Financial Accounting III# ACCT 3130 Introduction to Income Tax# BLAW 3721 Law of Business Transactions FIN 3850 Principles of Finance MGT 3325 Business Communications Free Choice Elective (may not be an ACCT prefix)## Semester Total	Hrs 3 3 3 3 1 16
Senior Year - Fall Semester ACCT 3160 Accounting Information Systems# ACCT 4100 Advanced Accounting I CIS 3650 Database Management Systems MGT 3360 Production/Operations Management 3000/4000 Level Non-Accounting Business Elective## Semester Total	Hrs 3 3 3 3 15	Senior Year - Spring Semester ACCT 4105 Auditing ACCT 4130 Advanced Income Tax MGT 4357 Organizational Policy and Strategy 3000/4000 Level Non-Accounting Business Elective## Free Choice Electives (may not be an ACCT prefix)## Semester Total	Hrs 3 3 3 4 16

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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CS 1100 Computer Programming I ECON 1010 Principles of Macroeconomics (GE) MATH 1300 Basic Statistics (GE)	Hrs 3 3 3	Freshman Year - Spring Semester CS 3800 Applications Development with VB.NET MATH 1152 Calculus & Analytic Geometry II MATH 2410 Discrete Mathematics	Hrs 3 5 3
MATH 1151 Calculus & Analytic Geometry I (GE) Semester Total AE 1400 Freshman Seminar*	5 14 1	Free Choice Electives# (ECON 1011 Microeconomics ^) Semester Total	3 14
Sophomore Year - Fall Semester ENGL 1020 Composition I (GE) MATH 2153 Calculus & Analytic Geometry III MATH 3311 Introduction to Math Statistics** General Education Semester Total	Hrs 3 3 3 6 15	Sophomore Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) MATH 4312 Probability Models** MATH 4501 Actuarial Exam Review Problem Set I** MATH 4510 Mathematics of Finance*** General Education Semester Totals	Hrs 3 3 1 3 6 16
Junior Year - Fall Semester ECON 3010 Intermediate Macroeconomics** FIN 4817 Managing Financial Derivatives** MATH 4321 Applied Statistics I** MATH 4511 Actuarial Exam Review Problem Set II** General Education Semester Total	Hrs 3 3 3 1 6 16	Junior Year - Spring Semester FIN 3861 Financial Management I FIN 4803 Principles of Insurance MATH 4322 Applied Statistics II** Major Elective## (ECON 3030 Intermediate Microeconomics ^) Free Choice Elective# Semester Total	Hrs 3 3 3 3 15
Senior Year - Fall Semester MATH 4520 Life Contingencies I** Major Elective## General Education Semester Total	Hrs 3 3 9 15	Senior Year - Spring Semester MATH 4530 Statistical Modeling** MATH 4645 Senior Projects in Actuarial Science & Statistics Major Elective## Free Choice Electives# Semester Total	Hrs 3 3 3 6 15

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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CS 1100 Computer Programming I ENGL 1020 Composition I (GE) MATH 1151 Calculus & Analytic Geometry I (GE) MATH 1300 Basic Statistics (GE)	Hrs 3 3 5 3	Freshman Year - Spring Semester CS 1110 Computer Programming II ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) MATH 1152 Calculus & Analytic Geometry II MATH 2410 Discrete Mathematics	Hrs 3 3 5 3
Semester Total AE 1400 Freshman Seminar*	14 1	General Education Semester Total	3 1 7
Sophomore Year - Fall Semester MATH 2153 Calculus & Analytic Geometry III MATH 3311 Introduction to Math Statistics** MATH 3710 Linear Algebra General Education Semester Total	Hrs 3 3 3 6 15	Sophomore Year - Spring Semester MATH 3151 Differential Equations** MATH 4312 Probability Models** General Education Semester Totals	Hrs 3 3 9 15
Junior Year - Fall Semester MATH 4321 Applied Statistics I** Major Electives# General Education Semester Total	Hrs 3 4 9	Junior Year - Spring Semester MATH 4322 Applied Statistics II** General Education Free Choice Electives## Semester Total	Hrs 3 3 9 15
Senior Year - Fall Semester MATH 4323 Statistical Aspects of Experimental Design** MATH 4331 SAS Programming for Statistical Analysis Major Electives# Free Choice Electives## Semester Total	Hrs 3 3 6 3 15	Senior Year - Spring Semester MATH 4530 Statistical Modeling** MATH 4645 Senior Projects in Actuarial Science & Statistics Major Elective# Free Choice Electives## Semester Total	Hrs 3 3 4-5 2-3 13

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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Agricultural Science Major - Area 1: Agribusiness Management, B.S. Degree (43-277)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester AGRI 1100 Introduction to Agriculture AGRI 1420 Animal Husbandry COMM 1000 Public Speaking (GE) ECON 1010 Principles of Macroeconomics (GE) ENGL 1020 Composition I (GE) LIS 1600 University Library and Research Skills (GE) Semester Total	Hrs 1 3 3 3 2 15	Freshman Year - Spring Semester AGRI 1600 Introduction to Horticulture Science (Lab) AGRI 2425 Livestock Evaluation (Lab) CHEM 1104 Introduction to the Sciences: Chemistry (Lab) (GE) ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) MATH 1111 College Algebra (GE) Semester Total	Hrs 4 3 4 3 17
Sophomore Year - Fall Semester AGRI 2330 Introduction to Soil Science (Lab) General Education Semester Total	Hrs 3 9 12	Sophomore Year - Spring Semester ACCT 2101 Principles of Financial Accounting or ACCT 2100 Survey of Accounting AGRI 2130 Global Agriculture (GE) AGRI 1310 Agronomy I: Row Crops (fall only) or AGRI 2315 Agronomy II: Forages (spring only) ECON 1011 Principles of Microeconomics General Education Semester Total	Hrs 3 3 2 1 7
Junior Year - Fall Semester AGRI 3110 Agri-Business Management AGRI 3140 Agricultural Analysis and Statistics AGRI 3410 Animal Breeding or AGRI 4310 Plant Breeding & Genetics MCT 3325 Business Communications MKT 3430 Professional Sales Semester Total	Hrs 3 3 3 3 1 12	Junior Year - Spring Semester AGRI 4140 Agricultural Policy AGRI 4300 Soil Fertility & Fertilizers General Education Free Choice Electives Semester Total	Hrs 3 3 3 6 15
Senior Year - Fall Semester AGRI 3120 Distrib. and Marketing of Agriculture Products AGRI 3610 Agriculture Pest Management AGRI 3810 Internship in Agriculture BLAW 2720 Legal Environment of Business Free Choice Electives Semester Total	Hrs 3 3 3 3 15	Senior Year - Spring Semester AGRI 4101 Agricultural Capstone Experience AGRI 4110 Agricultural Futures Trading AGRI 4120 International Agriculture AGRI 4150 Natural Resources Economics Free Choice Electives Semester Total	Hrs 3 3 3 3 2 14

Agricultural Science 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Agricultural Science Major - Area 2: Animal Sciences, B.S. Degree (43-277)

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Freshman Year - Fall Semester AGRI 1100 Introduction to Agriculture AGRI 1420 Animal Husbandry COMM 1000 Public Speaking (GE) ECON 1010 Principles of Macroeconomics (GE) ENGL 1020 Composition I (GE) LIS 1600 University Library and Research Skills (GE) Semester Total	Hrs 1 3 3 3 2 15	Freshman Year - Spring Semester AGRI 1600 Introduction to Horticulture Science (Lab) AGRI 2425 Livestock Evaluation (Lab) CHEM 1104 Introduction to the Sciences: Chemistry (Lab) (GE) ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) MATH 1111 College Algebra (GE) Semester Total	Hrs 4 3 4 3 1 7
Sophomore Year - Fall Semester AGRI 2130 Global Agriculture (GE) AGRI 2330 Introduction to Soil Science (Lab) AGRI 3420 Animal Nutrition ECON 1011 Principles of Microeconomics General Education Semester Total	Hrs 3 3 3 3 1 5	Sophomore Year - Spring Semester AGRI 1310 Agronomy I: Row Crops (fall only) or AGRI 2315 Agronomy II: Forages (spring only) General Education Semester Total	Hrs 2 15 17
Junior Year - Fall Semester AGRI 3110 Agri-Business Management AGRI 3120 Distribution and Marketing of Agriculture Products AGRI 3415 Mear Science AGRI 4415 Reproduction of Farm Animals Free Choice Electives Semester Total	Hrs 3 3 3 3 1 5	Junior Year - Spring Semester AGRI 4110 Agricultural Futures Trading AGRI 4300 Soil Fertility & Fertilizers AGRI 4435 Animal Science: Pork Free Choice Electives Semester Total	Hrs 3 3 6 15
Senior Year - Fall Semester AGRI 3410 Animal Breeding or AGRI 4310 Plant Breeding & Genetics AGRI 3610 Agriculture Pest Management AGRI 3810 Internship in Agriculture Free Choice Electives Semester Total	Hrs 3 3 3 1 14	Senior Year - Spring Semester AGRI 4101 Agricultural Capstone Experience AGRI 4410 General Veterinary Science AGRI 4430 Animal Science: Beef Free Choice Electives Semester Total	Hrs 3 3 3 12

Agricultural Science 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Agricultural Science Major - Area 3: Agronomy, B.S. Degree (43-277)

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Freshman Year - Fall Semester AGRI 1100 Introduction to Agriculture AGRI 1420 Animal Husbandry CHEM 1104 Introduction to the Sciences: Chemistry (Lab) (GE) COMM 1000 Public Speaking (GE) ENGL 1020 Composition I (GE) Semester Total	Hrs 1 3 4 3 1 1 4	Freshman Year - Spring Semester AGRI 1600 Introduction to Horticulture Science (Lab) ECON 1010 Principles of Macroeconomics (GE) ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) MATH 1111 College Algebra (GE) General Education Semester Total	Hrs 4 3 3 3 16
Sophomore Year - Fall Semester AGRI 1310 Agronomy I: Row Crops (fall only) or AGRI 2315 Agronomy II: Forages (spring only) AGRI 2330 Introduction to Soil Science (Lab) ECON 1011 Principles of Microeconomics General Education Semester Total	Hrs 2 3 3 6 14	Sophomore Year - Spring Semester AGRI 2130 Global Agriculture (GE) AGRI 2425 Livestock Evaluation (Lab) LIS 1600 University Library and Research Skills (GE) General Education Semester Total	Hrs 3 3 2 6 14
Junior Year - Fall Semester AGRI 3110 Agri-Business Management AGRI 3610 Agriculture Pest Management (Lab) GEOG 4220 Geographic Information Systems I General Education Free Choice Electives Semester Total	Hrs 3 3 3 3 15	Junior Year - Spring Semester AGRI 2331 Soils AGRI 3210 Soil & Water Management AGRI 4300 Soil Fertility & Fertilizers Free Choice Electives Semester Total	Hrs 3 3 3 7 16
Senior Year - Fall Semester AGRI 3120 Distribution and Marketing of Agriculture Products AGRI 3410 Animal Breeding or AGRI 4310 Plant Breeding & Genetics AGRI 3810 Internship in Agriculture AGRI 4340 Agricultural Sprays and Chemicals (Lab) Free Choice Electives Semester Total	Hrs 3 3 3 4 16	Senior Year - Spring Semester AGRI 3320 Field Crop Management AGRI 4101 Agricultural Capstone Experience AGRI 4110 Agricultural Futures Trading AGRI 4120 International Agriculture Free Choice Electives Semester Total	Hrs 3 3 3 3 3 15

Agricultural Science Major - Area 3: Agronomy, 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

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Freshman Year - Fall Semester AGRI 1100 Introduction to Agriculture AGRI 1420 Animal Husbandry CHEM 1104 Introduction to the Sciences: Chemistry (Lab) (GE) ENGL 1020 Composition I (GE) LIS 1600 University Library and Research Skills (GE) General Education Semester Total	Hrs 1 3 4 3 2 3 16	Freshman Year - Spring Semester AGRI 1600 Introduction to Horticulture Science (Lab) COMM 1000 Public Speaking (GE) ECON 1010 Principles of Macroeconomics (GE) ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) MATH 1111 College Algebra (GE) Semester Total	Hrs 4 3 3 3 16
Sophomore Year - Fall Semester AGRI 2330 Introduction to Soil Science (Lab) ECON 1011 Principles of Microeconomics General Education Semester Total	Hrs 3 3 9 15	Sophomore Year - Spring Semester AGRI 1310 Agronomy I: Row Crops (fall only) or AGRI 2315 Agronomy II: Forages (spring only) AGRI 2130 Global Agriculture (GE) AGRI 2425 Livestock Evaluation (Lab) General Education Semester Total	Hrs 2 3 3 6 14
Junior Year - Fall Semester AGRI 3110 Agri-Business Management AGRI 4600 Horticultural Plants I: Woody (Lab) AGRI 4610 Turfgrass Science (Lab) Free Choice Electives Semester Total	Hrs 3 3 3 6 15	Junior Year - Spring Semester AGRI 3610 Agricultural Pest Management (Lab) AGRI 3620 Residential Landscape Design (Lab) AGRI 4300 Soil Fertility & Fertilizers AGRI 4605 Horticultural Plants II: Herbaceous Free Choice Electives Semester Total	Hrs 3 3 3 3 15
Between Junior and Senior Year - Summer AGRI 3810 Internship in Agriculture Semester Total	Hrs 3 3		
Senior Year - Fall Semester AGRI 3120 Distribution and Marketing of Agriculture Products AGRI 3410 Animal Breeding or AGRI 4310 Plant Breeding & Genetics AGRI 4340 Agricultural Sprays and Chemicals Free Choice Electives Semester Total	Hrs 3 3 5 14	Senior Year - Spring Semester AGRI 3640 Horticultural Propagation Materials (Lab) AGRI 4000 Special Projects in Agriculture AGRI 4101 Agricultural Capstone Experience Free Choice Electives Semester Total	Hrs 3 3 3 3 12

Agricultural Science 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

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Freshman Year - Fall Semester ART 1110 Drawing I ART 1315 2-D Design ART 1800 Ideas & the Visual Arts (GE) ENGL 1020 Composition I (GE) General Education Semester Total AE 1400 Freshman Seminar*	Hrs 3 3 3 3 15	Freshman Year - Spring Semester ART 1120 Drawing II ART 1325 Color and Design ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) HIST 1350 or 1351 History of the United States (GE) General Education MATH Semester Total	Hrs 3 3 3 3 15
Sophomore Year - Fall Semester ART 1815 Art History Survey I (fall) ART 2412 Ceramics I EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDFL 2240 Educational Psychology EDSP 2100 Education of the Exceptional Child POLS 1510 American Government (GE) Semester Total	Hrs 3 3 2 1 3 2 1 3 7	Sophomore Year - Spring Semester ART 1825 Art History Survey II ART 2420 Sculpture I ART 2710 Printmaking I General Education Science w/lab General Education Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 3 3 4 5 18
Junior Year - Fall Semester ART 2511 Painting I ART 3314 Fibers PHOT 1203 Introduction to Photography General Education Semester Total	Hrs 3 3 9 18	Junior Year - Spring Semester ART 3209 Figure Construction ART 3915 Methods of Teaching Art I: Elementary ART 4850 20th Century Art & Architecture (fall) or ART 4860 Contemporary Art & Design (spring) EDFL 4210 The Teaching of Reading in the Secondary School PSY 4230 Psychology of Adolescence (GE) Upper Level Studio Concentration Semester Total	Hrs 3 3 3 2 3 17
Senior Year - Fall Semester ART 3920 Methods of Teaching Art II: Secondary (fall) ART 4221 Art Theory and Criticism EDFL 3500 Secondary Teaching & Behavior Management FLDX 3550 Practicum in Secondary Instruction EDFL 4300 Educational Measures & Evaluation Upper Level Studio Concentration Semester Total	Hrs 3 3 1 2 3 15	Senior Year - Spring Semester** ART 4920 Methods of Teaching Art III: Seminar for Student Teaching FLDX 4495 Student Teaching Elementary I FLDX 4468 Student Teaching Secondary II Semester Total	Hrs 3 5 4 12

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.
- **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 Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam
- See www.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.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester AT 1610 Introduction to Athletic Training AT 1611 Introduction to Athletic Training Lab I AT 1625 CPR/AED for Health Care Professionals CHEM 1104 Introduction to the Sciences: Chemistry (GE) ENGL 1020 Composition I (GE) MATH 1111 College Algebra (GE) Semester Total AE 1400 Freshman Seminar*	Hrs 2 1 1 4 3 3 3 14 1	Freshman Year - Spring Semester (apply to major) AT 1630 Foundations of Athletic Training AT 1631 Foundations of Athletic Training Lab II AT 1640 Medical Terminology AT 1650 Responding to Emergencies for the Profess. Rescuer BIOL 3401 Human Anatomy LIS 1600 University Library and Research Skills (GE) PE 1800 Functional Anatomy Semester Total	Hrs 2 1 1 3 3 2 2 3 15
Sophomore Year - Fall Semester AT 2610 Orthopedic Assessment: Lower Extremity AT 2611 Orthopedic Assessment: Lower Extremity Lab III AT 2640 Introduction to Therapeutic Exercise BIOL 3402 Human Physiology HED 1100 Personal Health (GE) PE 2850 Foundations of Exercise Physiology Semester Total Summer Semester (during even numbered years only) PE 4340 Adapted Physical Education Semester Total	Hrs 2 1 2 5 3 3 16 Hrs 3 3	Sophomore Year - Spring Semester AT 2620 Orthopedic Assessment: Upper Extremity AT 2621 Orthopedic Assessment: Upper Extremity Lab IV AT 2630 Therapeutic Modalities AT 2631 Therapeutic Modalities Lab PE 2472 Communicating Ideas on Sport (GE) PE 2800 Biomechanics PSY 1100 General Psychology (GE) Semester Total	Hrs 2 1 2 1 3 3 3 3 15
Junior Year - Fall Semester AT 3620 Clinical Athletic Training Lab V AT 3630 Therapeutic Rehabilitation AT 3631 Therapeutic Rehabilitation Lab AT 3650 Sport & Exercise Pharmacology AT 4650 Human Disease Lab for Athletic Training CTE 3060 Technical Writing (GE) HED 4370 Human Diseases Semester Total	Hrs 2 2 1 2 1 3 3 3 14	Junior Year - Spring Semester AT 3640 Clinical Athletic Training Lab VI AT 4630 Organization & Administration of Athletic Training PE 4740 Legal Liability in Fit./Well., PE, Rec, & Sport Settings General Education Free Choice Elective Semester Total	Hrs 2 3 2 6 6 1 14
Senior Year - Fall Semester AT 4610 Clinical Athletic Training Lab VII AT 4640 Senior Seminar in Athletic Training PE 4830 Psychological Aspects of Physical Education PSY 4520 Statistics for the Behavioral Sciences General Education Semester Total	Hrs 2 2 2 2 3 6 15	Senior Year - Spring Semester AT 4620 Clinical Athletic Training Lab VIII HED 4300 Nutrition & Human Performance PE 4850 Assessment & Evaluation of Fitness/Wellness General Education Semester Total	Hrs 2 3 3 6 14

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 www.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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

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Freshman Year - Fall Semester ATM 1010 Contemporary Power Systems* ENGL 1020 Composition I (GE) ET 1010 Applied Electricity MATH 1111 College Algebra (GE) Semester Total	Hrs 3 3 4 3 13	Freshman Year - Spring Semester ATM 2124 Automotive Braking Systems* CIS 1600 Business Information Management (GE) ECON 1010 Principles of Macroeconomics (GE) MATH 1131 Applied Calculus or MATH 1300 Basic Statistics General Education Semester Total	Hrs 4 3 3 3 1 16
Sophomore Year - Fall Semester ATM 2110 Engine Theory & Maintenance* ATM 2130 Automotive Electrical Systems* ET 2060 Microprocessors: Theory and Applications PHYS 1104 Introduction to the Sciences: Physics (GE) Semester Total	Hrs 4 4 4 16	Sophomore Year - Spring Semester ACCT 2100 Survey of Accounting or ACCT 2101 Principles of Financial Accounting** ATM 2132 Fuel Systems & Emission Controls* ATM 2150 Mobile HVAC* ATM 3110 Automotive Engine Overhaul CHEM 1103 Introduction to the Sciences: Chemistry (GE) Semester Total	Hrs 3 4 3 4 3 17
Junior Year - Fall Semester ATM 3120 Steering and Suspension Systems* ATM 3130 Computerized Engine Diagnostics* COMM 1000 Public Speaking (GE) INDM 4210 Industrial Management or MGT 3315 Management of Organizations** General Education Semester Total Summer - Between Junior & Senior Year SOT 3022 Internship in Technology*** Semester Total	Hrs 4 4 3 3 17 Hrs 3 3	Junior Year - Spring Semester ATM 3150 Diesel Technology* BLAW 2720 Legal Environment of Business CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 4 3 3 6 16
Senior Year - Fall Semester ATM 3134 Advanced Powerplant Systems* ATM 4032 Hydraulics & Pneumatics MKT 3405 Marketing Policy** or HRM 3920 Human Resource Management General Education Semester Total	Hrs 3 3 3 1 12	Senior Year - Spring Semester ATM 3140 Transmissions & Drivelines* ATM 4112 ATM Capstone Experience* ATM 4134 Advanced Vehicle Systems* COMM 3340 Intercultural Communication (GE) Semester Total	Hrs 4 3 2 3 12

Automotive Technology Management Major - Area 1 Automotive Technology, B.S. Degree Automotive Technology Option - 122 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ATM 1010 Contemporary Power Systems* CIS 1600 Business Information Management (GE) ENGL 1020 Composition I (GE) ET 1010 Applied Electricity MATH 1111 College Algebra (GE) Semester Total	Hrs 3 3 4 3 16	Freshman Year - Spring Semester ATM 2124 Automotive Braking Systems* CADD 1105 Basic AutoCAD CADD 1110 Fundamentals of Drafting COMM 1000 Public Speaking (GE) MATH 1131 Applied Calculus or MATH 1300 Basic Statistics Semester Total	Hrs 4 1 3 3 1 4
Sophomore Year - Fall Semester ATM 2110 Engine Theory & Maintenance* ATM 2130 Automotive Electrical Systems* ECON 1010 Principles of Macroeconomics (GE) PHYS 1104 Introduction to the Sciences: Physics (GE) Semester Total	Hrs 4 4 3 4 15	Sophomore Year - Spring Semester ATM 2132 Fuel Systems & Emission Controls* CADD 1170 Introduction to Computer-Aided Drafting CHEM 1103 Introduction to the Sciences: Chemistry (GE) CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 4 2 3 3 3 15
Junior Year - Fall Semester ATM 3120 Steering & Suspension Systems* ATM 3130 Computerized Engine Diagnostics* ET 2060 Microprocessors: Theory and Applications General Education Semester Total	Hrs 4 4 4 1 3	Junior Year - Spring Semester ACCT 2100 Survey of Accounting or ACCT 2101 Principles of Financial Accounting** ATM 3150 Diesel Technology* BLAW 2720 Legal Environment of Business General Education Semester Total	Hrs 3 4 3 6
Summer – Between Junior & Senior Year SOT 3022 Internship in Technology*** Semester Total	Hrs 3 3		
Senior Year - Fall Semester ATM 3134 Advanced Powerplant Systems* ATM 4032 Hydraulics & Pneumatics INDM 4210 Industrial Management or MGT 3315 Management of Organizations** General Education Semester Total	Hrs 3 3 3 12	Senior Year - Spring Semester ATM 4112 ATM Capstone Experience* ATM 4134 Advanced Vehicle Systems* COMM 3340 Intercultural Communication (GE) HRM 3920 Human Resource Management or MKT 3405 Marketing Policy** Major Area 2 Elective# Semester Total	Hrs 3 2 3 3 4 14-15

Automotive Technology Management Major - Area 2 Design Technology, B.S. Degree Design Technology Option - 120-121 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 2014 Undergraduate Catalog for acceptable courses for Major Option Area 2 Electives. Three to four hours are required.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ATM 1010 Contemporary Power Systems* CIS 1600 Business Information Management (GE) ENGL 1020 Composition I (GE) ET 1010 Applied Electricity MATH 1111 College Algebra (GE) Semester Total	Hrs 3 3 4 3 16	Freshman Year - Spring Semester ATM 2124 Automotive Braking Systems* COMM 1000 Public Speaking (GE) ECON 1010 Principles of Macroeconomics (GE) MATH 1131 Applied Calculus or MATH 1300 Basic Statistics General Education Semester Total	Hrs 4 3 3 3 16
Sophomore Year - Fall Semester ACCT 2100 Survey of Accounting or ACCT 2101 Principles of Financial Accounting** ATM 2110 Engine Theory* ATM 2130 Automotive Electrical Systems* PHYS 1104 Introduction to the Sciences: Physics (GE) Semester Total	Hrs 3 4 4 4 4 15	Sophomore Year - Spring Semester ATM 2132 Fuel Systems & Emission Controls* BLAW 2720 Legal Environment of Business CHEM 1103 Introduction to the Sciences: Chemistry (GE) ET 2060 Microprocessors: Theory and Applications Semester Total	Hrs 4 3 4 14
Junior Year - Fall Semester ATM 3120 Steering & Suspension Systems* ATM 3130 Computerized Engine Diagnostics* CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 4 4 3 3 14	Junior Year - Spring Semester ATM 3150 Diesel Technology* COMM 3340 Intercultural Communication (GE) INDM 4210 Industrial Management or MGT 3315 Management of Organizations** Major Option Area 3 Elective# General Education Semester Total	Hrs 4 3 3 3 16
Summer – Between Junior & Senior Year SOT 3022 Internship in Technology*** Semester Total	Hrs 3 3		
Senior Year - Fall Semester ATM 3134 Advanced Powerplant Systems* MKT 3405 Marketing Policy** or HRM 3920 Human Resource Management Major Option Area 3 Elective# General Education Semester Total	Hrs 3 3 3 12	Senior Year - Spring Semester ATM 4032 Hydraulics & Pneumatics ATM 4112 ATM Capstone Experience* ATM 4134 Advanced Vehicle Systems* Major Option Area 3 Elective# General Education Semester Total	Hrs 3 3 2 3 14

Automotive Technology Management Major - Area 3 Service Management, B.S. Degree Service Management Option - 120 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.
- \bullet ***SOT 3022 Internship (3.0 hrs) should be completed in the summer of the Junior/Senior year.
- #See the 2014 Undergraduate Catalog for a listing of the approved elective courses within Option Area 3 of the major.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

This guide is valid for the 2014 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 (www.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.

Hrs 2 3 3 6 14	Junior Year - Spring Semester AVIA 4090 Aviation Law ECON 1010 Principles of Macroeconomics (GE) MATH 1131 Applied Calculus (GE) MGT 3315 Management of Organizations or NDM 4210 Industrial Management Major Area Elective** Semester Total	Hrs 3 3 3 3 15
Hrs 3 3 3 3 3 3 3 5 5	Senior Year - Spring Semester AVIA 4420 Air Transportation or AVIA 4430 Corporate Aviations AVIA 4999 Integrative Studies Capstone Major Area Elective** General Education* Semester Total	Hrs 3 3 6-7 3 15-16
	2 3 3 6 14 Hrs 3 3 3 3 3	2 AVIA 4090 Aviation Law 3 ECON 1010 Principles of Macroeconomics (GE) 3 MATH 1131 Applied Calculus (GE) 6 MGT 3315 Management of Organizations or NDM 4210 Industrial Management 14 Major Area Elective** Semester Total Hrs Senior Year - Spring Semester 3 AVIA 4420 Air Transportation or AVIA 4430 Corporate Aviations 3 AVIA 4999 Integrative Studies Capstone 3 Major Area Elective** 3 General Education*

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 42 hours of General Education. This major requires these specific general education classes: ECON 1010, ENGL 1030, MATH 1131, and PHYS 1104.
- **Students will choose an area of concentration from the following options: Area 1 Management Focus (12 hours), Area 2
 Maintenance Focus (12 hours), or Area 3 Flight Focus (13 hours). See the 2014 Undergraduate Catalog for the required courses in each area.
- 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester AVIA 1020 Aeronautics AVIA 1310 FAA Private Requirement FLYA 1320 Private Flight A ENGL 1020 Composition I (GE) General Education Semester Total AE 1400 Freshman Seminar**	Hrs 2 3 1 3 5 14	Freshman Year - Spring Semester ACCT 2101 Principles of Financial Accounting FLYA 1321 Private Flight B ECON 1010 Principles of Macroeconomics (GE) ENGL 1030 Composition II (GE) MATH 1131 Applied Calculus (GE) General Education Semester Total	Hrs 3 1 3 3 3 1 1 6
Sophomore Year - Fall Semester FLYA 3313 Instrument Flight A FLYA 3314 Instrument Flight B AVIA 3325 FAA Instrument Requirement BLAW 2720 Legal Environment of Business General Education Semester Total	Hrs 1 1 3 3 6 14	Sophomore Year - Spring Semester AVIA 4350 Aviation Weather COMM 2620 Introduction to Public Relations PHYS 1104 Introduction to the Sciences: Physics (GE) General Education Semester Total	Hrs 3 3 4 6 16
Junior Year - Fall Semester AVIA 4010 Aerodynamics MGT 3315 Management of Organizations or INDM 4210 Industrial Management* MKT 3405 Marketing Policy Major Option 1 Electives* General Education Semester Total	Hrs 3 3 3 3 3 15	Junior Year - Spring Semester AVIA 3710 Professional Ethics in Aviation AVIA 4310 Air Traffic Control FIN 2801 Business Statistics HRM 3920 Human Resource Management MGT 3325 Business Communications General Education Semester Total	Hrs 2 2 2 3 3 3 3 3 16
Senior Year - Fall Semester AVIA 4040 Aviation Management AVIA 4090 Aviation Law AVIA 4420 Air Transportation AVIA 4430 Corporate Aviation Management AVIA 4500 Aviation Safety Semester Total	Hrs 3 3 3 3 1 5	Senior Year - Spring Semester AVIA 4380 Flight Operations Management AVIA 4999 Integrative Studies Capstone FIN 3850 Principles of Finance Major Option 1 Electives* Free Choice Elective Semester Total	Hrs 3 3 2 3 14

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 MGT 3315 instead of INDM 4210. In addition, CIS 1600 would be needed in general education 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester AVIA 1020 Aeronautics ENGL 1020 Composition I (GE) MATH 1131 Applied Calculus (GE) General Education Semester Total AE 1400 Freshman Seminar*	Hrs 2 3 3 6 14	Freshman Year - Spring Semester ENGL 1030 Composition II (GE) CADD 1105 Basic AutoCAD CADD 1110 Fundamentals of Drafting CADD 1170 Introduction to Computer-Aided Drafting PHYS 1104 Introduction to the Sciences: Physics (GE) General Education Semester Total	Hrs 3 1 3 2 4 3 16
Sophomore Year - Fall Semester ACCT 2101 Principles of Financial Accounting ATM 3010 Transportation Systems BLAW 2720 Legal Environment of Business General Education Semester Total	Hrs 3 3 3 5 14	Sophomore Year - Spring Semester COMM 2620 Public Relations FIN 2801 Business Statistics I General Education Semester Total	Hrs 3 3 9 15
Junior Year - Fall Semester ECON 1010 Principles of Macroeconomics (GE) MGT 3315 Management of Organizations or INDM 4210 Industrial Management** MKT 3405 Marketing Policy Semester Total	Hrs 3 3 3 3 12	Junior Year - Spring Semester AVIA 3620 Principles of Aviation Accident Causation or SAFE 3000 Principles of Accident Causation & Prevention AVIA 3710 Professional Ethics in Aviation AVIA 4310 Air Traffic Control FIN 3850 Principles of Finance HRM 3920 Human Resource Management MGT 3325 Business Communications Semester Total	Hrs 3 2 2 3 3 3 16
Summer – Between Junior/Senior Year AVIA 3022 Aviation Internship Semester Total	Hrs 3 3		
Senior Year — Fall Semester AVIA 4010 Aerodynamics AVIA 4040 Aviation Management AVIA 4430 Corporate Aviation Management AVIA 4500 Aviation Safety Free Choice Elective Semester Total	Hrs 3 3 3 3 15	Senior Year - Spring Semester AVIA 4045 Airport Management AVIA 4090 Aviation Law AVIA 4420 Air Transportation AVIA 4999 Integrative Studies Capstone Major Option 2 Electives Semester Total	Hrs 3 3 3 3 1 5

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 MGT 3315 instead of INDM 4210. In addition, CIS 1600 would be needed in general education to complete the minor.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CHEM 1131 General Chemistry I (GE) ENGL 1020 Composition I (GE) MATH 1151 Calculus & Analytical Geometry I (GE) General Education Managing Information Semester Total AE 1400 Freshman Seminar*	Hrs 5 3 5 2-3 15-16	Freshman Year - Spring Semester BIOL 1110 Principles of Biology CHEM 1132 General Chemistry II ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 3 5 3 3 14
Sophomore Year - Fall Semester BIOL 2512 Cell Biology CHEM 3341 Organic Chemistry I PHYS 1101 (GE) or PHYS 2121 (GE) or PHYS 2123/1123 General Education Semester Total	Hrs 3 4 4-5 3 14-15	Sophomore Year - Spring Semester CHEM 3212 Quantitative Analysis CHEM 3342 Organic Chemistry II PHYS 1102 or PHYS 2122 or PHYS 2124/1124 General Education Semester Total	Hrs 3 4 4-5 3 14-15
Junior Year - Fall Semester BIOL 3511 Genetics CHEM 4531 Physical Chemistry: Thermodynamics & Kinetics** General Education Semester Total	Hrs 4 4 6 14	Junior Year - Spring Semester BIOL 4514 Molecular Biology BIOL 4515 Molecular Technology Laboratory CHEM 3920 Communication Skills in Chemistry** BIOL/CHEM Major Electives# General Education Semester Total	Hrs 3 2 2 2-4 6 15-17
Senior Year - Fall Semester CHEM 3421 Intermediate Biochemistry BIOL/CHEM Major Electives# General Education Free Choice Electives*** Semester Total	Hrs 3 2-4 3 7 15-17	Senior Year - Spring Semester CHEM 4421 Advanced Biochemistry CHEM 4431 Biochemistry Laboratory Free Choice Electives*** Semester Total	Hrs 3 2 10 15

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. The number of free choice electives required will depend on the PHYS choice made in the major. This plan assumes that the PHYS chosen will overlap with general education.
- #Six hours of major electives are required. Three of the six hours must be CHEM. See the 2014 Undergraduate Catalog for a listing of appropriate Major Electives.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester BIOL 1000 The Discipline of Biology and Earth Science BIOL 1110 Principles of Biology General Education Semester Total	Hrs 1 3 11 15	Freshman Year - Spring Semester BIOL 1111 Plant Biology ENGL 1020 Composition I (GE) General Education Semester Total	Hrs 4 3 9
Sophomore Year - Fall Semester BIOL 1112 Animal Biology CHEM 1131 General Chemistry I (GE) ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 4 5 3 15	Sophomore Year - Spring Semester BIOL 2020 General Ecology CHEM 1132 General Chemistry II General Education Semester Total	Hrs 3 5 6 14
Junior Year - Fall Semester BIOL 3511 Genetics BIOL 3712 Field Natural History General Education Free Choice Electives Semester Total	Hrs 4 4 3 5	Junior Year - Spring Semester BIOL 2512 Cell Biology BIOL 4013 Introductory Experimental Design & Analysis BIOL 4102 Evolution Free Choice Electives Semester Total	Hrs 3 3 6 15
Senior Year - Fall Semester BIOL 3431 Animal Physiology (fall only)* Free Choice Electives Semester Total	Hrs 0-4* 10-14 14	Senior Year - Spring Semester BIOL 3611 Microbiology BIOL 4001 Ecology Senior Seminar or BIOL 4002 Life Science Senior Seminar BIOL 4411 Plant Physiology (spring only)* BIOL 4222 The Biological Perspective Free Choice Electives Semester Total	Hrs 4 1 0-4* 3 3-7

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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester BIOL 1000 The Discipline of Biology and Earth Science BIOL 1110 Principles of Biology General Education Semester Total	Hrs 1 3 11 15	Freshman Year - Spring Semester BIOL 1111 Plant Biology CHEM 1131 General Chemistry I (GE) ENGL 1020 Composition I (GE) General Education Semester Total	Hrs 4 5 3 15
Sophomore Year - Fall Semester BIOL 1112 Animal Biology BIOL 3711 Plant Identification ENGL 1030 Composition II or CTE 3060 Technical Writing* (GE) General Education Semester Total	Hrs 4 4 3 1	Sophomore Year - Spring Semester BIOL 2020 General Ecology BIOL Major Area Electives** CHEM 1132 General Chemistry II General Education Semester Total	Hrs 3 4 5 3 15
Junior Year - Fall Semester BIOL 4709 Plant Ecology General Education Semester Total	Hrs 4 12 16	Junior Year - Spring Semester BIOL 4013 Introductory Experimental Design & Analysis BIOL 4711 Animal Ecology Free Choice Electives Semester Total	Hrs 3 4 9 16
Senior Year - Fall Semester BIOL Major Area Electives** Major Area Electives* Free Choice Elective Semester Total	Hrs 4 3 7 14	Senior Year - Spring Semester BIOL 4001 Ecology Senior Seminar BIOL 4102 Evolution BIOL 4222 The Biological Perspective Free Choice Electives Semester Total	Hrs 1 3 3 8 15

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

- *See the 2014 Undergraduate Catalog for list of appropriate major area electives (non-BIOL choices). If CTE 3060 is chosen in general education, it will also fulfill the three hours of non-BIOL major electives. This choice would increase Free Choice Electives by 3 hours.
- **See the 2014 Undergraduate Catalog for list of appropriate Biology major area electives (BIOL 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester BIOL 1000 The Discipline of Biology and Earth Science BIOL 1110 Principles of Biology General Education Semester Total	Hrs 1 3 12 16	Freshman Year - Spring Semester BIOL 1111 Plant Biology BIOL 1112 Animal Biology ENGL 1020 Composition I (GE) General Education Semester Total	Hrs 4 4 3 3 14
Sophomore Year - Fall Semester BIOL 2020 General Ecology ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) Physical Science Major Area Elective* General Education Semester Total	Hrs 3 4 6 16	Sophomore Year - Spring Semester Physical Science Major Area Elective* Wildlife Management & Conservation Major Area Elective* General Education Semester Total	Hrs 5 3 6 14
Junior Year - Fall Semester BIOL 3711 Plant Identification Wildlife Management & Conservation Major Area Elective* General Education or Free Choice Electives** Semester Total	Hrs 4 3 9 16	Junior Year - Spring Semester BIOL 4013 Introductory Experimental Design & Analysis or MATH 1300 Basic Statistics** BIOL 4102 Evolution or BIOL 2510 Basic Genetics** + Free Choice Electives Semester Total	Hrs 3 3 9 15
Senior Year - Fall Semester Wildlife & Habitat Biology Major Area Elective* Free Choice Elective Semester Total	Hrs 4 11 15	Senior Year - Spring Semester BIOL 4001 Ecology Senior Seminar BIOL 4222 The Biological Perspective Wildlife & Habitat Biology Major Area Elective* Free Choice Electives Semester Total	Hrs 1 3 4 6

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

- *See the 2014 Undergraduate Catalog for lists of appropriate major area electives in the following three categories: physical sciences electives (9 hours), wildlife management and conservation electives (6 hours), and wildlife and habitat biology electives (6 hours). If chosen, CHEM 1131, EASC 1004, and/or PHYS 1101 will also count in general education and additional hours of free choice electives will be needed to reach 120 hours for graduation.
- **If any of the following classes are chosen in the major, they will also count in general education and additional hours of free choice electives will be needed to reach 120 hours for graduation: MATH 1300, BIOL 2510, CHEM 1131, EASC 1004 or PHYS 1101. The plan above assumes no overlap between major and general education classes.
- +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 4 hours of general education. The number of free choice electives will vary depending on choices made.
- 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester BIOL 1000 The Discipline of Biology and Earth Science BIOL 1110 Principles of Biology General Education Semester Total	Hrs 1 3 11 15	Freshman Year - Spring Semester BIOL 1111 Plant Biology ENGL 1020 Composition I (GE) General Education Semester Total	Hrs 4 3 9
Sophomore Year - Fall Semester BIOL 2020 General Ecology BIOL 3711 Plant Identification CHEM 1131 General Chemistry I (GE) ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) Semester Total	Hrs 3 4 5 3 15	Sophomore Year - Spring Semester BIOL 2512 Cell Biology CHEM 1132 General Chemistry II General Education Semester Total	Hrs 3 5 6 14
Junior Year - Fall Semester BIOL 3511 Genetics PHYS 1101 College Physics I (GE) General Education Free Choice Electives** Semester Total	Hrs 4 4 3 3	Junior Year - Spring Semester BIOL 4102 Evolution Major Area Electives* Free Choice Electives** Semester Total	Hrs 3 6-8 6 15-17
Senior Year - Fall Semester BIOL 4709 Plant Ecology Free Choice Electives*** Semester Total	Hrs 4 10-12 14-16	Senior Year - Spring Semester BIOL 4001 Ecology Senior Seminar or BIOL 4002 Life Science Senior Seminar BIOL 4411 Plant Physiology BIOL 4222 The Biological Perspective Free Choice Electives** Semester Total	Hrs 1 4 3 7

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

- *See the 2014 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.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester BIOL 1000 The Discipline of Biology and Earth Science BIOL 1110 Principles of Biology General Education Semester Total	Hrs 1 3 11 15	Freshman Year - Spring Semester BIOL 1112 Animal Biology CHEM 1131 General Chemistry I (GE) ENGL 1020 Composition I (GE) General Education Semester Total	Hrs 4 5 3 1 5
Sophomore Year - Fall Semester BIOL 2020 General Ecology CHEM 1132 General Chemistry II ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 3 5 3 3 14	Sophomore Year - Spring Semester BIOL 2512 Cell Biology Major Area Elective* General Education Semester Total	Hrs 3 2-4 9 14-16
Junior Year - Fall Semester BIOL 3511 Genetics PHYS 1101 College Physics I (GE); Major Area Electives* General Education Semester Total	Hrs 4 4 2-4 3 13-15	Junior Year - Spring Semester BIOL 3211 Comparative Anatomy BIOL 4102 Evolution Free Choice Electives** Semester Total	Hrs 4 3 9 16
Senior Year - Fall Semester BIOL 3431 Animal Physiology Free Choice Electives** Semester Total	Hrs 4 12 16	Senior Year - Spring Semester BIOL 4001 Ecology Senior Seminar or BIOL 4002 Life Science Senior Seminar BIOL 4711 Animal Ecology BIOL 4222 The Biological Perspective Free Choice Electives** Semester Total	Hrs 1 4 3 5-7 13-15

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

- *See the 2014 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester BIOL 1000 The Discipline of Biology and Earth Science BIOL 1110 Principles of Biology CHEM 1131 General Chemistry I (GE)* General Education Semester Total	Hrs 1 3 5 6 15	Freshman Year - Spring Semester BIOL 1111 Plant Biology CHEM 1132 General Chemistry II ENGL 1020 Composition I (GE) General Education Semester Total	Hrs 4 5 3 1 15
Sophomore Year - Fall Semester BIOL 1112 Animal Biology BIOL 2512 Cell Biology ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 4 3 3 6	Sophomore Year - Spring Semester BIOL 3611 Microbiology General Education Semester Total	Hrs 4 11 15
Junior Year - Fall Semester BIOL 3511 Genetics General Education Free Choice Elective** Semester Total	Hrs 4 6 5 15	Junior Year - Spring Semester BIOL 4514 Molecular Biology BIOL 4515 Molecular Technology Lab Major Area Electives*** Free Choice Electives** Semester Total	Hrs 3 2 4 6 15
Senior Year - Fall Semester BIOL 3431 Animal Physiology (fall only)# Major Area Electives*** Free Choice Electives** Semester Total	Hrs 0.4# 3.4 7-12	Senior Year - Spring Semester BIOL 4002 Life Science Senior Seminar BIOL 4411 Plant Physiology (spring only)# BIOL 4222 The Biological Perspective Free Choice Electives** Semester Total	Hrs 1 0.4# 3 6-10 14

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 2014 Undergraduate Catalog for list of appropriate major area electives. If PHYS 1101 is chosen, this class will count in both the major and in general education. If chosen, additional hours of free choice electives will be needed to reach 120 hours for graduation.
- #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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester BIOL 1000 The Discipline of Biology and Earth Science BIOL 1110 Principles of Biology CHEM 1131 General Chemistry I (GE)* General Education Semester Total	Hrs 1 3 5 6	Freshman Year - Spring Semester BIOL 1112 Animal Biology CHEM 1132 General Chemistry II ENGL 1020 Composition I (GE) General Education Semester Total	Hrs 4 5 3 1 5
Sophomore Year - Fall Semester BIOL 2512 Cell Biology BIOL 3511 Genetics CHEM 3341 Organic Chemistry I ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) Semester Total	Hrs 3 4 4 3	Sophomore Year - Spring Semester CHEM 3342 Organic Chemistry II PHYS 1101 College Physics I (GE) General Education Semester Total	Hrs 4 4 8 16
Junior Year - Fall Semester BIOL 3611 Microbiology General Education Free Choice Electives Semester Total	Hrs 4 6 5 15	Junior Year - Spring Semester BIOL 3211 Comparative Anatomy or BIOL 3401 Human Anatomy Major Area Electives** General Education Free Choice Electives Semester Total	Hrs 3-4 4 6 2 15-16
Senior Year - Fall Semester BIOL 3431 Animal Physiology or BIOL 3402 Human Physiology Major Area Electives** Free Choice Electives Semester Total	Hrs 4-5 4 7 15-16	Senior Year - Spring Semester BIOL 4002 Life Science Senior Seminar BIOL 4222 The Biological Perspective Free Choice Electives Semester Total	Hrs 1 3 10 14

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 2014 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

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Freshman Year - Fall Semester BIOL 1000 The Discipline of Biology and Earth Science BIOL 1110 Principles of Biology ENGL 1020 Composition I (GE) General Education Semester Total	Hrs 1 3 9 16	Freshman Year - Spring Semester BIOL 1111 Plant Biology CJ 1000 Introduction to Criminal Justice (GE) General Education Semester Total	Hrs 4 3 9 16
Sophomore Year - Fall Semester BIOL 1112 Animal Biology CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 4 3 9 16	Sophomore Year - Spring Semester BIOL 2020 General Ecology Major Electives* General Education Free Choice Electives** Semester Total	Hrs 3 6 3 15
Junior Year - Fall Semester BIOL 3711 Plant Identification COMM 2620 Public Relations CJ 2300 Criminal Law and Procedure Free Choice Electives** Semester Total	Hrs 4 3 6	Junior Year - Spring Semester BIOL 4919 Wildlife Policy and Law Free Choice Electives** Semester Total	Hrs 3 12 15
Senior Year - Fall Semester CJ 4302 Criminal Evidence Major Electives* Free Choice Electives** Semester Total	Hrs 3 3-4 7-8 14	Senior Year - Spring Semester BIOL 4001 Ecology Senior Seminar BIOL 4222 The Biological Perspective Major Electives* Free Choice Electives** Semester Total	Hrs 1 3 4 1 12

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

- *See catalog for choices to fulfill this area. If BIOL 2510 is chosen, this course will count in both the major and in general education. If chosen, three additional hours of free choice electives will be needed. This plan assumes BIOL 2510 is not chosen.
- **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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before
 earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second
 semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for
 the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more
 information.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester BIOL 1000 The Discipline of Biology and Earth Science BIOL 1111 Plant Biology EASC 1004 Introduction to Geology (GE) ENGL 1020 Composition I (GE) General Education MATH Semester Total	Hrs 1 4 4 3 3 15	Freshman Year - Spring Semester BIOL 1112 Animal Biology CHEM 1131 Chemistry I (GE) ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) POLS 1510 American Government (GE) Semester Total	Hrs 4 5 3 1
Sophomore Year - Fall Semester BIOL 3511 Genetics BIOL 2512 Cell Biology EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDFL 2240 Educational Psychology (GE) HIST 1350 or 1351 History of the United States (GE) Semester Total	Hrs 4 3 2 1 3 3 16	Sophomore Year - Spring Semester BIOL 2020 General Ecology PHYS 1101 Physics I (4) or PHYS 1104 Introduction to Sciences: Physics (4) or PHYS 2121 University Physics (5) General Education Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 3 4-5 9 16-17
Junior Year - Fall Semester BIOL 3611 Microbiology BIOL 3712 Field Natural History EDSP 2100 Education of the Exceptional Child EDFL 4300 Educational Measurement & Evaluation Major Electives* Semester Total	Hrs 4 4 2 2 1 3	Junior Year - Spring Semester BIOL 3431 Animal Physiology (fall only)** or BIOL 4411 Plant Physiology (spring only)** CTE 2000 Technology & Society (GE) EDFL 4210 The Teaching of Reading in the Secondary School PSY 4230 Psychology of Adolescence Major Electives* Semester Total	Hrs 4 3 2 3 3 15
Senior Year - Fall Semester EDFL 3500 Secondary Teaching & Behavior Management FLDX 3550 Practicum in Secondary Instruction STCH 4050 Science Teaching Methods Major Electives* General Education Semester Total	Hrs 3 1 3 3-4 6 16-17	Senior Year - Spring Semester*** FLDX 4595 Student Teaching Secondary I FLDX 4468 Student Teaching Secondary II STCH 4080 Teaching Secondary Science Semester Total	Hrs 5 4 3 12

Biology Major, B.S. in Ed. Degree - 120 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.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

Career and Tech. Teacher Education Major, B.S. in Ed. Degree - Area 1 Business Teacher Education (41-01564)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester BTE 1210 Essentials of Managing Information (GE) CTE 1000 Intro. to Career Technology Education (fall only) ENGL 1020 Composition I (GE) General Education Math General Education Science with laboratory Semester Total	Hrs 2 2 3 3 4	Freshman Year - Spring Semester ECON 1010 Principles of Macroeconomics (GE) ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) HIST 1350 or 1351 History of the United States (GE) POLS 1510 American Government (GE) General Education Semester Total	Hrs 3 3 3 3 15
Sophomore Year - Fall Semester ACCT 2101 Principles of Financial Accounting EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDFL 2240 Educational Psychology EDSP 2100 Education of Exceptional Child General Education Semester Total	Hrs 3 2 1 3 2 6 17	Sophomore Year - Spring Semester BLAW 2720 Legal Environment Business CTE 3110 Financial Management Education General Education Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 3 3 9 15
Junior Year - Fall Semester BTE 4535 Data Input Technologies (fall only) MGT 3315 Management of Organizations MGT 3325 Business Communications MKT 3405 Marketing Policy PSY 4230 Psychology of Adolescence Major Elective* Semester Total	Hrs 2 3 3 3 3 3 3 17	Junior Year - Spring Semester BTE 4241 Coord. of Cooperative Education Programs (sp. only) BTE 4536 Integrated Productivity Applications (spring only) BTE 4550 Publishing Applications for Business (spring only) CTE 4145 Curriculum Construction in CTE EDFL 4210 The Teaching of Reading in the Secondary School Major Electives* Semester Total Apply for Student Teaching	Hrs 2 3 2 3 2 4 16
Senior Year - Fall Semester BTE 4210 Methods of Teaching Business Edu. (fall/sum. only) CTE 4280 Implementing CTE Programs and Lab Management** CTE 4501 Managing Classroom Technologies (fall/sum. only) EDFL 3500 Behavioral Management FLDX 3550 Practicum in Secondary Instruction EDFL 4300 Education Measurement & Evaluation Semester Total	Hrs 3 3 2 3 1 2 14	Senior Year - Spring Semester*** BTE 4220 Secondary Field Experience II CTE 4135 Professional Preparation in CTE FLDX 4595 Student Teaching I FLDX 4468 Student Teaching II Semester Total	Hrs 1 2 5 4 12

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.
- **CTE 4280 is offered summer only through UCM. During the fall semester it is offered cooperatively through a consortium agreement with SEMO and through MSSU during the spring 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.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass
 all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the
 MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to
 prepare for the exam.
- See www.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.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CFD 1010 Individual & Family Relationships (GE) CFD 1220 Child Development CTE 1000 Intro. to Career & Technology Education (fall only) ENGL 1020 Composition I (GE) General Education Math Semester Total AE 1400 Freshman Seminar*	Hrs 3 2 2 3 1 4	Freshman Year - Spring Semester CHEM 1104 Introduction to the Sciences: Chemistry (GE) ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) POLS 1510 American Government (GE) General Education Semester Total	Hrs 4 3 3 5-6 15-16
Sophomore Year - Fall Semester FAME 1450 Fundamentals of Apparel Design and Construction FCSE 2000 FCS Student Organizations EDFL 2100 Foundations of Education FLDX 2150 Introductory Fled Experience EDFL 2240 Educational Psychology EDSP 2100 Education of the Exceptional Child General Education	Hrs 3 1 2 1 3 2 3 3 3	Sophomore Year - Spring Semester FAME 2442 Textile Science FOOD 2322 Food Preparation HIST 1350 or 1351 History of the United States (GE) General Education Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 3 3 3 9 18
Semester Total	15		
Junior Year - Fall Semester CFD 3230 Family Systems & Lifespan Development (fall only) CTE 3110 Financial Management Education D&N 3340 Nutrition ECEL 3260 Practicum in Child Development FCSE 3710 Found. of Family Consumer Sciences Educ. (fall only) General Education (if HED 1100 is not chosen) or Major Elective** (if HED 1100 is chosen) Semester Total	Hrs 3 3 3 1 3 1 3	Junior Year - Spring Semester CFD 3240 Parent-Child Interaction (spring only) CFD 4220 Sexuality Across the Lifespan or HED 1100 Personal Health (GE) or HED 4320 Teaching Sexuality Education in the School CTE 4145 Curriculum Construction for CTE FCSE 3120 Family Resource Management (spring only) PSY 4230 Psychology of Adolescence Semester Total	Hrs 3 3 3 3 3 3 1 5
Senior Year - Fall Semester EDFL 3500 Secondary Teaching & Behavioral Management FLDX 3550 Practicum in Secondary Instruction EDFL 4210 The Teaching of Reading in the Secondary School EDFL 4300 Educational Measurement & Evaluation FCSE 4740 Methods of Teaching Fam. Consumer Sci. (fall only) FAME 4410 Materials for Interior Furnishings Major Elective** Semester Total	Hrs 3 1 2 2 3 3 1 1 15	Senior Year - Spring Semester*** CTE 4135 Professional Preparation in CTE FCSE 4725 Secondary Field Experience II FLDX 4595 Student Teaching Secondary I FLDX 4468 Student Teaching Secondary II Semester Total	Hrs 2 1 5 4 12

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.
- **This major area requires 1-4 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.
- Certification to teach family and consumer sciences from birth to grade 12.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

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

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Freshman Year - Fall Semester CTE 1000 Intro. to Career & Technical Education (fall only) CTE 1300 Introduction to Engineering Design (fall only) ENGL 1020 Composition I (GE) CADD 1105 Basic AutoCAD General Education Math* General Education Semester Total	Hrs 2 3 3 1 3-5 3 1 5-17	Freshman Year - Spring Semester CADD 1170 Introduction to Computer-Aided Drafting ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) HIST 1350 or 1351 History of the United States (GE) PHYS 1104 Introduction to the Sciences: Physics (Lab) (GE) General Education Semester Total	Hrs 2 3 3 4 4 3 15
Sophomore Year - Fall Semester EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDFL 2240 Educational Psychology (GE) EDSP 2100 Education of the Exceptional Child ENGT 1510 Introduction to Manufacturing Processes ET 1020 General Electronics General Education Semester Total	Hrs 2 1 3 2 3 3 3 3 17	Sophomore Year - Spring Semester BIOL 1004 or other Knowledge Area II General Education** ENGT 2515 Applied Manufacturing Processes POLS 1510 American Government (GE) General Education* Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 3-4 3 3 6 15-16
Junior Year - Fall Semester CTE 2000 Technology & Society (GE) CTE 4280 Implementing CTE Programs and Lab Management+ Major Electives*** Semester Total	Hrs 3 3 12 18	Junior Year - Spring Semester BTE 4241 Coord. of Cooperative Educ. Programs (spring only) SOT 4570 Computer Graphics IGEN 3116 Creative Problem Solving PSY 4230 Psychology of Adolescence Major Electives*** Semester Total	Hrs 2 3 3 3 14
Senior Year - Fall Semester CTE 4125 Methods of Teaching Problem-Based Learning CTE 4145 Curriculum Construction CTE EDFL 3500 Secondary Teaching & Behavioral Management FLDX 3550 Practicum in Secondary Instruction EDFL 4210 The Teaching of Reading in the Secondary School EDFL 4300 Educational Measurement & Evaluation Semester Total	Hrs 3 3 1 1 2 2 14	Senior Year - Spring Semester + CTE 4135 Professional Preparation in CTE FLDX 4595 Student Teaching Secondary I FLDX 4468 Student Teaching Secondary II T&OE 4120 Secondary Field Experience Semester Total	Hrs 2 5 4 1 12

Career and Technology Teacher Education Major, B.S. in Ed. Degree Area 3 Engineering and Technology Teacher Education (9-12 Certification) - 120 hours

- *Students interested in Project Lead the Way (PLTW) curriculum must have complete a certain level of mathematics. Students may take Option 1 = MATH 1111 and 1112 (elective, not part of general education) or Option 2 = MATH 1150 or 1151.
- **Students interested in PLTW curriculum must have BIOL 1004 as the third choice in Knowledge Area II in General Education.
- ***Suggested Major Electives (15 hours required) to enhance your degree program are: ATM 1010 CADD 3160 or 4180, CMGT 3010, CTE 3060 (counts in General Education) or 4115, EDFL 4130 and 4340, ENGT 4520, or GRAP 1010.
- +CTE 4280 is offered summer only through UCM. During the fall semester it is offered cooperatively through a consortium
 agreement with SEMO and through MSSU during the spring 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.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

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

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Freshman Year - Fall Semester CHEM 1131 General Chemistry I (GE)* ENGL 1020 Composition I (GE) MATH 1151 Calculus & Analytical Geometry I (GE)* General Education Managing Information Semester Total AE 1400 Freshman Seminar**	Hrs 5 3 5 2-3 15-16	Freshman Year - Spring Semester CHEM 1132 General Chemistry II ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) MATH 1152 Calculus & Analytical Geometry II General Education Semester Total	Hrs 5 3 5 3 16
Sophomore Year - Fall Semester CHEM 3341 Organic Chemistry I PHYS 1101 College Physics I (GE) General Education Semester Total	Hrs 4 4 6 14	Sophomore Year - Spring Semester CHEM 3342 Organic Chemistry II PHYS 1102 College Physics II General Education Semester Total	Hrs 4 4 6 14
Junior Year - Fall Semester CHEM 3111 Intermediate Inorganic Chemistry*** CHEM 3421 Intermediate Biochemistry CHEM 4231 Instrumental Analysis*** CHEM 4910 Research in Chemistry General Education Semester Total	Hrs 4 3 4 1 3 15	Junior Year - Spring Semester CHEM 3212 Quantitative Analysis CHEM 3920 Communication Skills in Chemistry*** CHEM 4910 Research in Chemistry General Education Free Choice Electives Semester Total	Hrs 3 2 1 6 3 15
Senior Year - Fall Semester CHEM 4111 Advanced Inorganic Chemistry or CHEM 4313 Advanced Organic Chemistry CHEM 4531 Physical Chemistry I*** CHEM 4910 Research in Chemistry Free Choice Electives Semester Total	Hrs 3 4 1 8 16	Senior Year - Spring Semester CHEM 4421 Advanced Biochemistry CHEM 4532 Physical Chemistry II*** CHEM 4910 Research in Chemistry Free Choice Electives Semester Total	Hrs 3 4 1 6-7 14-15

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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CHEM 1131 General Chemistry I (GE)* ENGL 1020 Composition I (GE) MATH 1151 Calculus & Analytical Geometry I (GE)* General Education Managing Information Semester Total AE 1400 Freshman Seminar**	Hrs 5 3 5 2-3 15-16	Freshman Year - Spring Semester CHEM 1132 General Chemistry II ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) MATH 1152 Calculus & Analytical Geometry II General Education Semester Total	Hrs 5 3 5 3 16
Sophomore Year - Fall Semester CHEM 3341 Organic Chemistry I ET 1010 Applied Electricity PHYS 1101 College Physics I (GE) General Education Semester Total	Hrs 4 4 4 7 15	Sophomore Year - Spring Semester CHEM 3342 Organic Chemistry II GEOG 2212 World Geography (GE) PHYS 1102 College Physics II General Education Semester Total	Hrs 4 3 4 3 14
Junior Year - Fall Semester CHEM 3111 Intermediate Inorganic Chemistry*** CHEM 3421 Intermediate Biochemistry CHEM 4231 Instrumental Analysis*** CHEM 4910 Research in Chemistry General Education Semester Total	Hrs 4 3 4 1 3 15	Junior Year - Spring Semester CHEM 3212 Quantitative Analysis CHEM 3920 Communication Skills in Chemistry*** CHEM 4910 Research in Chemistry General Education Semester Total	Hrs 3 2 1 9
Senior Year - Fall Semester CHEM 4531 Physical Chemistry I*** CHEM 4910 Research in Chemistry ET 3017 Industrial Electronics Free Choice Electives Semester Total	Hrs 4 1 4 6 15	Senior Year - Spring Semester CHEM 4221 Environmental Chemistry*** CHEM 4532 Physical Chemistry II*** CHEM 4910 Research in Chemistry Free Choice Electives Semester Total	Hrs 3 4 1 6-7 14-15

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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CHEM 1131 General Chemistry I (GE)* ENGL 1020 Composition I (GE) MATH 1151 Calculus & Analytical Geometry I (GE)* General Education Managing Information Semester Total AE 1400 Freshman Seminar**	Hrs 5 3 5 2-3 15-16	Freshman Year - Spring Semester CHEM 1132 General Chemistry II ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) MATH 1152 Calculus & Analytical Geometry II General Education Semester Total	Hrs 5 3 5 3 16
Sophomore Year - Fall Semester BIOL 1110 Principles of Biology CHEM 3341 Organic Chemistry I PHYS 1101 College Physics I (GE) General Education Semester Total	Hrs 3 4 4 1 1 1	Sophomore Year - Spring Semester CHEM 3342 Organic Chemistry II EASC 3010 Environmental Geology PHYS 1102 College Physics II General Education Semester Total	Hrs 4 3 4 6 17
Junior Year - Fall Semester CHEM 3111 Intermediate Inorganic Chemistry*** CHEM 3421 Intermediate Biochemistry CHEM 4231 Instrumental Analysis*** CHEM 4910 Research in Chemistry General Education Semester Total	Hrs 4 3 4 1 3 15	Junior Year - Spring Semester CHEM 3212 Quantitative Analysis CHEM 3920 Communication Skills in Chemistry*** CHEM 4910 Research in Chemistry General Education Semester Total	Hrs 3 2 1 9
Senior Year - Fall Semester CHEM 4531 Physical Chemistry I*** CHEM 4910 Research in Chemistry GEOG 4220 Geographic Information Systems I Free Choice Electives Semester Total	Hrs 4 1 3 6 14	Senior Year - Spring Semester CHEM 4221 Environmental Chemistry*** CHEM 4532 Physical Chemistry II*** CHEM 4910 Research in Chemistry SAFE 3120 Industrial Hygiene Free Choice Electives Semester Total	Hrs 3 4 1 3 2-3 13-14

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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

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Freshman Year - Fall Semester CHEM 1131 General Chemistry I (GE)* ENGL 1020 Composition I (GE) MATH 1151 Calculus & Analytical Geometry I (GE)* General Education Managing Information (CIS 1600 rec. for IBE Block)# Semester Total AE 1400 Freshman Seminar**	Hrs 5 3 5 2-3 15-16	Freshman Year - Spring Semester CHEM 1132 General Chemistry II ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) MATH 1152 Calculus & Analytical Geometry II General Education Semester Total	Hrs 5 3 5 3 16
Sophomore Year - Fall Semester CHEM 3341 Organic Chemistry I PHYS 1101 College Physics I (GE) General Education Semester Total	Hrs 4 4 6 14	Sophomore Year - Spring Semester ACCT 2100 Survey of Accounting CHEM 3342 Organic Chemistry II PHYS 1102 College Physics II General Education Semester Total	Hrs 3 4 4 1 14
Junior Year - Fall Semester CHEM 3111 Intermediate Inorganic Chemistry*** CHEM 3421 Intermediate Biochemistry CHEM 4231 Instrumental Analysis*** CHEM 4910 Research in Chemistry General Education Semester Total	Hrs 4 3 4 1 3 15	Junior Year - Spring Semester CHEM 3212 Quantitative Analysis CHEM 3920 Communication Skills in Chemistry*** CHEM 4910 Research in Chemistry General Education Semester Total	Hrs 3 2 1 9
Senior Year - Fall Semester CHEM 4531 Physical Chemistry I*** CHEM 4910 Research in Chemistry CIS 3630 Management Information Systems# MGT 3315 Management of Organizations# MGT 3385 or MKT 3485 or CIS 3685 IBE Practicum# MKT 3405 Marketing Policy# Semester Total	Hrs 4 1 3 3 3 17	Senior Year - Spring Semester CHEM 4532 Physical Chemistry II*** CHEM 4910 Research in Chemistry Free Choice Electives Semester Total	Hrs 4 1 8-9 13-14

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 1600).
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

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Freshman Year - Fall Semester BIOL 1110 Principles of Biology or BIOL 1111 Plant Biology* CHEM 1131 General Chemistry I (GE)** CTE 2000 Technology & Society (GE) ENGL 1020 Composition I (GE) Semester Total	Hrs 3-4 5 3 1 14-15	Freshman Year - Spring Semester BIOL 1005 Introduction to Environmental Sciences (GE) CHEM 1132 General Chemistry II ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) HIST 1350 or 1351 History of the United States (GE) Semester Total	Hrs 3 5 3 1 4
Sophomore Year - Fall Semester CHEM 3341 Organic Chemistry I EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDFL 2240 Educational Psychology EDSP 2100 Education of the Exceptional Child MATH 1151 Calculus & Analytic Geometry I (GE)** Semester Total	Hrs 4 2 1 3 2 5 17	Sophomore Year - Spring Semester CHEM 3212 Quantitative Analysis EASC 1004 Introduction to Geology PHYS 1101 or PHYS 2121 (or PHYS 2123 & 1123) POLS 1510 American Government (GE) Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 3 4 4-5 3 14-15
Junior Year - Fall Semester CHEM 3111 Intermediate Inorganic Chemistry*** PSY 4230 Psychology of Adolescence (GE) Major Elective# General Education Semester Total	Hrs 4 3 3 6 16	Junior Year - Spring Semester CHEM 4531 or 4532 Physical Chemistry*** EDFL 4210 The Teaching of Reading in the Secondary School EDFL 4300 Educational Measurement & Evaluation General Education Free Choice Elective Semester Total	Hrs 4 2 2 6 3 17
Senior Year - Fall Semester CHEM 3421 Intermediate Biochemistry EDFL 3500 Secondary Teaching & Behavioral Management FLDX 3550 Practicum in Secondary Instruction STCH 4050 Science Teaching Methods Major Elective# General Education Semester Total	Hrs 3 3 1 3 1-3 3 14-16	Senior Year - Spring Semester + FLDX 4595 Student Teaching Secondary I FLDX 4468 Student Teaching Secondary II STCH 4080 Secondary Science Teaching Semester Total	Hrs 5 4 3 12

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.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester AE 1450 Valuing Differences CFD 1010 Individual & Family Relationships (GE) ENGL 1020 Composition I (GE) PSY 1100 General Psychology or SOC 1800 Gen. Sociology (GE) General Education Semester Total AE 1400 Freshman Seminar*	Hrs 1 3 3 3 6 16	Freshman Year - Spring Semester CFD 1220 Child Development ECEL 2110 Diversity and Social Justice (GE) ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 3 3 3 6 15
Sophomore Year - Fall Semester CFD 1230 Observation of Children HIST 1350 or 1351 History of the United States (GE) General Education Semester Total	Hrs 2 3 9 14	Sophomore Year - Spring Semester CTE 3110 Financial Management Education or FCSE 3120 Family Resource Management SOC 2805 Introduction to Social Research General Education Free Choice Electives** Semester Total	Hrs 3 3 3 6 15
Junior Year - Fall Semester CFD 3230 Family Systems & Life Span Development CFD 3710 Field Experience in Child & Family Development Free Choice Electives** Semester Total Summer Semester CFD 4710 Internship*** Semester Total	Hrs 3 9 15 Hrs 3	Junior Year - Second Semester CFD 3240 Parent-Child Interaction CFD 3250 Org. & Admin. of Programs for Young Children CFD 4220 Sexuality Across the Lifespan Free Choice Electives** Semester Total	Hrs 3 3 3 6 15
Senior Year - Fall Semester CFD 3260 Youth Culture and Development CFD 4260 Adulthood CFD 4850 Family Policy and Advocacy CFD Major Elective (see Catalog for course choices) Free Choice Electives** Semester Total	Hrs 3 3 3 3 1 15	Senior Year - Spring Semester CFD 4745 Senior Seminar CFD Major Elective (see Catalog for course choices) Free Choice Electives** Semester Total	Hrs 3 3 6 12

Child and Family Development Major, 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.
- **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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

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Freshman Year - Fall Semester COMM 1100 Introduction to Communication COMM 2330 Communication in Small Groups/Teams ENGL 1020 Composition I (GE) General Education Semester Total	Hrs 1 3 3 9 16	Freshman Year - Spring Semester COMM 1000 Public Speaking (GE) COMM 2100 Introduction to Communication Theory COMM 2320 Foundations of Rhetorical Theory (spring only)# or General Education ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 3 3 3 1 5
Sophomore Year - Fall Semester COMM 1520 Reporting or COMM 2200 Writing Across the Media or COMM 2625 Writing & Editing for Public Relations COMM 2000 Media Literacy (GE) COMM 2380 Intro. to Organizational Comm. (fall only)# or General Education General Education Semester Total	Hrs 3 3 6 15	Sophomore Year - Spring Semester COMM 3010 Interpersonal Communication COMM 3100 Communication Research Methods Major Area Electives** General Education Semester Total	Hrs 3 3 3 6 15
Junior Year - Fall Semester COMM 3000 Film Appreciation (GE) COMM 3315 Improving Listening Abilities* Major Area Electives** Free Choice Electives Semester Total	Hrs 3 3 3 6 15	Junior Year - Spring Semester COMM 4320 Social Influence* Major Area Elective** Free Choice Electives Semester Total	Hrs 3 3 9 15
Senior Year - Fall Semester Major Area Elective*** Free Choice Elective*** Semester Total	Hrs 3 12 15	Senior Year - Spring Semester COMM 4790 Semior Capstone Major Area Elective** Free Choice Electives*** Semester Total	Hrs 1 3 10 14

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

- #Students will choose between COMM 2320 (spring semester only) or COMM 2380 (fall semester only). During the term when one is not taken, students should take a general education course.
- *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.
- ***Depending on the choices made for the 15 hour of major area electives, the minimum number (30) of upper level credit hours required for graduation may not be met. If needed, include upper level choices (3000/4000) in your general education and/or free choice electives.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

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Freshman Year - Fall Semester (IS 1600 Business Information Management (GE)* ENGL 1020 Composition I (GE) MATH 1111 College Algebra (GE)* General Education Semester Total AE 1400 or BADM 1400 Freshman Seminar**	Hrs 3 3 6 15	Freshman Year - Spring Semester CIS 1612 Ethics in Information Technology (GE) COMM 1000 Public Speaking or COMM 1050 Fundamentals of Oral Communication Competency (GE) ECON 1010 Principles of Macroeconomics (GE)* ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 3 3 3 3 15
Sophomore Year - Fall Semester ACCT 2101 Principles of Financial Accounting* CIS 2605 Programming with Visual C# ECON 1011 Principles of Microeconomics* General Education Semester Total	Hrs 3 3 7 16	Sophomore Year - Spring Semester ACCT 2102 Principles of Managerial Accounting* BLAW 2720 Legal Environment of Business* CIS 2665 Principles of Data Communications & LAN FIN 2801 Business Statistics I* General Education Semester Total Note: Complete all B.S.B.A. Admission requirements.*	Hrs 3 3 3 3 15
Junior Year - Fall Semester CIS 2615 Introduction to JAVA (IBE Block-below)*** CIS 3630 Management Information Systems*** MGT 3315 Management of Organizations*** MKT 3405 Marketing Policy*** IBE Practicum (CIS 3685/MKT 3485/MGT 3385)*** Semester Total	Hrs 3 3 3 3 3 15	Junior Year - Spring Semester CIS 3650 Database Management Systems CIS 3660 Analysis & Design of Computer Information Systems FIN 3801 Business Statistics II FIN 3850 Principles of Finance MGT 3325 Business Communications Semester Total	Hrs 3 3 3 3 15
Senior Year - Fall Semester CIS 3670 User Interface Design CIS 4660 Applications Development Using JAVA or CIS 4670 Applications Development Using VB.net CIS 4680 Data Resource Management MGT 4357 Organization Policy & Strategy CIS Major Elective Semester Total	Hrs 3 3 3 3 3 1 5	Senior Year - Spring Semester CIS 4690 Systems Architecture & Development MGT 3360 Production/Operations Management CIS Major Electives General Education Semester Total	Hrs 3 3 5 14

Computer Information Systems Major (Software Development), 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.
- ***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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

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Freshman Year - Fall Semester CIS 1600 Business Information Management (GE)* CIS 1612 Ethics in Information Technology (GE) ECON 1010 Principles of Macroeconomics (GE)* ENGL 1020 Composition I (GE) MATH 1111 College Algebra (GE)* Semester Total AE 1400 or BADM 1400 Freshman Seminar**	Hrs 3 3 3 3 15	Freshman Year - Spring Semester COMM 1000 Public Speaking or COMM 1050 Fundamentals of Oral Communication Competency (GE) ECON 1011 Principles of Microeconomics* ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	3 3 3 6 15
Sophomore Year - Fall Semester ACCT 2101 Principles of Financial Accounting* CIS 2605 Programming with Visual C# General Education Semester Total	Hrs 3 3 10 16	Sophomore Year - Spring Semester ACCT 2102 Principles of Managerial Accounting* BLAW 2720 Legal Environment of Business* CIS 2615 Introduction to JAVA CIS 2665 Prin. of Data Communications & Local Area Network FIN 2801 Business Statistics I* Semester Total Note: Complete all B.S.B.A. Admission requirements.*	Hrs 3 3 3 3 15
Junior Year - Fall Semester CIS 3665 Data Communication Technologies (fall only) (IBE Block-below)*** CIS 3630 Management Information Systems*** MGT 3315 Management of Organizations*** MKT 3405 Marketing Policy*** IBE Practicum (CIS 3685/MKT 3485/MGT 3385)*** Semester Total	Hrs 3 3 3 3 3 15	Junior Year - Spring Semester CIS 3650 Database Management Systems CIS 3660 Analysis & Design of Computer Information Systems FIN 3801 Business Statistics II MGT 3325 Business Communications General Education Semester Total	Hrs 3 3 3 3 1 5
Senior Year - Fall Semester CIS 4665 Data Communication & Distributed Data Processing (fall and summer semesters only) FIN 3850 Principles of Finance MGT 3360 Production/Operations Management MGT 4357 Organization Policy & Strategy CIS Elective Semester Total	Hrs 3 3 3 3 15	Senior Year - Spring Semester CIS 4685 Network Planning, Design and Security (spring only) CIS 4690 Systems Architecture & Development CIS Electives General Education Semester Total	Hrs 3 3 5 14

Computer Information Systems Major (Networking), 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.
- ***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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Computer Science Major (Option 1 Software Design), B.S. Degree (43-01281)

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Freshman Year - Fall Semester COMM 1000 Public Speaking (GE) CS 1000 Computers and Modern Society (GE) CS 1100 Computer Programming I ENGL 1020 Composition I (GE) General Education Semester Total AE 1400 Freshman Seminar*	Hrs 3 3 3 3 1 5	Freshman Year - Spring Semester CS 1110 Computer Programming II General Education Semester Total	Hrs 3 12 15
Sophomore Year - Fall Semester CS 2300 Data Structures CS 3500 C and UNIX Environment** MATH 1131 Applied Calculus (GE) or MATH 1151 Calculus & Analytic Geometry I (GE) General Education Semester Total	Hrs 3 3 3 1-5 6 15-17	Sophomore Year - Spring Semester CS 2200 Introduction to Computer Organization CS 2400 Discrete Structures CS 3110 Applications Programming in C# and .NET** or CS 3800 Applications Development w/ VB.NET*** CTE 3060 Technical Writing (GE) MATH 1300 Basic Statistics (GE) + + or MATH 3311 Introduction to Mathematical Statistics** Semester Total	Hrs 3 3 3 3 15
Junior Year - Fall Semester CS 3200 Computer Architecture** CS 4110 Mobile Applications Programming with Android or CS 4120 Advanced Applications Programming in Java*** CS 4300 Algorithm Design & Analysis** Option 1 Major Elective + General Education Semester Total	Hrs 3 3 3 3 3 15	Junior Year - Spring Semester CS 3100 Programming Languages** CS 3110, CS3800, CS 4110, and/or CS 4120*** CS 4500 Operating Systems** Option 1 Major Elective + Semester Total	Hrs 3 3-6 3 3-6 15
Senior Year - Fall Semester CS 4600 Database Theory & Applications** CS 4910 Software Engineering** Option 1 Major Elective+ General Education Free Choice Electives+++ Semester Total	Hrs 3 3 3 3 1 5	Senior Year - Spring Semester CS 4920 Senior Project** Option 1 Major Elective + Free Choice Electives + + + Semester Total	Hrs 3 3 7-9 13-15

Computer Science Major (Option 1 Software Design), 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 1 requires 9-12 credit hours of major electives from CS 3110, 3800, 4110, and/or 4120. The number of hours chosen among these classes will determine the number of major electives needed from the second major electives area (see below)
- +Option 1 requires 12-15 credit hours of major electives (15 required if only 9 hours were chosen from CS 3110, 3800, 4110, and 4120 see above). See the 2014 Undergraduate Catalog for the list of appropriate course choices.
- ++If MATH 1300 is chosen, it will count in both the major and in general education. If chosen, three additional hours of free choice electives will be needed to reach 120 hours for graduation. This plan assumes MATH 1300 is not chosen.
- +++The number of free choice electives will depend on the selections made in the two required MATH classes.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Computer Science Major (Missouri Innovation Campus (MIC) Option 1 Software Design), B.S. Degree (43-01281)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Courses listed in the first seven semesters include the course prefix, number, and titles used by the Metropolitan Community Colleges (MCC). The UCM equivalents are listed in parenthesis after the MCC course title. If there is no UCM equivalency, (N/A) is listed. Transfer course articulations may be found on the UCM website at www.ucmo.edu/corequiv/transferSearch.cfm.

High School Junior Year/MCC - Summer Semester COLL 100 First-Year Seminar CSIS 110 Technology and Info. Management (BTE 1210) (GE) Semester Total	Hrs 1 3 4	High School Junior Year/MCC - Fall Semester CSIS 123 Programming Fundamentals (CS 1100) CSIS 223 Object-Oriented Programming (CS 3110)** CSIS 143 Database Design and Management (CIS 3650) HIST 120, HIST 121, POLS 135, POLS 136, or POLS 137 (GE) MATH 110 Intermediate Algebra or MATH 120 College Algebra Semester Total	Hrs 3 3 3 3 15
High School Junior Year/MCC - Spring Semester (SIS 222 Java (substitute for CS 1110) MATH 115 (MATH 1300) (GE)++ SPDR 100 Fundamentals of Speech (COMM 1000) (GE) General Education Semester Total	Hrs 3 3 3 1 12	High School Senior Year/MCC - Summer Semester BSAD 120 Organizational Behavior CSIS 170 Principles of Information Assurance Semester Total	Hrs 3 3 6
High School Senior Year/MCC - Fall Semester CSIS 115 Intro. to Microcomputer Applications (CIS 1600) CSIS 161 Networking Fundamentals ENGL 101 Composition and Reading I (ENGL 1020) (GE) PHYS 130 General Physics I (PHYS 1101) (GE) or CHEM 107 Preparatory General Chemistry (GE) Semester Total	Hrs 3 3 3 7 1 4	High School Senior Year/MCC - Spring Semester CSIS 128 Web Development CSIS 152 Linux Operating Systems (CS 3500) ENGL 215 Technical Writing (CTE 3060) (GE) MATH 141 Discrete Structures for CS I (CS 2400) General Education Semester Total (graduate from high school this semester)	Hrs 3 3 3 3 1 5
MCC/UCM Junior Year - Summer Semester BSAD 127/221 Management Internship I CSIS 228 Advanced Web Development (CS 3120) + Semester Total	Hrs 3 3 6	MCC/UCM Junior Year - Fall Semester CSIS 221 Introduction to Computer Architecture (CS 2200) CSIS 271 Data Structures and Algorithm Analysis (CS 2300) CSIS 279 Web Database Programming CSIS 290 Field Competencies and Employment Strategies General Education Semester Total	Hrs 3 3 3 3 15
MCC/UCM Junior Year - Spring Semester CS 1000 Computers and Modern Society (GE) CS 3100 Programming Languages* CS 3800 Applications Development w/ VB.NET** MATH 175 Calculus for Business & Social Sci. (MATH 1131) (GE) General Education Semester Total	Hrs 3 3 3 3 15	UCM Senior Year - Summer Semester CS 4020 Internship in CS+ CS 4110 Mobile Applications Programming with Android** Semester Total	Hrs 3 3 6
UCM Senior Year - Fall Semester CS 3200 Computer Architecture* CS 4300 Algorithm Design & Analysis* CS 4800 Computer Networking + CS 4910 Software Engineering* General Education Semester Total	Hrs 3 3 3 3 1 5	UCM Senior Year - Spring Semester CS 4120 Advanced Applications Programming in Java** CS 4500 Operating Systems* CS 4600 Database Theory & Applications* CS 4820 Computer Security + CS 4920 Senior Project* Semester Total	Hrs 3 3 3 3 15

Computer Science Major (Missouri Innovation Campus (MIC) Option 1 Software Design), B.S. Degree (43-01281)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Computer Science Major (Missouri Innovation Campus (MIC) Option 1 Software Design), B.S. Degree - 138 hours

- This program is offered in cooperation with the Lee's Summit R-7 School District and the Metropolitan Community College (MCC). Students begin the program during their junior year in high school and will earn an AAS degree from MCC-Longview with a major in Computer Science and Information Systems: Software Development Emphasis.
- Students must be accepted into this program. Go to www.ucmo.edu/mic or call 660-543-8256 for more information.
- *This class is only offered during the semester indicated.
- **Option 1 requires 9-12 credit hours of major electives from CS 3110, 3800, 4110, and/or 4120. It is recommended that MIC students take all 12 credit hours from this list.
- +Option 1 requires 12-15 credit hours of major electives (15 required if only 9 hours were chosen from CS 3110, 3800, 4110, and 4120 see above). It is recommended that MIC students take the following 12 credit hours: CS 3120, 4020, 4800, and 4820 from this list.
- Please note that the credit hours from any course taken at a community college that articulates or substitutes for an upper-level (3000/4000) UCM course will not count towards the upper-level hours needed for graduation. The same rule applies to any 1000/2000 level courses at four-year institutions, even if the course(s) articulates or substitutes for an upper-level (3000/4000) UCM course. Learn more at www.ucmo.edu/registrar/standards/upper.cfm.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CS 1000 Computers and Modern Society (GE) CS 1100 Computer Programming I ENGL 1020 Composition I (GE) General Education Semester Total AE 1400 Freshman Seminar*	Hrs 3 3 3 6 15	Freshman Year - Spring Semester COMM 1000 Public Speaking (GE) CS 1110 Computer Programming II MATH 1151 Calculus & Analytic Geometry I (GE) General Education Semester Total	Hrs 3 5 14
Sophomore Year - Fall Semester CS 2300 Data Structures CS 3500 C and UNIX Environment** MATH 1152 Calculus & Analytic Geometry II General Education Semester Total	Hrs 3 3 5 14	Sophomore Year - Spring Semester BIOL 1005, 1110, 2010, 2510, CHEM 1103, EASC 3010, 3112, 3114, or PHYS 1103 + CS 2200 Introduction to Computer Organization CS 2400 Discrete Structures CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 3 3 3 3 15
Junior Year - Fall Semester BIOL 1007, EASC 1004, or PHYS 1101 + + CS 3200 Computer Architecture** CS 4300 Algorithm Design & Analysis** General Education Semester Total	Hrs 4 3 6 16	Junior Year - Spring Semester BIOL 1112, EASC 1114, or PHYS 1102 + + CS 3100 Programming Languages** CS 4500 Operating Systems** Option 2 Major Elective*** General Education Semester Total	Hrs 4 3 3 3 16
Senior Year - Fall Semester CS 4600 Database Theory & Applications** CS 4910 Software Engineering** MATH 3311 Introduction to Mathematical Statistics** Option 2 Major Elective*** General Education Semester Total	Hrs 3 3 3 3 15	Senior Year - Spring Semester CS 4920 Senior Project** MATH 2153 Calculus & Analytic Geometry III or MATH 3710 Linear Algebra or MATH 4450 Intro. to Graph Theory Free Choice Electives + + + Semester Total	Hrs 3 3 9 15

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 6 hours of CS major electives. See the 2014 Undergraduate Catalog for the list of appropriate course choices.
- +If chosen, BIOL 1005, 2010, 2510, CHEM 1103, or PHYS 1103 will count both in the major and in general education.
- ++Students must choose one set from: BIOL 1007/1112, EASC 1004/1114, or PHYS 1101/1102. If chosen, BIOL 1007, EASC 1004, 1114, or PHYS 1101 will count both in the major and in general education.
- +++The number of free choice electives required will depend on the selections made in the Option 2 courses. Up to seven hours of overlap between major and general education is possible. This plan assumes no overlap.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CS 1000 Computers and Modern Society (GE) CS 1100 Computer Programming I ENGL 1020 Composition I (GE) General Education Semester Total AE 1400 Freshman Seminar*	Hrs 3 3 3 6 15	Freshman Year - Spring Semester COMM 1000 Public Speaking (GE) CS 1110 Computer Programming II General Education Semester Total	Hrs 3 3 9 15
Sophomore Year - Fall Semester CS 2300 Data Structures CS 3500 C and UNIX Environment*** MATH 1131 Applied Calculus (GE) or MATH 1151 Calculus & Analytic Geometry I (GE) General Education Semester Total	Hrs 3 3 3 -5 6 15-17	Sophomore Year - Spring Semester CS 2200 Introduction to Computer Organization CS 2400 Discrete Structures CTE 3060 Technical Writing (GE) MATH 1300 Basic Statistics (GE) + or MATH 3311 Introduction to Mathematical Statistics*** Option 3 Major Elective** Semester Total	Hrs 3 3 3 3 15
Junior Year - Fall Semester CS 3200 Computer Architecture*** CS 4300 Algorithm Design & Analysis*** Option 3 Major Elective** General Education Semester Total	Hrs 3 3 6 3 15	Junior Year - Spring Semester CS 3100 Programming Languages*** CS 4500 Operating Systems*** Option 3 Major Elective** Free Choice Electives+ + Semester Total	Hrs 3 3 6 3 15
Senior Year - Fall Semester CS 4600 Database Theory & Applications*** CS 4910 Software Engineering*** Option 3 Major Electives** General Education Semester Total	Hrs 3 3 6 3 15	Senior Year - Spring Semester CS 4920 Senior Project*** Option 3 Major Elective** Free Choice Electives + + Semester Total	Hrs 3 3 7-9 13-15

Computer Science Major (Option 3 Computer Networking and Security - Applications 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 3 requires a total of 24 hours of major electives: 9-15 hours from set one and 9-15 hours from set two. See the 2014 Undergraduate Catalog for the list of appropriate course choices in each set.
- ***This class is only offered during the semester indicated.
- +If MATH 1300 is chosen, it will count in both the major and in general education. If chosen, three additional hours of free choice electives will be needed to reach 120 hours for graduation. This plan assumes MATH 1300 is not chosen.
- ++The number of free choice electives will depend on the selections made in the two required MATH classes.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CS 1000 Computers and Modern Society (GE) CS 1100 Computer Programming I ENGL 1020 Composition I (GE) General Education Semester Total AE 1400 Freshman Seminar*	Hrs 3 3 6 15	Freshman Year - Spring Semester COMM 1000 Public Speaking (GE) CS 1110 Computer Programming II General Education Semester Total	Hrs 3 3 9 15
Sophomore Year - Fall Semester CS 2300 Data Structures CS 3500 C and UNIX Environment*** MATH 1131 Applied Calculus (GE) or MATH 1151 Calculus & Analytic Geometry I (GE) General Education Semester Total	Hrs 3 3 3-5 6 15-17	Sophomore Year - Spring Semester CS 2200 Introduction to Computer Organization CS 2400 Discrete Structures CTE 3060 Technical Writing (GE) MATH 1300 Bacis Statistics (GE) + or MATH 3311 Introduction to Mathematical Statistics*** Option 4 Major Elective** Semester Total	Hrs 3 3 3 3 15
Junior Year - Fall Semester CS 3810 Introduction to Game Design CS 3200 Computer Architecture*** CS 4300 Algorithm Design & Analysis*** Option 4 Major Elective** General Education Semester Total	Hrs 3 3 3 3 15	Junior Year - Spring Semester CS 3100 Programming Languages*** CS 4110 Mobile Applications Programming with Android CS 4500 Operating Systems*** Option 4 Major Elective** Free Choice Electives + + Semester Total	Hrs 3 3 3 3 15
Senior Year - Fall Semester CS 4600 Database Theory & Applications*** CS 4910 Software Engineering*** Option 4 Major Elective** General Education Free Choice Electives + + Semester Total	Hrs 3 3 3 3 15	Senior Year - Spring Semester CS 4830 Game Development CS 4920 Senior Project*** Option 4 Major Elective** Free Choice Electives + + Semester Total	Hrs 3 3 3 4-6 13-15

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 15 hours of major electives. See the 2014 Undergraduate Catalog for the list of appropriate course choices.
- ***This class is only offered during the semester indicated.
- +If MATH 1300 is chosen, it will count in both the major and in general education. If chosen, three additional hours of free choice electives will be needed to reach 120 hours for graduation. This plan assumes MATH 1300 is not chosen.
- ++The number of free choice electives will depend on the selections made in the two required MATH classes.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CIS 1600 Business Information Management (GE) CMGT 1300 Introduction to Construction Management CMGT 1301 Seminar in Construction Management ENGL 1020 Composition I (GE) MATH 1111 College Algebra (GE) General Education Semester Total	Hrs 3 5 5 3 1 5 5 1 5 6 7 7 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Freshman Year - Spring Semester CADD 1105 Basic AutoCAD CADD 1110 Fundamentals of Drafting CMGT 2310 Construction Plans & Specifications ECON 1010 Principles of Macroeconomics (GE) MATH 1112 College Trigonometry PHYS 1103 Introduction to the Sciences: Physics (GE) Semester Total	Hrs 1 3 3 2 3 15
Sophomore Year - Fall Semester CMGT 1301 Seminar in Construction Management CMGT 2020 Statics CMGT 2325 Project Cost Estimating CMGT 2340 Surveying & Construction Layout EASC 1004 Introduction to Geology (GE) MATH 1300 Basic Statistics Semester Total	Hrs .5 .3 .3 .3 .4 .3 .16.5	Sophomore Year - Spring Semester BLAW 2720 Legal Environment of Business CMGT 3020 Applied Strength Materials CTE 3060 Technical Writing (GE) EASC 2100 Engineering Geology General Education Semester Total	Hrs 3 3 4 3 16
Junior Year - Fall Semester ACCT 2101 Principles of Financial Accounting CMGT 1301 Seminar in Construction Management CMGT 3330 Building Codes & Code Administration CMGT 3355 Construction Planning & Scheduling MGT 3315 Management of Organizations* or INDM 4210 Industrial Management General Education Semester Total	Hrs 3 .5 3 3 3 15.5	Junior Year - Spring Semester ACCT 2102 Principles of Managerial Accounting or MKT 3405 Marketing Policy* CADD 3150 Civil Drafting or CADD 4162 Commercial Architecture Design/Drafting (BIM) CMGT 3320 Principles of Construction Management ENGT 2040 Engineering Material Science General Education Semester Total	Hrs 3 3 4 3 16
Summer – Between Junior & Senior Year SOT 3022 Internship in Technology** Semester Total	Hrs 1 1		
Senior Year - Fall Semester CMGT 1301 Seminar in Construction Management CMGT 3350 Building Structures: Methods & Materials CMGT 4355 Computer-Based Project Control HRM 3920 Human Resources Management or INDM 4260 Organizational Dynamic General Education Semester Total	Hrs .5 3 3 5 15.5	Senior Year - Spring Semester CMGT 4310 Construction Safety CMGT 4325 Advanced Estimating & Cost Analysis CMGT 4330 Mechanical Systems for Buildings or CMGT 4380 Heavy Construction: Methods and Materials CMGT 4400 Construction Operations General Education Semester Total	Hrs 3 3 3 15

Construction Management Major, B.S. Degree - Minimum hours 126

- *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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CJ 1000 Introduction to Criminal Justice (GE) CJ 1605 Orientation to the Criminal Justice Major ENGL 1020 Composition I (GE) General Education Semester Total AE 1400 Freshman Seminar*	Hrs 3 1 3 9 16	Freshman Year - Spring Semester CJ 3010 Policing a Democratic Society ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 3 3 9 15
Sophomore Year - Fall Semester CJ 2300 Criminal Law and Procedure CJ Major Elective General Education Semester Total	Hrs 3 3 9 15	Sophomore Year - Spring Semester CJ 3006 Corrections CJ Major Elective General Education Free Choice Electives Semester Total	Hrs 3 3 6 3 15
Junior Year — Fall Semester CJ 3605 Junior Seminar in Criminal Justice CJ 4503 Dynamics of Criminal Behavior Free Choice Electives Semester Total	Hrs 1 3 11 15	Junior Year - Spring Semester U Major Elective Free Choice Elective Semester Total	Hrs 3 12 15
Senior Year - Fall Semester U 3600 Introduction to CI Research & Statistics U Major Elective Free Choice Electives Semester Total	Hrs 3 9 15	Senior Year - Spring Semester CJ 4605 Senior Seminar in Criminal Justice CJ Major Elective Free Choice Electives Semester Total	Hrs 1 3 10 14

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, 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Crisis and Disaster Management, B.S. Degree (43-248, 250, 251, 886)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) General Education Semester Total AE 1400 Freshman Seminar*	Hrs 3 12 15	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 3 12 15
Sophomore Year - Fall Semester CDM 3000 Introduction to Crisis & Disaster Management CHEM 1103 or 1104 Intro. to the Sciences: Chemistry (GE) General Education Semester Total	Hrs 3 3-4 8-9 15	Sophomore Year - Spring Semester CDM 3400 Community Mitigation & Recovery Free Choice Electives Semester Total	Hrs 3 9 12
Junior Year - Fall Semester Major Area Course** Free Choice Electives Semester Total	Hrs 3 12 15	Junior Year - Spring Semester CDM 4200 Disaster Management Technology Major Area Course** Free Choice Electives Semester Total	Hrs 3 3 9
Summer - Between Junior & Senior Year CDM 4900 Technology Application Studies*** CDM 4990 Practicum in CDM Major Area Course** Semester Total	Hrs 3 3 9		
Senior Year - Fall Semester CDM 4400 Research Issues in CDM CDM 4910 Field Exercise Project*** Departmentally Approved Technical Elective Free Choice Electives Semester Total	Hrs 3 3 3 1 12	Senior Year - Spring Semester CDM 4800 Integrated Emergency Management Free Choice Electives Semester Total	Hrs 3 9 12

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 Major Area chosen: Business Continuity Area, Emergency Management Area, Emergency Services Management Area, or the Environmental Hazards Area. Each area requires 9 specific hours of CDM courses. See the Undergraduate Catalog for more information.
- \bullet ***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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester BTE 1210 Essentials of Managing Information (GE) CADD 1100 Orientation to Drafting* CADD 1105 Basic AutoCAD CADD 1110 Fundamentals of Drafting or CTE 1300 Introduction to Engineering Design CADD 1170 Introduction Computer-Aided Drafting ENGL 1020 Composition I (GE) MATH 1111 College Algebra (GE) Semester Total	Hrs 2 1 1 1 3 2 3 3 1 5	Freshman Year - Spring Semester CADD 2120 Machine Drafting* CADD 2171 Introduction to MicroStation EASC 1004 Introduction to Geology (GE) MATH 1112 College Trigonometry General Education Semester Total	Hrs 3 3 4 2 3 15
Sophomore Year - Fall Semester CADD 2100 Sophomore Design/Drafting Seminar* CADD 2150 Descriptive Geometry for Engin. Technology CMGT 2020 Statics General Education Semester Total	Hrs .5 .3 .3 .9 .15.5	Sophomore Year - Spring Semester CADD 2160 Structural Drafting CADD 2180 Technical Illustration CTE 3060 Technical Writing (GE) PHYS 1103 Introduction to the Sciences: Physics (GE) General Education Semester Total	Hrs 3 3 3 3 15
Junior Year - Fall Semester CADD 3100 Junior Design/Drafting Seminar* CADD 3170 Computer Drafting Systems ENGT 2530 Machine Tool Technology GEOG 2212 World Geography (GE) General Education Semester Total	Hrs .5 3 3 6 15.5	Junior Year - Spring Semester CADD 3150 Civil Drafting CADD 3175 Advanced MicroStation CADD 4170 CADD for Engineering Technology Major Area Electives** Semester Total	Hrs 3 3 3 6 15
Senior Year - Fall Semester CADD 4100 Senior Design/Drafting Seminar* IGEN 3116 Creative Problem Solving INDM 4250 Project Management or MGT 3315 Management of Organizations*** SOT 3022 Internship in Technology SOT 4570 Computer Graphics Major Area Electives** Semester Total	Hrs 1 3 3 1 3 1 4	Senior Year - Spring Semester CADD 4180 Industrial Design INDM 4260 Organizational Dynamics or HRM 3920 Human Resource Management*** Major Area Electives** Free Choice Electives Semester Total	Hrs 3 3 6 3 15

Design & Drafting Technology Major, B.S. Degree - 120 hours

- *This class is only offered the semester indicated.
- **Students choose an area of specialty from the following five areas: Area 1 Mechanical (Product/Machine) Design, Area 2 Architectural/Structural, Area 3 MEP (Mechanical, Electrical & Plumbing) & Industrial Piping Systems, Area 4 Civil/GIS, or Area 5 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 INDM 4250 and INDM 4260 or MGT 3315 and HRM 3920.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

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Design & Drafting Technology Major, Missouri Innovation Campus (MIC), B.S. Degree (43-568)

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Courses listed in the first seven semesters include the course prefix, number, and titles used by the Metropolitan Community Colleges (MCC). The eighth semester is partially at both MCC and UCM. The UCM equivalents are listed in parenthesis after the MCC course title. If there is no UCM equivalency, (N/A) is listed. Transfer course articulations may be found on the UCM website at www.ucmo.edu/corequiv/transferSearch.cfm. The (GE) following some classes denotes that they will fulfill a UCM general education requirement. See the current Undergraduate Catalog (www.ucmo.edu/academics/catalogs) for a complete listing of the 42 hours of general education.

High School Junior Year/MCC - Summer Semester EHSS 111 Intro. to Health and Safety General Industry (N/A) ENGR 101 Introduction to Engineering Profession (ENGT 1500) SPDR 100 Fundamentals of Speech (COMM 1000) (GE)# Semester Total	Hrs 1 1 3 5	High School Junior Year/MCC - Fall Semester ETEC 152 Eng. Graphics and CADD I (CADD 1105, 1110, & 1170) HIST 120 or 121 American History (HIST 1350 or 1351) or POLS 135, 136, or 137 (POLS 1500, 1510, or 2511) (GE) MATH 120 College Algebra (MATH 1111) (GE) (course not needed if tested into MATH 130 or 150) Semester Total	Hrs 5 3 8 or 11
High School Junior Year/MCC - Spring Semester ETEC 265 Introduction to Civil Design (CADD 3150) ETEC 269 CADD II (CADD 1170) ## MATH 130 Trigonometry (MATH 1112) or MATH 150 Precalculus (MATH 1150) Semester Total	Hrs 3 4 3 or 5 10 or 12	High School Senior Year/MCC - Summer Semester ETEC 170 Microstation (CADD 2171) ETEC 290 Internship (N/A) Semester Total	Hrs 3 3 6
High School Senior Year/MCC - Fall Semester CSIS 110 Technology and Information Mgmt. (BTE 1210) (GE) ENGL 101 Composition and Reading I (ENGL 1020) (GE) ETEC 153 Descriptive Geometry (N/A)### PHYS 130 General Physics (PHYS 1101) (GE)+ Semester Total (must have completed MATH 130 or 150 by this semester)	Hrs 3 4 5 15	High School Senior Year/MCC - Spring Semester ENGL 215 Technical Writing (CTE 3060) (GE) ETEC 200 Applied Statics and Mechanics (CMGT 2020) ETEC 210 Commercial Design (N/A) + + SRWY 135 Elementary Surveying (N/A) + + Semester Total (graduate from high school this semester)	Hrs 3 3 3 1 12
MCC Junior Year - Summer Semester ETEC 211 Building Information Modeling, Revit (N/A)* ETEC 268 (CADD 2160) Semester Total	Hrs 3 3 6	MCC/UCM Junior Year - Fall Semester (ADD 2120 Machine Drafting** EASC 1004 Introduction to Geology (GE) MATH 180 Analytic Geometry and Calculus I (MATH 1151) General Education Semester Total (graduate from MCC with A.A.S. degree this semester)	Hrs 3 4 5 3 15
UCM Junior Year - Spring Semester CADD 3170 Computer Drafting Systems CADD 3175 Advanced MicroStation ENGT 2530 Machine Tool Technology General Education Semester Total	Hrs 3 3 6 15	UCM Senior Year - Summer Semester SOT 4570 Computer Graphics Semester Total	Hrs 3 3
UCM Senior Year - Fall Semester CADD 4170 CADD for Engineering Technology GEOG 2212 World Geography (GE) IGEN 3116 Creative Problem Solving General Education Semester Total	Hrs 3 3 3 6 15	UCM Senior Year - Spring Semester CADD 4180 Industrial Design INDM 4260 Organizational Dynamics or HRM 3920 Human Resource Management*** INDM 4250 Project Management or MGT 3315 Management of Organizations*** SOT 3022 Internship in Technology Upper-Level Free Choice Electives ^ Semester Total	Hrs 3 3 3 1-3 3-5 15

Design & Drafting Technology Major, Missouri Innovation Campus (MIC), B.S. Degree (43-568)

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General Information

- This program is offered in cooperation with the Lee's Summit R-7 School District and the Metropolitan Community College (MCC).
 Students begin the program during their junior year in high school and will earn an AAS degree from MCC-BTC with a major in Engineering Technology: Architecture Emphasis.
- Students must be accepted into this program. Go to www.ucmo.edu/mic or call 660-543-8256 for more information.
- The following major classes will be waived for MIC students at UCM: CADD 1100 (1 hour), 2100 (.5 hour), 3100 (.5 hour), and 4100 (1 hour). These three credit hour will be fulfilled using free elective credit or extra transfer credit.
- Please note that the credit hours from any course taken at a community college that articulates or substitutes for an upper-level (3000/4000) UCM course will not count towards the upper-level hours needed for graduation. The same rule applies to any 1000/2000 level courses at four-year institutions, even if the course(s) articulates or substitutes for an upper-level (3000/4000) UCM course. Learn more at www.ucmo.edu/registrar/standards/upper.cfm.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Key to Curriculum Notes on Four Year Guide

- #After summer 2014, this class will become SPDR 102.
- ##While this course articulates to CADD 1170, it will also substitute for CADD 2180 which is also required in the UCM major.
- ###This course will substitute for CADD 2150 which is required in the UCM major.
- +This course will substitute for PHYS 1103 which is required in the UCM major.
- ++This course will substitute for CADD 3160 which is required in Area 2 of the UCM major.
- +++This course will substitute for CMGT 3330 which is required in Area 2 of the UCM major.
- *This course will substitute for CADD 4162 which is required in Area 2 of the UCM major.
- **This class is only offered the semester indicated.
- ***Students either take MGT 3315 and HRM 3920 OR INDM 4250 and INDM 4260.
- ^All students must earn a minimum of 30 upper-level credits for graduation. These are classes taken at the 3000/4000 level.
 Courses taken at a community college may not count for these hours, even if the course is articulated or substituted for an upper-level UCM course. Students are encouraged to choose upper-level courses in the general education where available. Depending on choices made in the general education and internship, students may need additional hours of upper-level free choice electives for graduation.

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

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CHEM 1104 Introduction to the Sciences: Chemistry (GE)# D&N 1300 Introduction to Dietetics# ENGL 1020 Composition I (GE) PSY 1100 General Psychology (GE)# General Education Managing Information Semester Total AE 1400 Freshman Seminar*	Hrs 4 1 3 3 2-3 13-14	Freshman Year - Spring Semester MATH 1111 College Algebra (GE)# PE 2472 Communicating Ideas on Sport (GE)# SOC 1800 General Sociology (GE)# General Education Semester Total	Hrs 3 3 3 6 15
Sophomore Year - Fall Semester BIOL 3401 Human Anatomy# FOOD 2320 Sanitation and Safety# FOOD 2322 Food Preparation# HIST 1350 or 1351 US History General Education Semester Total	Hrs 3 1 3 6 16	Sophomore Year - Spring Semester ACCT 2100 Survey of Accounting# BIOL 3402 Human Physiology# CTE 3060 Technical Writing (GE)# D&N 3340 Nutrition# Free Choice Elective Semester Total	Hrs 3 5 3 3 17
Junior Year - Fall Semester BIOL 3611 Microbiology# FOOD 3332 Quantity Food Production & Service# FOOD 3333 Food Systems Management#** Free Choice Electives Semester Total	Hrs 4 3 6 16	Junior Year - Spring Semester CHEM 1604 Elementary Organic & Biochemistry# FOOD 3334 Advanced Food Systems Management#** PSY 4520 Statistics for the Behavioral Sciences# Free Choice Electives Semester Total	Hrs 4 3 3 4-5 14-15
Senior Year - Fall Semester D&N 4340 Advanced Nutrition#** D&N 4342 Medical Nutrition I#** D&N 4345 Senior Dietetics Seminar#** FOOD 4326 Experimental Foods# Semester Total	Hrs 3 3 3 3 1 12	Senior Year - Spring Semester BIOL 2510 Basic Genetics (GE)# D&N 3350 Community Nutrition# D&N 4343 Medical Nutrition II#** D&N 4344 Nutrition Education & Counseling#** Free Choice Elective Semester Total	Hrs 3 3 3 2 5

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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Digital Media Production Major, B.S. Degree (43-604)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester COMM 1000 Public Speaking (GE) COMM 1100 Introduction to Communication COMM 1200 Introduction to Mass Communication (GE) (required GE for students doing Audio and Live Studio and Remote Production major areas) or General Education COMM 1275 Introduction to Media Technology ENGL 1020 Composition I (GE) General Education Semester Total	Hrs 3 1 3 1 3 1 4	Freshman Year - Spring Semester COMM 2100 Introduction to Communication Theory COMM 2200 Writing Across the Media ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) MUS 1450 Audio and Acoustics (GE) (required GE for students doing Audio and Digital Journalism major areas) or General Education General Education Semester Total	Hrs 3 3 3 3 15
Sophomore Year - Fall Semester COMM 2250 Media Aesthetics COMM 2410 Multimedia Production COMM 3100 Communication Research Methods Major Area Course* General Education Semester Total	Hrs 3 3 3 3 1 5	Sophomore Year - Spring Semester COMM 2411 Audio Production Major Area Course* General Education Semester Total	Hrs 3 3 9 15
Junior Year - Fall Semester COMM 2412 Introduction to Digital Video COMM 3000 Film Appreciation (GE) Major Area Course* General Education Free Choice Electives Semester Total	Hrs 3 3 3 3 1 5	Junior Year - Spring Semester COMM 2000 Media Literacy (GE) Major Area Course* Free Choice Electives Semester Total	Hrs 3 3 9 15
Summer - Between Junior/Senior Year COMM 3200 Digital Media Practicum or COMM 4295 Internship** Semester Total	Hrs 3 3		
Senior Year- Fall Semester COMM 4250 The Law & Digital Media Major Area Course* Free Choice Electives Semester Total	Hrs 3 3 9	Senior Year - Spring Semester COMM 4490 Senior Capstone Seminar*** Major Area Course* Free Choice Electives Semester Total	Hrs 1 6 6 13

Digital Media Production Major, B.S. Degree - 120 hours

- *Students will choose a major area (21 credit hours) from: Audio, Live Studio and Remote Production, Digital Cinema, or Digital Journalism. See the 2014 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 2014 Undergraduate Catalog or the Department of Communication for the statement of policy for admission to the major program.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Earth Science Major, Area 1: Standard Earth Science Certificate; B.S. in Ed. Degree (41-280)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester EASC 1004 Introduction to Geology (GE) ENGL 1020 Composition I (GE) General Education MATH General Education Semester Total AE 1400 Freshman Seminar*	Hrs 4 3 6 16	Freshman Year - Spring Semester BIOL 1112 Animal Biology EASC 1114 or GEOG 1114 Weather and Climate ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) HIST 1350 or HIST 1351 History of the United States (GE) Semester Total	Hrs 4 4 3 3 14
Sophomore Year - Fall Semester EASC 2200 Historical Geology** CHEM 1131 General Chemistry I (GE) POLS 1510 American Government (GE) General Education Managing Information Semester Total	Hrs 4 5 3 2-3 14-15	Sophomore Year - Spring Semester EASC 3112 Astronomy EASC 3115 Oceanography EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDFL 2240 Educational Psychology (GE) General Education Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 3 3 2 1 3 3 15
Junior Year - Fall Semester EASC 2100 Engineering Geology or EASC 3501 Invertebrate Paleontology** or EASC 4300 Earth Resources PHYS 1101 College Physics I or PHYS 1104 Introduction to the Sciences: Physics EDSP 2100 Education of Exceptional Child Area 1 Major Elective*** General Education Semester Total	Hrs 4 4 2 3 3 16	Junior Year - Spring Semester BIOL 4102 Evolution EASC 3010 Environmental Geology PSY 4230 Psychology of Adolescence EDFL 4210 The Teaching of Reading in the Secondary School EDFL 4300 Educational Measurement & Evaluation Area 1 Major Elective*** Semester Total	Hrs 3 3 2 2 3-4 16-17
Senior Year - Fall Semester EDFL 3500 Secondary Teaching & Behavioral Management FLDX 3550 Practicum in Secondary Instruction STCH 4050 Science Teaching Methods Area 1 Major Elective*** General Education Free Choice Electives# Semester Total	Hrs 3 1 3 3 3 2-4 15-17	Senior Year - Spring Semester FLDX 4595 Student Teaching Secondary I FLDX 4468 Student Teaching Secondary II STCH 4080 Teaching Secondary Science Semester Total	Hrs 5 4 3 12

Earth Science Major, Area 1: Standard Earth Science Certificate; B.S. in Ed. 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.
- **These courses are offered in alternate Fall semesters if one is not available, take the other.
- ****Students must choose 9 hour of Area 1 Major Electives from the following list: any course with a BIOL, CHEM, EASC, or PHYS
 prefix, AGRI 2330 Introduction to Soil Science, GEOG 4280 Natural Disasters, or GEOG 4291 Conservation of Natural Resources.
- #The number of free choice electives required will depend on choices in the General Education Managing Information class and major electives.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

Earth Science Major, Area 2: Earth Science - Unified Science Certificate; B.S. in Ed. Degree (41-280)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester EASC 1004 Introduction to Geology (GE) ENGL 1020 Composition I (GE) General Education MATH General Education Semester Total AE 1400 Freshman Seminar*	Hrs 4 3 3 6 16	Freshman Year - Spring Semester BIOL 1112 Animal Biology EASC 1114 or GEOG 1114 Weather and Climate ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) HIST 1350 or HIST 1351 History of the United States (GE) General Education Managing Information Semester Total	Hrs 4 4 3 3 16-17
Sophomore Year - Fall Semester CHEM 1131 General Chemistry I (GE) EASC 2200 Historical Geology** EASC 3112 Astronomy POLS 1510 American Government (GE) Semester Total	Hrs 5 4 3 1 5	Sophomore Year - Spring Semester CHEM 1132 General Chemistry II EASC 3115 Oceanography EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDFL 2240 Educational Psychology (GE) General Education Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 5 3 2 1 3 3 3 17
Junior Year - Fall Semester EASC 2100 Engineering Geology or EASC 3501 Invertebrate Paleontology** or EASC 4300 Earth Resources EDSP 2100 Education of Exceptional Child PHYS 1101 College Physics I or PHYS 2121 University Physics I General Education Semester Total	Hrs 4 2 4-5 3 13-14	Junior Year - Spring Semester BIOL 4102 Evolution EASC 3010 Environmental Geology EDFL 4210 The Teaching of Reading in the Secondary School EDFL 4300 Educational Measurement & Evaluation PHYS 1102 College Physics II or PHYS 2122 University Physics II PSY 4230 Psychology of Adolescence Semester Total	Hrs 3 2 2 4-5 3 17-18
Senior Year - Fall Semester BIOL 1111 Plant Biology EDFL 3500 Secondary Teaching & Behavioral Management FLDX 3550 Practicum in Secondary Instruction STCH 4050 Science Teaching Methods General Education Semester Total	Hrs 4 3 1 3 1 4 3	Senior Year - Spring Semester FLDX 4595 Student Teaching Secondary I FLDX 4468 Student Teaching Secondary II STCH 4080 Teaching Secondary Science Semester Total	Hrs 5 4 3 12

Earth Science Major, Area 2: Earth Science - Unified Science Certificate; B.S. in Ed. Degree - 120-122 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.
- **These courses are offered in alternate Fall semesters if one is not available, take the other.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

Economics Major, B.S.B.A. Degree (46-611)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester (IS 1600 Business Information Management (GE)* ECON 1010 Principles of Macroeconomics (GE)* ENGL 1020 Composition I (GE) MATH 1111 College Algebra (GE)* General Education Semester Total AE 1400 or BADM 1400 Freshman Seminar**	Hrs 3 3 3 3 1 5	Freshman Year - Spring Semester COMM 1000 Public Speaking or COMM 1050 Fundamentals of Oral Communication Competency (GE) ECON 1011 Principles of Microeconomics* ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 3 3 6 15
Sophomore Year - Fall Semester ACCT 2101 Principles of Financial Accounting* BLAW 2720 Legal Environment of Business* General Education Semester Total	Hrs 3 3 9 15	Sophomore Year - Spring Semester ACCT 2102 Principles of Managerial Accounting* FIN 2801 Business Statistics I* General Education Free Choice Electives Semester Total Note: Complete all B.S.B.A. admission requirements.*	Hrs 3 7 2 15
Junior Year - Fall Semester ECON 3010 Intermediate Macroeconomics (fall only) FIN 3801 Business Statistics II FIN 3850 Principles of Finance MGT 3315 Management of Organizations Free Choice Electives Semester Total	Hrs 3 3 3 3 1 5	Junior Year - Spring Semester CIS 3630 Management Information Systems ECON 3030 Intermediate Microeconomics MGT 3325 Business Communication MGT 3360 Production/Operations Management MKT 3405 Marketing Policy Semester Total	Hrs 3 3 3 3 15
Senior Year - Fall Semester MGT 4357 Organizational Policy and Strategy ECON Major Electives*** Free Choice Elective Semester Total	Hrs 3 6 6 15	Senior Year - Spring Semester ECON 4000 Senior Seminar in Economics ECON Major Electives*** Free Choice Electives Semester Total	Hrs 3 6 6 15

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 ECON major electives are offered fall or spring semester only, or are only taught online check with the department for course offerings. Students may choose from the following ECON prefix classes: 3020, 3035, 3065, 4010, 4020, 4050, 4054, 4060, 4065, 4075, and 4080. Some of these courses are only offered online as part of the Missouri Association for Collaboration in Economics (MACE). See the Undergraduate Catalog for more information.
- A 2.25 cumulative GPA is required for graduation in this major.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Electronics Technology Major (Area 1 Electrical/Electronic Communication Technology), B.S. Degree (43-01221)

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Freshman Year - Fall Semester ENGL 1020 Composition I (GE) ET 1026 DC Circuit Analysis* ET 1050 Digital Principles & Applications* MATH 1111 College Algebra (GE) General Education Managing Information Semester Total AE 1400 Freshman Seminar**	Hrs 3 4 4 3 2 16	Freshman Year - Spring Semester CTE 3060 Technical Writing (GE) ET 1027 AC Circuit Analysis* ET 2048 Active Electronic Devices* MATH 1112 College Trigonometry or TECH 1042 Technical Mathematics II Semester Total	Hrs 3 4 4 2-3 13-14
Sophomore Year - Fall Semester CHEM 1103 Introduction to the Sciences: Chemistry (GE) ET 2060 Microprocessors: Theory & Applications* ET 3020 Circuit Analysis & Implementation* MATH 1131 Applied Calculus or TECH 2040 Calculus for Technology Semester Total	Hrs 3 4 4 1 1 1	Sophomore Year - Spring Semester COMM 1000 Public Speaking (GE) ET 2065 Computer Programming for Electronics Technology* PHYS 1104 Introduction to the Sciences: Physics (GE) General Education Semester Total	Hrs 3 4 4 1 3
Junior Year - Fall Semester ET 3017 Industrial Electronics* ET 3041 Communication Systems* MGT 3315 Management of Organizations or INDM 4210 Industrial Management General Education Semester Total Junior Year - Summer Semester S0T 3022 Internship in Technology Semester Total	Hrs 4 4 3 3 114 Hrs 3 3 3	Junior Year - Spring Semester ET 3014 Analog-Digital Circuitry* IGEN 3116 Creative Problem Solving or ENGT 4110 Engineering Technology Problem Solving Departmentally Approved Area 1 Electives*** General Education Semester Total	Hrs 4 3 3 6 16
Senior Year - Fall Semester Departmentally Approved Area 1 Elective*** Departmentally Approved Area 1 Management Elective# General Education Semester Total	Hrs 3 3 9	Senior Year - Spring Semester Departmentally Approved Area 1 Elective*** Free Choice Electives Semester Total	Hrs 8-9 6 14-15

Electronics Technology Major (Area 1 Electrical/Electronic Communication Technology) B.S. Degree - 120 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. Fourteen to fifteen hours are required, at least two hours must be at the upper-level (3000/4000). The number of electives needed will depend on the choice made between MATH 1112 and TECH 2040.
- #See department chairperson for appropriate choices for the Management Elective.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Electronics Technology Major (Area 2 Computer/Networking Electronics Technology) B.S. Degree (43-02221)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) ET 1026 DC Circuit Analysis* ET 1050 Digital Principles & Applications* MATH 1111 College Algebra (GE) General Education Managing Information Semester Total AE 1400 Freshman Seminar**	Hrs 3 4 4 3 2 16	Freshman Year - Spring Semester CTE 3060 Technical Writing (GE) ET 1027 AC Circuit Analysis* ET 2048 Active Electronic Devices* NET 1058 Computer Technologies* Semester Total	Hrs 3 4 4 3 14
Sophomore Year - Fall Semester COMM 1000 Public Speaking (GE) CHEM 1103 Introduction to the Sciences: Chemistry (GE) ET 2060 Microprocessors: Theory & Applications* NET 1060 Introduction to Networking Basics* NET 1061 Routers & Routing Basics* Semester Total	Hrs 3 3 4 3 16	Sophomore Year - Spring Semester ET 2065 Computer Programming For Electronics Technology* NET 2060 Switching Basics and Intermediate Routing* NET 2061 WAN Technologies* PHYS 1104 Introduction to the Sciences: Physics (GE) Semester Total	Hrs 4 3 3 4 14
Junior Year - Fall Semester NET 4060 Advanced Network Routing* Area 2 Major Departmentally Approved Elective# General Education Semester Total Junior Year - Summer Semester SOT 3022 Internship in Technology	Hrs 3 2 9 14 Hrs 3 3 3	Junior Year - Spring Semester IGEN 3116 Creative Problem Solving or ENGT 4110 Engineering Technology Problem Solving NET 3068 Network Security I NET 4040 Fundamentals of Network Operating Systems or NET 3000 Fundamentals of Wireless Networks*** General Education Semester Total	Hrs 3 4 3 6 16
Semester Total Senior Year - Fall Semester NET 4042 Network Servers and Services or NET 3062 Network Design*** NET 4062 Advanced Switching* Area 2 Major Departmentally Approved Elective# General Education Semester Total	Hrs 3 3 3 6 15	Senior Year - Spring Semester NET 4043 Network Servers and Infrastructure or NET 4064 Advanced Network Design*** NET 4063 Network Support* Free Choice Electives Semester Total	Hrs 3 3 6 12

Electronics Technology Major (Area 2 Computer/Networking Electronics Technology) B.S. Degree - 120 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.
- ***This major requires a nine hour set of NET courses. The two options include: NET 4040, 4042, and 4043 OR NET 3000, 3062, and 4064.
- #See department chairperson for appropriate choices for the Departmentally Approved Elective. Five hours are required.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Elementary Education Major (Birth - Grade 3), Traditional Pathway, B.S. in Ed. Degree (41-286)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition 1 (GE) POLS 1510 American Government (GE) General Education Semester Total	Hrs 3 3 9 15	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) HIST 1350 or 1351 History of the United States (GE) MATH 1620 Contemporary Math (GE) General Education Science w/lab General Education Managing Information Semester Total	Hrs 3 3 4 2-3 15-16
Sophomore Year - Fall Semester CFD 1220 Child Development D&N 2310 Early Childhood Nutrition & Health EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDFL 2240 Educational Psychology (GE) EDSP 2100 Education of the Exceptional Child MATH 1820 Introduction to Mathematical Modeling (GE) Semester Total	Hrs 3 2 2 1 3 2 3 16	Sophomore Year - Spring Semester ART 3910 Art for Elementary Schools ECEL 1310 or 1320 Science for Teachers ECEL 2830 Early Childhood Principles ECEL 2110 Diversity and Social Justice (GE) EDFL 3410 Children's Literature PE 2410 Movement Skills & Activities for Primary Grades General Education Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 2 3 3 2 2 2 3 18
Junior Year - Fall Semester CD 2000 Bases of Speech & Language# ECEL 3260 Practicum in Child Development# ECEL 3850 Development & Learning Through Play# ECEL 3220 The Teaching of Language Arts# EDFL 3210 Methods of Reading Instruction# MATH 3800 Introduction to Elementary & M.S. Math# MATH 3801 Conc. & Meth. in Elementary School Math# Semester Total	Hrs 2 1 3 3 3 2 1 17	Junior Year - Spring Semester ECEL 2310 Computer/Technology in Education# ECEL 3420 Teaching Social Studies & Economics# EDSP 3150 Community & Family Resources EDSP 3151 Community & Family Resources Practicum EDSP 4370 Screening, Diagnosing, & Prescribing Instruction# HED 3310 Methods in Elementary School Health MUS 3301 Music for Elementary Schools PSY 2220 Child Psychology or PSY 3220 Lifespan Development Semester Total	Hrs 2 3 3 2 1 3 2 2 2 3 18
Senior Year - Fall Semester CFD 3250 Org. & Admin. of Programs for Young Children ECEL 3468 Community, School, & Family Connections ECEL 4350 Elementary Science Teaching Strategies# ECEL 4400 Classroom Management & Interactions* ECEL 4830 Early Childhood Curriculum# HED 4330 First Aid and CPR Semester Total	Hrs 3 3 3 3 1 16	Senior Year - Spring Semester** ECEL 4150 Student Teaching Professional Seminar FLDX 4493 Student Teaching Early Childhood FLDX 4496 Student Teaching Elementary II Semester Total	Hrs 2 6 4 12

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 #.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all
 five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA
 before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for
 the exam.
- See www.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.

Elementary Education Major (Birth - Grade 3), Clinical Pathways, B.S. in Ed. Degree (41-286)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) POLS 1510 American Government (GE) General Education Semester Total	Hrs 3 3 9 15	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) HIST 1350 or 1351 History of the United States (GE) MATH 1620 Contemporary Math (GE) General Education Science w/lab General Education Managing Information Semester Total	Hrs 3 3 4 2-3 15-16
Sophomore Year - Fall Semester CFD 1220 Child Development D&N 2310 Early Childhood Nutrition & Health EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDFL 2240 Educational Psychology (GE) EDSP 2100 Education of the Exceptional Child MATH 1820 Introduction to Mathematical Modeling (GE) Semester Total	Hrs 3 2 2 1 3 2 3 16	Sophomore Year - Spring Semester ART 3910 Art for Elementary Schools ECEL 1310 or 1320 Science for Teachers ECEL 2830 Early Childhood Principles and Observation ECEL 2110 Diversity and Social Justice (GE) EDFL 3410 Children's Literature PE 2410 Movement Skills & Activities for Primary Grades General Education Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 2 3 3 3 2 2 2 3 18
Junior Year - Fall Semester - Jr. Block 1 - PreK-K ECEL 3100 Early Childhood Assessment and Screening ECEL 3150 Early Childhood Practicum ECEL 3300 Literacy and Communication Arts for EC ECEL 3400 Literacy and Communication Arts for EC ECEL 3500 Social Studies for Early Childhood ECEL 3600 Science for Early Childhood ECEL 3800 Math for Early Childhood MUS 3301 Music for Elementary Schools PSY 2220 Child Psychology or PSY 3220 Lifespan Development Semester Total	Hrs 2 2 1 2 1 1 1 1 2 3 1 5	Junior Year - Spring Semester - Jr. Block 2 - Grades 1-3 ECEL 3151 Young Learner Practicum (Grades 1-3) ECEL 3310 Literacy and Communication Arts for the YL ECEL 3510 Social Studies and Economics for the Young Learner ECEL 3610 Science for the Young Learner MATH 3810 Math for the Young Learner CFD 3250 Org. & Admin. of Programs for Young Children EDSP 3150 Community & Family Resources EDSP 3151 Community & Family Resources EDSP 3151 Community & Family Resources EDSP 3150 Methods in Elementary School Health Semester Total	Hrs 2 2 1 1 2 3 2 1 2 1 6
Senior Year - Fall Semester - Senior Block 1 - Senior Experience ECEL 4120 Curriculum Design and Assessment ECEL 4140 Communication Arts Integration ECEL 4400 Classroom Management & Interactions* MATH 4800 Curriculum Design and Assessment in Math HED 4330 First Aid and CPR ECEL 3468 Community, School, & Family Connections Semester Total	Hrs 3 5 3 1 1 3 16	Senior Year - Spring Semester** ECEL 4150 Student Teaching Professional Seminar FLDX 4493 Student Teaching Early Childhood FLDX 4496 Student Teaching Elementary II Semester Total	Hrs 2 6 4 12

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.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

Elementary Education Major (Grades 1 - 6), Traditional Pathway, B.S. in Ed. Degree (41-285)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I MATH 1620 Contemporary Math POLS 1510 American Government (GE) General Education Semester Total	Hrs 3 3 3 6 15	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) HIST 1350 or 1351 History of the United States (GE) MATH 1820 Introduction to Mathematical Modeling (GE) General Education Science w/lab General Education Managing Information Semester Total	Hrs 3 3 3 4 2-3 15-16
Sophomore Year - Fall Semester ECEL 2110 Diversity and Social Justice (GE) EDFL 2240 Educational Psychology (GE) EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDSP 2100 Education of Exceptional Child Teaching area of concentration* Semester Total	Hrs 3 2 1 2 3 14	Sophomore Year - Spring Semester ECEL 1310 or 1320 Science for Teachers PE 3420 Elementary School PE Activities Teaching area of concentration* General Education Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 3 2 6 17
Junior Year - Fall Semester ECEL 3220 The Teaching of Language Arts# EDFL 3210 Methods of Reading Instruction# EDFL 3410 Children's Literature MATH 3800 Intro. to Teaching Elementary & M.S. Math# MATH 3801 Concepts & Methods in Elementary Sch. Math# Teaching area of concentration* Semester Total	Hrs 3 3 2 2 3 3 16	Junior Year - Spring Semester ART 3910 Art for Elementary Schools ECEL 3420 Teaching Social Studies & Economics# EDFL 3215 Reading in the Content Fields# HED 3310 Methods in Elementary School Health MUS 3301 Music for Elementary Schools PSY 2220 Child Psychology or PSY 3220 Lifespan Development Teaching area of concentration* Semester Total	Hrs 2 3 3 2 2 2 3 3 18
Senior Year - Fall Semester ECEL 2310 Computer/Technology in Education# ECEL 4350 Elementary Science Teaching Strategies# ECEL 4400 Classroom Management & Interactions** EDFL 4220 Analysis & Correction of Reading Disabilities# EDFL 4250 Practicum in Reading# HED 4330 First Aid & CPR ECEL 3468 Community, School, and Family Connections Semester Total	Hrs 2 3 3 2 1 1 3 1 5	Senior Year - Spring Semester+ ECEL 4150 Student Teaching Professional Seminar FLDX 4495 Student Teaching Elementary I FLDX 4496 Student Teaching Elementary II Semester Total	Hrs 2 6 4 12

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.
- +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 #.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

Elementary Education Major (Grades 1 - 6), Clinical Pathways, B.S. in Ed. Degree (41-285)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) MATH 1620 Contemporary Math (GE) POLS 1510 American Government (GE) General Education Semester Total	Hrs 3 3 6 15	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) HIST 1350 or 1351 History of the United States (GE) MATH 1820 Introduction to Mathematical Modeling (GE) General Education Science w/lab General Education Managing Information Semester Total	Hrs 3 3 4 2-3 15-16
Sophomore Year - Fall Semester ECEL 2110 Diversity and Social Justice (GE) EDFL 2240 Educational Psychology (GE) EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDSP 2100 Education of Exceptional Child PE 3420 Elementary School PE Activities Teaching area of concentration* Semester Total	Hrs 3 3 2 1 2 2 3 16	Sophomore Year - Spring Semester ART 3910 Art for Elementary Schools ECEL 1310 or 1320 Science for Teachers Teaching area of concentration* General Education Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 2 3 6 17
Junior Year - Fall Semester - Junior Block 2 - YL Grades 1-3 ECEL 3151 Young Learner Practicum (Grades 1-3) ECEL 3310 Literacy and Communication Arts for the YL ECEL 3510 Social Studies and Economics for the Young Learner ECEL 3610 Science for the Young Learner MATH 3810 Math for the Young Learner HED 3310 Methods in Elementary School Health EDFL 3410 Children's Literature Teaching area of concentration** Semester Total	Hrs 2 2 1 1 2 2 2 2 3 15	Junior Year - Spring Semester - Junior Block 3 - IL Grades 4-6 ECEL 3152 Intermediate Learner Practicum Grades 4-6 ECEL 3320 Literacy and Communication Arts for the IL ECEL 3520 Social Studies and Economics for the IL ECEL 3620 Science for the Intermediate Learner MATH 3820 Mathematics for the Intermediate Learner MUS 3301 Music for Elementary Schools PSY 2220 Child Psychology or PSY 3220 Lifespan Development Teaching area of concentration** Semester Total	Hrs 2 2 1 1 2 2 3 3 16
Senior Year - Fall Semester - Senior Block 1 - Senior Experience ECEL 4120 Curriculum Design and Assessment ECEL 4140 Communication Arts Integration ECEL 4400 Classroom Management & Interactions* MATH 4800 Curriculum Design and Assessment in Math HED 4330 First Aid and CPR ECEL 3468 Community, School, & Family Connections Semester Total	Hrs 3 5 3 1 1 3 16	Senior Year - Spring Semester + ECEL 4150 Student Teaching Professional Seminar FLDX 4495 Student Teaching Elementary I FLDX 4496 Student Teaching Elementary II Semester Total	Hrs 2 6 4 12

Elementary Education Major (Grades 1 - 6), Clinical Pathways, 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.
- +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.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all
 five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA
 before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for
 the exam.
- See www.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.

Engineering Technology, Option 1 (Electronics Engineering Technology) B.S. Degree (43-01282)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) ENGT 1500 Orientation to Engineering Technology* ET 1010 Applied Electricity ET 1026 DC Circuit Analysis* MATH 1112 College Trigonometry** Semester Total	Hrs 3 1 4 4 2 14	Freshman Year - Spring Semester (ADD 1105 Basic AutoCAD CTE 1300 Introduction to Engineering Design or CADD 1110 Fundamentals of Drafting CTE 3060 Technical Writing (GE) ENGT 1000 Principles of Engineering or ENGT 1120 Welding ET 1027 AC Circuit Analysis* MATH 1131 Applied Calculus (GE) Semester Total	Hrs 1 3 3 4 3 17
Sophomore Year - Fall Semester ECON 1010 Principles of Macroeconomics (GE) ENGT 1501 Seminar in Engineering Technology ET 1050 Digital Principles & Applications* PHYS 1101 College Physics I (GE) General Education Managing Information Semester Total	Hrs 3 1 4 4 2-3 14-15	Sophomore Year - Spring Semester CHEM 1103 Introduction to the Sciences: Chemistry (GE) COMM 1000 Public Speaking (GE) ET 2048 Active Electronic Devices* ET 2065 Computer Programming for Electronics Tech.* Semester Total	Hrs 3 3 4 4 14
Junior Year - Fall Semester ENGT 1501 Seminar in Engineering Technology ENGT 3520 Engineering Economy ET 2060 Microprocessors: Theory & Applications* ET 3017 Industrial Electronics* General Education Semester Total	Hrs 1 3 4 4 1 5	Junior Year - Spring Semester ENGT 4580 Quality Systems ET 3014 Analog-Digital Circuitry* General Education Semester Total	Hrs 3 4 9 16
Junior Year - Summer Semester SOT 3022 Internship in Technology Semester Total	Hrs 3 3		
Senior Year - Fall Semester ENGT 4520 Robotics and Automation ET 3020 Circuit Analysis & Implementation* ET 3041 Communication Systems* Departmentally Approved Option 1 Elective*** Semester Total	Hrs 3 4 4 1 3	Senior Year - Spring Semester ENGT 3530 Inspection and Quality Control ENGT 4110 Engineering Technology Problem Solving CMGT 3320 Principles of Construction Management or INDM 4250 Project Management General Education Semester Total	Hrs 3 3 1 1 5

Engineering Technology, Option 1 (Electronics Engineering Technology) B.S. Degree - 122 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 course recommendations.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Engineering Technology, Option 2 (Mechanical Engineering Technology - Product Design) B.S. Degree (43-02282)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CADD 1105 Basic AutoCAD CADD 1170 Introduction to Computer-Aided Drafting CADD 1110 Fundamentals of Drafting or CTE 1300 Introduction to Engineering Design ENGT 1000 Principles of Engineering or ENGT 1120 Welding ENGT 1500 Orientation to Engineering Technology* MATH 1112 College Trigonometry** General Education Managing Information Semester Total	Hrs 1 2 3 3 1 2 2-3 14-15	Freshman Year - Spring Semester (ADD 2120 Machine Drofting* ENGL 1020 Composition I (GE) ENGT 1510 Introduction to Manufacturing Processes* ET 1010 Applied Electricity MATH 1131 Applied Calculus (GE) Semester Total	Hrs 3 3 3 4 3 16
Sophomore Year - Fall Semester CMGT 2020 Statics ENGT 1501 Seminar in Engineering Technology ENGT 2040 Engineering Materials Science ENGT 2530 Machine Tool Technology PHYS 1101 College Physics I (GE) Semester Total	Hrs 3 1 4 3 4 15	Sophomore Year - Spring Semester CADD 4170 CAD & Design for Engineering Technology CHEM 1103 Introduction to the Sciences: Chemistry (GE) CMGT 3020 Applied Strength of Materials COMM 1000 Public Speaking (GE) ECON 1010 Principles of Macroeconomics (GE) Semester Total	Hrs 3 3 3 3 1 5
Junior Year - Fall Semester CADD 4171 Production Design Drafting* CTE 3060 Technical Writing (GE) ENGT 1501 Seminar in Engineering Technology ENGT 2600 Lean Enterprises ENGT 3520 Engineering Economy General Education Semester Total	Hrs 3 3 1 3 3 3 1 4 6	Junior Year - Spring Semester CADD 4124 Geometric Dimen. & Toler. for Engineering Tech.* CADD 4174 Machine Design* ENGT 3530 Inspection and Quality Control ENGT 3562 Computer Numerical Control (CNC) General Education Semester Total	Hrs 3 3 3 3 1 5
Junior Year - Summer Semester SOT 3022 Internship in Technology Semester Total	Hrs 3 3		
Senior Year - Fall Semester ATM 4032 Hydraulics & Pneumatics CMGT 3320 Principles of Construction Management or INDM 4250 Project Management General Education Semester Total	Hrs 3 3 9 15	Senior Year - Spring Semester ENGT 4110 Engineering Technology Problem Solving ENGT 4580 Quality Systems Departmentally Approved Option 2 Elective*** General Education Semester Total	Hrs 3 3 3 3 12

Engineering Technology, Option 2 (Mechanical Engineering Technology - Product Design) B.S. Degree - 121 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 course recommendations.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Engineering Technology, Option 3 (Industrial Engineering Technology), B.S. Degree (43-03282)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) ENGT 1120 Welding ENGT 1500 Orientation to Engineering Technology* ENGT 1510 Introduction to Manufacturing Processes MATH 1112 College Trigonometry** General Education Semester Total	Hrs 3 3 1 3 2 3 15	Freshman Year - Spring Semester CADD 1105 Basic AutoCAD CADD 1110 Fundamentals of Drafting or CTE 1300 Introduction to Engineering Design CTE 3060 Technical Writing (GE) ENGT 2040 Engineering Materials Science ENGT 2530 Machine Tool Technology MATH 1131 Applied Calculus (GE) Semester Total	Hrs 1 3 3 4 3 17
Sophomore Year - Fall Semester COMM 1000 Public Speaking (GE) ENGT 1501 Seminar in Engineering Technology ENGT 2600 Lean Enterprises ET 1010 Applied Electricity PHYS 1101 College Physics I (GE) Semester Total	Hrs 3 1 3 4 1 5	Sophomore Year - Spring Semester CADD 2120 Marchine Drafting (prerequisite of CADD 1170 will be waived) CHEM 1103 Introduction to the Sciences: Chemistry (GE) ECON 1010 Principles of Macroeconomics (GE) ENGT 3530 Inspection & Quality Control* ENGT 3562 Computer Numerical Control (CNC)* Semester Total	Hrs 3 3 3 3 1 5
Junior Year - Fall Semester ENGT 1501 Seminar in Engineering Technology ET 1050 Digital Principles & Applications* INDM 4240 Facilities Engineering General Education Semester Total Junior Year - Summer Semester SOT 3022 Internship in Technology	Hrs 1 4 3 6 14 Hrs 3	Junior Year - Spring Semester CADD 4124 Geometric Dimen. & Toler. Principles for Eng. Tech. ENGT 3120 Advanced Welding Technology I ENGT 3520 Engineering Economy General Education Semester Total	Hrs 3 3 5-6 14-15
Semior Year - Fall Semester ATM 4032 Hydraulics & Pneumatics CMGT 3320 Principles of Construction Management or INDM 4250 Project Management ENGT 4520 Robotics & Automation* ENGT 4590 Computer Integrated Manufacturing (CIM)* General Education Semester Total	3 Hrs 3 3 3 3 3 15	Senior Year - Spring Semester ENGT 4110 Engineering Technology Problem Solving* ENGT 4580 Quality Systems ENGT 4750 Lean Six Sigma Departmentally Approved Option 3 Elective*** General Education Semester Total	Hrs 3 3 3 3 3 15

Engineering Technology, Option 3 (Industrial Engineering Technology), B.S. Degree - 123 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 course recommendations.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Engineering Technology, Option 4 (Civil Engineering Tech., Infrastructure Project Admin. Emphasis) B.S. Degree (43-04282)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CADD 1105 Basic AutoCAD CADD 1110 Fundamentals of Drafting or CTE 1300 Introduction to Engineering Design ENGL 1020 Composition I (GE) ENGT 1000 Principles of Engineering or ENGT 1120 Welding ENGT 1500 Orientation to Engineering Technology* MATH 1112 College Trigonometry** General Education Managing Information Semester Total	Hrs 1 3 3 1 2 2-3 15-16	Freshman Year - Spring Semester CADD 2160 Structural Drafting COMM 1000 Public Speaking (GE) CTE 3060 Technical Writing (GE) EASC 1004 Introduction to Geology (GE) MATH 1131 Applied Calculus (GE) Semester Total	Hrs 3 3 4 3 16
Sophomore Year - Fall Semester CMGT 2020 Statics ENGT 1501 Seminar in Engineering Technology ENGT 2040 Engineering Material Sciences PHYS 1101 College Physics I (GE) General Education Semester Total	Hrs 3 1 4 4 1 3	Sophomore Year - Spring Semester CMGT 2325 Project Cost Estimating CMGT 3020 Applied Strengths of Materials EASC 2100 Engineering Geology ET 1010 Applied Electricity Semester Total	Hrs 3 3 4 4 14
Junior Year - Fall Semester CADD 2171 Introduction to MicroStation CMGT 2340 Surveying and Construction Layout CMGT 3320 Principles of Construction Management or INDM 4250 Project Management ENGT 1501 Seminar in Engineering Technology ENGT 3520 Engineering Economy* ENGT 4140 Soils and Foundation Design* Semester Total	Hrs 3 3 3 1 3 1 3 1 6	Junior Year - Spring Semester CADD 3150 Civil Drafting CMGT 4380 Heavy Construction Methods and Materials ECON 1010 Principles of Macroeconomics (GE) ENGT 4120 Hydrology and Drainage Design* General Education Semester Total	Hrs 3 3 3 3 3 15
Junior Year - Summer Semester SOT 3022 Internship in Technology Semester Total	Hrs 3 3		
Senior Year - Fall Semester CMGT 4310 Construction Safety ENGT 4160 Transportation Systems Design* ENGT 4180 Water and Wastewater Systems Design* General Education Semester Total	Hrs 3 3 3 6 15	Senior Year - Spring Semester ENGT 4110 Engineering Technology Problem Solving ENGT 4580 Quality Systems General Education Semester Total	Hrs 3 3 6 12

Engineering Technology, Option 4 (Civil Engineering Technology, Infrastructure Project Administration) B.S. Degree - 121 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Engineering Technology, Option 4 (Civil Engineering Technology, Design Emphasis) B.S. Degree (43-04282)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester (ADD 1105 Basic AutoCAD CTE 1300 Introduction to Engineering Design or CADD 1110 Fundamentals of Drafting ENGL 1020 Composition I (GE) ENGT 1000 Principles of Engineering or ENGT 1120 Welding ENGT 1500 Orientation to Engineering Technology* MATH 1112 College Trigonometry** General Education Managing Information Semester Total	Hrs 1 3 3 1 2 2-3 15-16	Freshman Year - Spring Semester CADD 2160 Structural Drafting COMM 1000 Public Speaking (GE) CTE 3060 Technical Writing (GE) EASC 1004 Introduction to Geology (GE) MATH 1131 Applied Calculus (GE) Semester Total	Hrs 3 3 4 3 16
Sophomore Year - Fall Semester CMGT 2020 Statics ENGT 1501 Seminar in Engineering Technology PHYS 1101 College Physics I (GE) General Education Semester Total	Hrs 3 1 4 6 14	Sophomore Year - Spring Semester CMGT 2325 Project Cost Estimating CMGT 3020 Applied Strengths of Materials EASC 2100 Engineering Geology ECON 1010 Principles of Macroeconomics (GE) ET 1010 Applied Electricity Semester Total	Hrs 3 4 3 4 17
Junior Year - Fall Semester CADD 2171 Introduction to MicroStation CMGT 2340 Surveying and Construction Layout CMGT 3320 Principles of Construction Management or INDM 4250 Project Management ENGT 1501 Seminar in Engineering Technology ENGT 3520 Engineering Economy* ENGT 4140 Soils and Foundation Design* Semester Total	Hrs 3 3 1 3 1 3 1 6	Junior Year - Spring Semester CADD 3150 Civil Drafting CADD 3175 Advanced MicroStation CMCT 3350 Building Structures: Methods and Materials ENGT 4120 Hydrology and Drainage Design* General Education Semester Total	Hrs 3 3 3 3 15
Junior Year - Summer Semester SOT 3022 Internship in Technology Semester Total	Hrs 3 3		
Senior Year - Fall Semester CADD 4150 Applied Civil Design/Drafting ENGT 4160 Transportation Systems Design* GEOG 4220 Geographic Information Systems 1* General Education Semester Total	Hrs 3 3 6 15	Senior Year - Spring Semester CADD 4162 Commercial Architecture Design/Drafting (BIM) ENGT 4110 Engineering Technology Problem Solving ENGT 4580 Quality Systems General Education Semester Total	Hrs 3 3 3 12

Engineering Technology, Option 4 (Civil Engineering Technology, Design Emphasis) B.S. Degree - 123 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

English Major, B.A. Degree (42-303)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) Modern Language Requirement (GE)* General Education Semester Total AE 1400 Freshman Seminar**	Hrs 3 9 15	Freshman Year - Spring Semester ENGL 1030 Composition II (GE) Modern Language Requirement* General Education Semester Total	Hrs 3 3 9 15
Sophomore Year - Fall Semester ENGL 2210 or 2215 British Literature (GE) Minor Coursework General Education Free Choice Elective Semester Total	Hrs 3 3 6 3 15	Sophomore Year - Spring Semester ENGL 2200 or 2205 American Literature ENGL 2220 World Masterpieces* Minor Coursework General Education Semester Total	Hrs 3 3 6 15
Junior Year - Fall Semester ENGL 3240 Critical Approaches to Literature ENGL British Literature A or B Elective*** Minor Coursework Free Choice Electives Semester Total	Hrs 3 3 3 6 15	Junior Year - Spring Semester ENGL 3120 History of English Language ENGL 4360 Shakespeare ENGL American Literature A or B Elective*** Minor Coursework Semester Total	Hrs 3 3 6 15
Senior Year - Fall Semester ENGL American Literature A or B Elective*** ENGL British Literature A or B Elective*** Upper-Level ENGL Elective Minor Coursework Free Choice Elective Semester Total	Hrs 3 3 3 3 15	Senior Year - Spring Semester ENGL 4240 Senior Capstone in Literature Upper-Level ENGL Electives Minor Coursework Free Choice Elective Semester Total	Hrs 3 6 3 15

English 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 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

English Education Major, B.S. in Ed. Degree (41-311)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) General Education Semester Total AE 1400 Freshman Seminar*	Hrs 3 12 15	Freshman Year - Spring Semester ENGL 1030 Composition II (GE) POLS 1510 American Government (GE) General Education Math General Education Semester Total	Hrs 3 3 6 15
Sophomore Year - Fall Semester EDFL 2240 Educational Psychology EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDSP 2100 Education of the Exceptional Child ENGL 2210 or 2215 British Literature (GE) HIST 1350 or 1351 History of the United States (GE) Free Choice Electives Semester Total	Hrs 3 2 1 2 3 3 2 16	Sophomore Year - Spring Semester ENGL 2200 or 2205 American Literature ENGL 2830 Literature for Adolescents (spring only) ENGL 2220 World Masterpieces (GE) ENGL 3120 History of the English Language Free Choice Electives Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 3 3 3 3 15
Junior Year - Fall Semester ENGL 3110 English Grammar (fall only) ENGL 3240 Critical Approaches to Literature Upper-Level American Literature** Upper-Level British Literature** Free Choice Elective Semester Total	Hrs 3 3 3 3 15	Junior Year - Spring Semester EDFL 4300 Educational Measurement & Evaluation ENGL 3040 Advanced Rhetoric ENGL 4360 Shakespeare PSY 4230 Psychology of Adolescence (GE) Upper-Level American Literature** Upper-Level English Electives Semester Total	Hrs 2 3 3 3 3 3 17
Senior Year - Fall Semester EDFL 4210 The Teaching of Reading in the Secondary School ENGL 4840 Composition & Evaluation (fall only) EDFL 3500 Secondary Teaching & Behavioral Management FLDX 3550 Practicum in Secondary Instruction Upper-Level British Literature** Upper-Level English Electives Semester Total	Hrs 2 3 1 3 1 3 3 3 1 5	Senior Year - Spring Semester*** ENGL 4820 Secondary Field Experience II ENGL 4890 Methods of Teaching English FLDX 4595 Student Teaching Secondary I FLDX 4468 Student Teaching Secondary II Semester Total	Hrs 1 2 5 4 12

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.
- \bullet **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.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all
 five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA
 before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare
 for the exam.
- See www.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.

Entrepreneurship and Social Enterprise Major, B.S.B.A. Degree (46-331)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CIS 1600 Business Information Management (GE)* ECON 1010 Principles of Macroeconomics (GE)* ENGL 1020 Composition I (GE) MATH 1111 College Algebra (GE)* General Education Semester Total AE 1400 or BADM 1400 Freshman Seminar**	Hrs 3 3 3 3 15	Freshman Year - Spring Semester COMM 1000 Public Speaking or COMM 1050 Fundamentals of Oral Communication Competency (GE) ECON 1011 Principles of Microeconomics* ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 3 3 3 6 15
Sophomore Year - Fall Semester ACCT 2101 Principles of Financial Accounting* BLAW 2720 Legal Environment of Business* General Education# Semester Total	Hrs 3 3 9 15	Sophomore Year - Spring Semester ACCT 2102 Principles of Managerial Accounting* FIN 2801 Business Statistics I* General Education Free Choice Electives Semester Total	Hrs 3 7 2 15
		Note: Complete all BSBA Admission requirements.*	
Junior Year - Fall Semester MGT 3325 Business Communications (IBE Block-below)*** (IS 3630 Management Information Systems*** MGT 3315 Management of Organizations*** MKT 3405 Marketing Policy*** IBE Practicum (CIS 3685/MKT 3485/MGT 3385)*** Semester Total	Hrs 3 3 3 3 3 1 5	Junior Year - Spring Semester ESE 3710 Entrepreneurial Business Planning ESE 3715 Entrepreneurial Business Planning Lab FIN 3801 Business Statistics II FIN 3850 Principles of Finance MGT 3360 Production/Operations Management Major Electives## Semester Total	Hrs 3 1 3 3 3 1 1 6
Senior Year - Fall Semester ESE 3720 Social Enterprise for Entrepreneurs (fall only) ESE 3725 Social Enterprise Lab (fall only) Major Electives## Free Choice Electives (internship recommended) Semester Total	Hrs 3 1 3 6 13	Senior Year - Spring Semester ESE 4710 Commercialization (spring only) ESE 4715 Commercialization Lab (spring only) MGT 4357 Organizational Policy & Strategy Major Electives## Free Choice Electives (internship recommended)** Semester Total	Hrs 3 1 3 3 6 16

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: WGS 2000 is recommended in Knowledge Area III; PHIL 2300 is recommended in Engagement.
- ##Nine hours of major electives are required. See the course listing in the 2014 Undergraduate Catalog for course choices.
- A 2.25 cumulative GPA is required for graduation with in this major.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Fashion: Textiles & Clothing in Business Major, B.S. Degree (43-118)

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Freshman Year - Fall Semester (FD 1010 Individual & Family Relationships (GE) ENGL 1020 Composition I (GE) FAME 1400 Introduction to Fashion Merchandising FAME 1445 Freshman Seminar in Fashion* General Education (If chosen, CIS 1600 will also count in the Business Administration minor)** Semester Total	Hrs 3 3 1 1 3 13	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) FAME 1450 Fundamentals of Apparel Design and Construction General Education Semester Total	Hrs 3 9 15
Summer – After Freshman or Sophomore Year FAME 2440 Professional Work Experience*# Semester Total	Hrs 3 3		
Sophomore Year - Fall Semester FAME 2442 Textile Science	Hrs 3	Sophomore Year - Spring Semester FAME 2425 Apparel Quality Analysis*	Hrs 3
FAME 2445 Sophomore Seminar in Fashion*	1	Minor Coursework (BLAW 2720 recommended for overlap with	•
General Education Semester Total	9 13	both Marketing and Business Administration minors)** General Education	3 9
		Semester Total	15
Junior Year - Fall Semester FAME 3415 Product Development for Consumers* FAME 3430 Professional Image Management* FAME 3434 Fashion History of Costume (GE)* FAME 3445 Junior Seminar in Fashion* Minor Coursework (MKT 3405 required for both minors)** Semester Total	Hrs 3 3 1 3 1 3	Junior Year - Spring Semester ACCT 2101 Principles of Financial Accounting FAME 3435 Fashion Buying* FAME 3440 Fashion Promotion and Visual Merchandising* Minor Coursework** Semester Total	Hrs 3 3 3 6 15
Summer – After Junior or Senior Year FAME 4490 Internship in FAME*# Semester Total	Hrs 3 3		
Senior Year - Fall Semester FAME 4410 Materials for Interior Furnishings* FAME 4425 Fashion Entrepreneurship* Major Elective## Minor Coursework** (0 hours needed for Bus. Adm. minor and 6 hours needed* for Marketing minor) Free Choice Electives### (0 hours needed for Mkt. major and 6 hours needed for Business Administration minor) Semester Total	Hrs 3 3 3 0-6 0-6 15	Senior Year - Spring Semester FAME 3442 Sustainability for Consumer Products (GE)* FAME 4433 International Apparel Technology* FAME 4445 Senior Seminar in FAME* Major Elective## Free Choice Electives## Semester Total	Hrs 3 3 3 6 15

Fashion: Textiles & Clothing in Business Major, B.S. Degree - 120 hours

- *This class is only offered during the semester indicated.
- **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. ACCT 2101 in the major will overlap with 3 hours of the Business Administration minor.
- #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. FAME 2440 can be taken after either the freshman or sophomore years and FAME 4490 can be taken after either the junior or senior years.
- ##Choose six hours of major electives from the following list: FAME 2440 (up to 3 additional hours), 2450, 4450, 4490 (up to 3 additional hours), or GRAP 2030.
- ###The number of free choice electives required is based on the minor chosen. If the Marketing minor is chosen, 6 hours of free choice electives are needed. If Business Administration is chosen, 12 hours of free choice electives will be required because ACCT 2101 will overlap with the major and CIS 1600 will overlap with the general education.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Finance Major, B.S.B.A. Degree (46-267)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CIS 1600 Business Information Management (GE)* ECON 1010 Principles of Macroeconomics (GE)* ENGL 1020 Composition I (GE) MATH 1111 College Algebra (GE)* General Education Semester Total AE 1400 or BADM 1400 Freshman Seminar**	Hrs 3 3 3 3 1 5	Freshman Year - Spring Semester COMM 1000 Public Speaking or COMM 1050 Fundamentals of Oral Communication Competency (GE) ECON 1011 Principles of Microeconomics* ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	3 3 3 6 15
Sophomore Year - Fall Semester ACCT 2101 Principles of Financial Accounting* BLAW 2720 Legal Environment of Business* General Education Semester Total	Hrs 3 3 9 15	Sophomore Year - Spring Semester ACCT 2102 Principles of Managerial Accounting* FIN 2801 Business Statistics I* General Education Free Choice Electives Semester Total Note: Complete all B.S.B.A. Admission requirements.*	Hrs 3 3 7 2 15
Junior Year - Fall Semester ECON 3020 Money & Banking FIN 3801 Business Statistics II FIN 3850 Principles of Finance*** MGT 3325 Business Communication Free Choice Electives Semester Total	Hrs 3 3 3 3 1 15	Junior Year - Spring Semester FIN 3861 Financial Management I*** FIN 3881 Financial Institutions & Markets*** FIN 3891 Security Analysis*** FIN 3893 Credit & Financial Statement Analysis*** MGT 3315 Management of Organizations Semester Total	Hrs 3 3 3 3 1 5
Senior Year - Fall Semester CIS 3630 Management Information Systems ECON 3030 Intermediate Microeconomics MKT 3405 Marketing Policy Finance Electives# Semester Total	Hrs 3 3 3 6 15	Senior Year - Spring Semester MGT 4357 Organizational Policy & Strategy MGT 3360 Production/Operations Management Finance Electives# Finance or Upper-Level Business Elective# Semester Total	Hrs 3 3 6 3 15

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, FIN 3891 and FIN 3893 if they are to be applied toward the fulfillment of a Finance major or minor.
- #Fifteen hours of Finance electives are required for this major. Up to three of these hours may be a non-finance upper-level (3000-4000) elective. See department chair for advice. The finance electives include: FIN 3835, FIN 4803, FIN 4804, FIN 4815, FIN 4817, FIN 4820, FIN 4821, FIN 4831, FIN 4862, and 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Forensic Chemistry Major, B.S. Degree (43-294)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CHEM 1131 General Chemistry I (GE)* ENGL 1020 Composition I (GE) MATH 1151 Calculus & Analytical Geometry I (GE)* General Education Semester Total AE 1400 Freshman Seminar**	Hrs 5 3 5 2-3 15-16	Freshman Year - Spring Semester CHEM 1132 General Chemistry II ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 5 3 6 14
Sophomore Year - Fall Semester BIOL 1110 Principles of Biology CHEM 3341 Organic Chemistry I# PHYS 1101 (GE) or PHYS 2121 College/University Physics I (GE) General Education Semester Total	Hrs 3 4 4-5 3 14-15	Sophomore Year - Spring Semester CHEM 3212 Quantitative Analysis CHEM 3342 Organic Chemistry II PHYS 1102 or PHYS 2122 College/University Physics II General Education Semester Total	Hrs 3 4 4-5 3 14-15
Junior Year - Fall Semester BIOL 3511 Genetics CHEM 3111 Intermediate Inorganic Chemistry*** CHEM 3421 Intermediate Biochemistry CHEM 4231 Instrumental Analysis*** Semester Total	Hrs 4 4 3 4 15	Junior Year - Spring Semester BIOL 2010 Human Biology or BIOL 3401 Human Anatomy BIOL 4013 Introduction to Experimental Design & Analysis CHEM 3920 Communication Skills in Chemistry General Education Semester Total	Hrs 3 3 2 9 17
Senior Year - Fall Semester BIOL 3410 Forensic Science CJ 1000 Introduction to Criminal Justice (GE) Major CHEM Elective***## Free Choice Electives### Semester Total	Hrs 3 3 3 6 15	Senior Year - Spring Semester BIOL 4514 Molecular Biology CHEM 4531 Physical Chemistry I*** or CHEM 4532 Physical Chemistry II*** CJ 4302 Criminal Evidence Free Choice Electives### Semester Total	Hrs 3 4 3 3-6 13-16

Forensic Chemistry Major, 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.
- \bullet ****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 CHEM electives and the 10-12 hours of free choice electives: CHEM 4313, 4421, 4431, 4531, 4532, 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 general education for technology and in the major for the PHYS sequence.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Graphic Design, B.F.A. Degree (47-324)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ART 1110 Drawing I ART 1315 2-D Design ART 1800 Ideas & the Visual Arts (GE) ENGL 1020 Composition I (GE) General Education Semester Total	Hrs 3 3 3 3 15	Freshman Year - Spring Semester ART 1120 Drawing II ART 1325 Color and Design ART 2511 Pointing I ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) GRAP 1010 Fundamentals of Printing Processes Semester Total	Hrs 3 3 3 3 1 5
Sophomore Year - Fall Semester ART 1815 Art History Survey I (fall only) ART 2335 3-D Design ART 2610 Introduction to Graphic Design & Illustration ART 2620 Typography General Education Semester Total	Hrs 3 3 3 3 15	Sophomore Year - Spring Semester ART 1825 Art History Survey II ART 2710 Printmaking I ART 3620 Logo & Trademark Design ART 3660 Publication Design General Education Semester Total	Hrs 3 3 3 3 1 1 8
Junior Year - Fall Semester ART 2412 Ceramics I or ART 2420 Sculpture I ART 3510 Watercolor ART 3630 Design for Advertising Major Electives* General Education Semester Total	Hrs 3 3 6 3 18	Junior Year - Spring Semester ART 3640 Package Design ART 3650 Narrative Animation or ART 4620 Motion Design ART 4610 Interactive Design ART 3680 History of Graphic Design General Education Semester Total	Hrs 3 3 3 3 1 5
Senior Year - Fall Semester ART Elective Major Electives* General Education Semester Total	Hrs 3 6 6 15	Senior Year - Spring Semester ART 4020 Studio Seminar ART 4221 Art Theory and Criticism General Education (only 6 hours needed if COMM 1200 is chosen as one of the major electives*) Semester Total	Hrs 3 3 6-9 12-15

Graphic Design, B.F.A. Degree - 123-126 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. If COMM 1200 is chosen, this course will overlap with general education requirements and the student will graduate with 123 credit hours.
- 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 (GEA) Policy, students must take the GEA *after* they earn 45 credit hours but *before* earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Graphic Technologies Major, B.S. Degree, Option 1: Print Media Technology Management (43-01599)

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Freshman Year - Fall Semester CIS 1600 Business Information Management (GE) ENGL 1020 Composition I (GE) GRAP 1000 Orientation to Graphic Technologies* GRAP 1010 Fundamentals of Graphic Processes General Education Semester Total	Hrs 3 3 1 3 6 16	Freshman Year - Spring Semester CTE 3060 Technical Writing (GE) GRAP 2030 Pre-Media Applications - Adobe Illustrator GRAP 2031 Pre-Media Applications - Adobe Photoshop General Education Semester Total	Hrs 3 3 3 6 15
Sophomore Year - Fall Semester GRAP 2032 Pre-Media Applications - Adobe InDesign GRAP 3034 Lithographic Processes* General Education Semester Total	Hrs 3 3 9 15	Sophomore Year - Spring Semester ART 2610 Introduction to Graphic Design & Illustration GRAP 2035 Digital Workflow Applications GRAP 2610 Principles of Web Media* Major Option 1 Elective** Semester Total	Hrs 3 3 3 6 15
Junior Year - Fall Semester GRAP 3024 Flexographic Processes* GRAP 3040 Screen & Specialty Printing MGT 3315 Management of Organizations or INDM 4250 Project Management Major Option 1 Elective**# General Education Science with a Laboratory Semester Total	Hrs 3 3 3 4 16	Junior Year - Spring Semester GRAP 3030 Digital Output Technologies* GRAP 3043 Finishing & Distribution* GRAP 3045 Materials and Methods in Graphic Technologies* GRAP 3051 Graphic Technologies Management* General Education (If ECON 1010 is chosen will also count as a major Option 1 elective)# Semester Total	Hrs 3 3 3 3 15
Between Junior & Senior Year - Summer Semester GRAP 3016 Experiences in Graphic Production*** SOT 3022 Internship in Technology*** Semester Total	Hrs 1 2		
Senior Year - Fall Semester GRAP 3057 Quality Control for Print Media* GRAP 4038 Color Management* GRAP 4053 Production Analysis* GRAP 4095 Senior Seminar in Graphic Technologies* General Education Semester Total	Hrs 3 3 1 1 3	Senior Year - Spring Semester GRAP 4051 Print Production* GRAP 4055 Estimating & Costing for Print Media*## MGT 3325 Business Communication General Education Free Choice Electives# Semester Total	Hrs 3 3 3 1 1 13

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 2014 Undergraduate Catalog for the list of approved major option electives. Some of the Major Option 1 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.
- #If ECON 1010 is chosen for 3 hours of major option 1 electives, those hours will overlap with general education. The number of free choice electives needed will depend on choices made in the general education and major.
- ##It is recommended that students enroll in GRAP 4055, Estimating & Costing for Print Media, during the spring semester immediately prior to graduation.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Graphic Technologies Major, B.S. Degree, Option 2: Graphic Design Technology (43-02599)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CIS 1600 Business Information Management (GE) ENGL 1020 Composition I (GE) GRAP 1000 Orientation to Graphic Technologies* GRAP 1010 Fundamentals of Graphic Processes General Education Semester Total	Hrs 3 3 1 3 6 16	Freshman Year - Spring Semester CTE 3060 Technical Writing (GE) GRAP 2030 Pre-Media Applications - Adobe Illustrator GRAP 2031 Pre-Media Applications - Adobe Photoshop General Education Semester Total	Hrs 3 3 6 15
Sophomore Year - Fall Semester GRAP 2032 Pre-Media Applications - Adobe InDesign GRAP 3034 Lithographic Processes* General Education Semester Total	Hrs 3 3 9 15	Sophomore Year - Spring Semester ART 2610 Introduction to Graphic Design & Illustration GRAP 2035 Digital Workflow Applications GRAP 2610 Principles of Web Media* Major Option 2 Elective** General Education Science with Laboratory Semester Total	Hrs 3 3 3 4 15
Junior Year - Fall Semester GRAP 3024 Flexographic Processes* GRAP 3040 Screen & Specialty Printing MCT 3315 Management of Organizations or INDM 4250 Project Management Major Option 2 Elective** General Education Semester Total	Hrs 3 3 3 3 1 5	Junior Year - Spring Semester GRAP 3030 Digital Output Technologies* GRAP 3045 Materials and Methods in Graphic Technologies* GRAP 3051 Graphic Technologies Management* Major Option 2 Elective** General Education Semester Total	Hrs 3 3 3 3 15
Between Junior & Senior Year - Summer Semester GRAP 3016 Experiences in Graphic Production*** SOT 3022 Internship in Technology*** Semester Total	Hrs 1 2		
Senior Year - Fall Semester GRAP 4038 Color Management* GRAP 4053 Production Analysis* GRAP 4095 Senior Seminar in Graphic Technologies* Major Option 2 Elective** Semester Total	Hrs 3 3 1 6 13	Senior Year - Spring Semester GRAP 3043 Finishing & Distribution* Major Option 2 Elective** General Education Free Choice Electives Semester Total	Hrs 3 6 3 1 13

Graphic Technologies Major, B.S. Degree, Option 2: Graphic Design Technology - 120 hours

- *This class is only offered during the semester indicated.
- **See the 2014 Undergraduate Catalog for the list of approved Major Option 2 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.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Graphic Technologies Major, B.S. Degree, Option 3: Web Media Technology (43-03599)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CIS 1600 Business Information Management (GE) ENGL 1020 Composition I (GE) GRAP 1000 Orientation to Graphic Technologies GRAP 1010 Fundamentals of Graphic Processes General Education Semester Total	Hrs 3 3 1 3 6 16	Freshman Year - Spring Semester CTE 3060 Technical Writing (GE) GRAP 2030 Pre-Media Applications - Adobe Illustrator GRAP 2031 Pre-Media Applications - Adobe Photoshop General Education Semester Total	Hrs 3 3 3 6 15
Sophomore Year - Fall Semester GRAP 2032 Pre-Media Applications - Adobe InDesign GRAP 3034 Lithographic Processes* General Education Semester Total	Hrs 3 3 9 15	Sophomore Year - Spring Semester ART 2610 Introduction to Graphic Design & Illustration GRAP 2035 Digital Workflow Applications GRAP 2610 Principles of Web Media GRAP 2620 Web Media Applications Major Option 3 Elective** Semester Total	Hrs 3 3 3 3 15
Junior Year - Fall Semester GRAP 2670 Web Media Animation GRAP 3024 Flexographic Processes* GRAP 3040 Screen & Specialty Printing MGT 3315 Management of Organizations or INDM 4250 Project Management General Education Science with Laboratory Semester Total	Hrs 3 3 3 4 16	Junior Year - Spring Semester GRAP 2630 Web Authoring GRAP 3030 Digital Output Technologies GRAP 3045 Materials and Methods in Graphic Technologies* GRAP 3051 Graphic Technologies Management* General Education Semester Total	Hrs 3 3 3 3 15
Between Junior & Senior Year - Summer Semester GRAP 3016 Experiences in Graphic Production*** SOT 3022 Internship in Technology*** Semester Total	Hrs 1 2		
Senior Year - Fall Semester GRAP 4038 Color Management* GRAP 4053 Production Analysis* GRAP 4055 Senior Seminar in Graphic Technologies* Major Option 3 Elective** General Education Semester Total	Hrs 3 3 1 3 1 3 3 1 3	Senior Year - Spring Semester GRAP 3043 Finishing & Distribution* Major Option 3 Electives** General Education Free Choice Elective Semester Total	Hrs 3 6 3 1 13

Graphic Technologies Major, B.S. Degree, Option 3: Web Media Technology - 120 hours

- *This class is only offered during the semester indicated.
- **See the 2014 Undergraduate Catalog for the list of approved Major Option 3 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.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Graphic Technologies Major, B.S. Degree, Option 4: Packaging Technology (43-01599)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester (IS 1600 Business Information Management (GE) ENGL 1020 Composition I (GE) GRAP 1000 Orientation to Graphic Technologies GRAP 1010 Fundamentals of Graphic Processes General Education Semester Total	Hrs 3 3 1 3 6 16	Freshman Year - Spring Semester (TE 3060 Technical Writing (GE) GRAP 2030 Pre-Media Applications - Adobe Illustrator GRAP 2031 Pre-Media Applications - Adobe Photoshop General Education Semester Total	Hrs 3 3 3 6 15
Sophomore Year - Fall Semester CADD 11105 Basic AutoCAD CADD 1110 Fundamentals of Drafting ENGT 1012 Global Production Technology GRAP 2032 Pre-Media Applications - Adobe InDesign GRAP 3034 Lithographic Processes* General Education Semester Total	Hrs 1 3 2 3 3 1 5	Sophomore Year - Spring Semester ART 2610 Introduction to Graphic Design & Illustration GRAP 1700 Introduction to Packaging GRAP 2035 Digital Workflow Applications GRAP 2610 Principles of Web Media General Education Science with Laboratory Semester Total	Hrs 3 3 3 4 16
Junior Year - Fall Semester GRAP 3024 Flexographic Processes* GRAP 3040 Screen & Specialty Printing Major Option Elective** General Education Semester Total	Hrs 3 3 3 6 15	Junior Year - Spring Semester GRAP 3030 Digital Output Technologies GRAP 3045 Materials and Methods in Graphic Technologies* GRAP 3051 Graphic Technologies Management* Major Option Elective** General Education Semester Total	Hrs 3 3 3 3 1 5
Between Junior & Senior Year - Summer Semester GRAP 3016 Experiences in Graphic Production*** SOT 3022 Internship in Technology*** Semester Total	Hrs 		
Senior Year - Fall Semester GRAP 4038 Color Management* GRAP 4053 Production Analysis* GRAP 4055 Production Seminar in Graphic Technologies* MGT 3315 Management of Organizations or INDM 4250 Project Management General Education Semester Total	Hrs 3 3 1 3 1 3 3 1	Senior Year - Spring Semester GRAP 3043 Finishing & Distribution* GRAP 4051 Print Production Major Option Electives** General Education Free Choice Elective Semester Total	Hrs 3 3 3 1 13

Graphic Technologies Major, B.S. Degree, Option 4: Packaging Technology - 120 hours

- *This class is only offered during the semester indicated.
- **See the 2014 Undergraduate Catalog for the list of approved Major Option 4 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.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Graphic Technologies Major, B.S. Degree, Option 5: Photography (43-05599)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CIS 1600 Business Information Management (GE) ENGL 1020 Composition I (GE) GRAP 1000 Orientation to Graphic Technologies GRAP 1010 Fundamentals of Graphic Processes General Education Semester Total	Hrs 3 3 1 3 6 16	Freshman Year - Spring Semester CTE 3060 Technical Writing (GE) GRAP 2030 Pre-Media Applications - Adobe Illustrator GRAP 2031 Pre-Media Applications - Adobe Photoshop General Education Semester Total	Hrs 3 3 6 15
Sophomore Year - Fall Semester GRAP 2032 Pre-Media Applications - Adobe InDesign GRAP 3034 Lithographic Processes* PHOT Major Option 5 Elective** General Education Semester Total	Hrs 3 3 3 6 15	Sophomore Year - Spring Semester ART 2610 Introduction to Graphic Design & Illustration GRAP 2035 Digital Workflow Applications GRAP 2610 Principles of Web Media PHOT Major Option 5 Elective** Semester Total	Hrs 3 3 6 15
Junior Year - Fall Semester GRAP 3024 Flexographic Processes* GRAP 3040 Screen & Specialty Printing MGT 3315 Management of Organizations or INDM 4250 Project Management PHOT Major Option 5 Elective** General Education Science with Laboratory Semester Total	Hrs 3 3 3 4 16	Junior Year - Spring Semester GRAP 3030 Digital Output Technologies GRAP 3045 Materials and Methods in Graphic Technologies* GRAP 3051 Graphic Technologies Management* PHOT Major Option 5 Elective** General Education Semester Total	Hrs 3 3 3 3 15
Between Junior & Senior Year - Summer Semester GRAP 3016 Experiences in Graphic Production*** SOT 3022 Internship in Technology*** Semester Total	Hrs 		
Senior Year - Fall Semester GRAP 4038 Color Management* GRAP 4053 Production Analysis* GRAP 4095 Senior Seminar in Graphic Technologies* PHOT Major Option 5 Elective** General Education Semester Total	Hrs 3 3 1 3 1 3 1 3	Senior Year - Spring Semester GRAP 3043 Finishing & Distribution* PHOT Major Option 5 Elective** General Education Free Choice Elective Semester Total	Hrs 3 6 3 1 13

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 1210, 1211, 2210 and 2250 for 10 of the 21 major option 5 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Health Studies Major - Option 1 Pre-PT/Pre-OT, B.S. Degree (43-02330)

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Freshman Year - Fall Semester ENGL 1020 Composition I (GE)# MATH 1111 College Algebra (GE)# PE 2472 Communicating Ideas on Sport (GE)# SOC 1800 General Sociology (GE)# General Education Semester Total AE 1400 Freshman Seminar*	Hrs 3 3 3 3 3 1 5	Freshman Year - Spring Semester CHEM 1131 General Chemistry I (GE) #** CTE 3060 Technical Writing (GE) # PE 1800 Functional Anatomy # PSY 1100 General Psychology (GE) # General Education Semester Total	Hrs 5 3 3 3 2 16
Sophomore Year - Fall Semester BIOL 3401 Human Anatomy# CHEM 1604 Elementary Organic and Biochemistry# or CHEM 1132 General Chemistry II# PE 2800 Biomechanics# General Education Semester Total	Hrs 3 4-5 3 6 16-17	Sophomore Year - Spring Semester BIOL 3402 Human Physiology# PE 2850 Foundations of Exercise Physiology# PHIL 2300 Ethics (GE)# General Education Semester Total	Hrs 5 3 3 3 1 4
Junior Year - Fall Semester AT 2640 Introduction to Therapeutic Exercise# HED 4370 Human Diseases# PHYS 1101 College Physics I (GE)# PSY 3220 Life-Span Development# Free Choice Electives*** Semester Total	Hrs 2 3 4 3 15	Junior Year - Spring Semester AT 2630 Therapeutic Modalities# AT 2631 Therapeutic Modalities Lab# BIOL 2510 Basic Genetics# PHYS 1102 College Physics II# PSY 4440 Abnormal Psychology # Free Choice Electives*** Semester Total	Hrs 2 1 3 4 3 2 15
Senior Year - Fall Semester BIOL 3215 Medical Terminology# HED 4330 First Aid & CPR# PE 4850 Assessment and Evaluation of Fitness/Wellness# PSY 4520 Statistics for the Behavioral Sciences# Free Choice Electives*** Semester Total	Hrs 3 1 3 4 14	Senior Year - Spring Semester PE 4341 Physical Activity and Special Populations# PE 4765 Internship# PE 4870 Clinical Exercise Physiology# Free Choice Electives*** Semester Total	Hrs 3 6 3 2-3 14-15

Health Studies Major - Option 1 Pre-PT/Pre-OT, 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.
- **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 11-12 hours depending on the second CHEM course chosen.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Health Studies Major - Option 2 Community Health, B.S. Degree (43-02330)

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Freshman Year - Fall Semester CHEM 1104 Introduction to the Sciences: Chemistry (GE)# ENGL 1020 Composition I (GE)# HED 1010 Introduction to Health Studies# SOC 1800 General Sociology (GE)# General Education Managing Information Semester Total AE 1400 Freshman Seminar*	Hrs 4 3 1 3 2-3 13-14	Freshman Year - Spring Semester HED 1100 Personal Health# MATH 1111 College Algebra (GE)# PE 2472 Communicating Ideas on Sport (GE)# PSY 1100 General Psychology (GE)# General Education Semester Total	Hrs 3 3 3 3 1 5
Sophomore Year - Fall Semester BIOL 3401 Human Anatomy# D&N 3340 Nutrition# PHIL 2300 Ethics (GE)# General Education Semester Total	Hrs 3 3 6 15	Sophomore Year - Spring Semester BIOL 3215 Medical Terminology# BIOL 3402 Human Physiology# CTE 3060 Technical Writing (GE)# D&N 3350 Community Nutrition# General Education Semester Total	Hrs 3 5 3 3 17
Junior Year - Fall Semester COMM 3010 Interpersonal Communication# HED 4310 Drugs & Youth# HED 4370 Human Diseases# PSY 3220 Life-Span Development# General Education Free Choice Elective Semester Total	Hrs 3 3 3 3 3 1 8	Junior Year - Spring Semester HED 4390 Community Health Education# NUR 4030 Human Sexuality# PSY 4440 Abnormal Psychology# Free Choice Electives Semester Total	Hrs 3 3 6 15
Senior Year - Fall Semester HED 4400 Health Program Planning and Evaluation# SOC 4875 Medical Sociology# SOC 4894 Sociology of Aging# Free Choice Electives Semester Total	Hrs 3 3 3 6-7 15-16	Senior Year - Spring Semester PE 4765 Internship# PSY 4520 Statistics for the Behavioral Sciences# Free Choice Elective Semester Total	Hrs 6 3 3

Health Studies Major - Option 2 Community Health, 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.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

History Major, B.A. Degree (42-420)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

HIST 1350 History of the United States to 1877 (GE) Modern Language Requirement (GE)* General Education Semester Total AE 1400 Freshman Seminar** 1 Semester Total Sophomore Year - Fall Semester Hrs Sophomore Year - Spring Semester Hrs Sophomore Year - Spring Semester Hrs HIST 2401 History of Modern World 3 HIST 2402 History of Modern World 3 General Education 3 AE 1400 Freshman Seminar** 1 Semester Total 15 Semester Total 15 Semester Total Sophomore Year - Spring Semester Hrs HIST 2401 History of the Early Modern World 3 HIST 2401 History of the Early Modern World 3 HIST 2401 History of the Early Modern World 3 Free Choice Electives 3 Free Choice Electives 3 Free Choice Electives 3 Upper-Level Elective in American History 3 Upper-Level Elective in American History 7 Free Choice Electives 9 Free Choice Electives	Freshman Year - Fall Semester ENGL 1020 Composition I (GE)	Hrs 3	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Tech. Writing (GE)	Hrs 3
General Education Semester Total AE 1400 Freshman Seminar** 1 Semester Total 15 General Education 3 AE 1400 Freshman Seminar** 1 Semester Total 15 Sophomore Year - Fall Semester Hrs Hrs Sophomore Year - Spring Semester Hrs Hrs 1400 History of the Early World 3 HIST 2400 History of the Early Modern World 3 HIST 2400 History of the Early Modern World 3 General Education 9 General Educa				
Semester Total AE 1400 Freshman Seminar** 1 Semester Total 1 Semior Year - Fall Semester Upper-Level Elective in World History*** 3 HIST 2401 History of the Early Modern World General Education 9 Ge	Modern Language Requirement (GE)*	3	HIST 2402 History of Modern World	3
AE 1400 Freshman Seminar** 1 Semester Total 15 Sophomore Year - Fall Semester Hrs Sophomore Year - Spring Semester Hrs HIST 2400 History of the Early World 3 HIST 2401 History of the Early Modern World 3 General Education 9 Junior Year - Fall Semester 15 Semester Total 16 Junior Year - Spring Semester 17 Junior Year - Spring Semester 18 Junior Year - Spring Semester 19 Junior Year - Spring Semester 19 Junior Year - Spring Semester 19 Junior Year - Spring Semester 10 Junior Year - Fall Semester 10 Junior Year - Spring Semester 10 Junior Year - Fall Semester 11 Junior Year - Spring Semester 12 Junior Year - Fall Semester 13 Junior Year - Spring Semester 14 Junior Year - Fall Semester 15 Semester Total 15 Semester Total 15 Junior Year - Spring Semester 15 Junior Year - Spring Semester 16 Hist Junior Year - Spring Semester 17 Junior Year - Spring Semester 18 Junior Year - Spring	General Education	6	Modern Language Requirement*	3
Sophomore Year - Fall Semester HIST 2400 History of the Early World General Education Modern Language Requirement* Semester Total Junior Year - Fall Semester Hrs Sophomore Year - Spring Semester Hrs Junior Year - Spring Semester Hrs Sock 3010 Writing in the Social Sciences Upper-Level Elective in American History Free Choice Electives Semester Total Juper-Level Elective in American History Free Choice Electives Semester Total Semester Total Hrs Semester Total Semester Total Semester Total Semester Total Hrs Semior Year - Spring Semester Hr Upper-Level Elective in World History*** Hrs Semior Year - Spring Semester Hrs	Semester Total	15	General Education	3
HIST 2400 History of the Early World 3 HIST 2401 History of the Early Modern World 3 General Education 9 General Education 15 Semester Total 15 Semester Total 15 Semester Total 15 Junior Year - Spring Semester 9 Free Choice Electives 9 Hrs Senior Year - Spring Semester Hr Upper-Level Elective in World History*** 6 HIST 4500 Senior Capstone in History#	AE 1400 Freshman Seminar**	1	Semester Total	15
General Education Modern Language Requirement* 3 Free Choice Electives 3 Free Choice Electives 3 Free Choice Electives 3 Junior Year - Fall Semester Hrs Junior Year - Spring Semester Hrs Semester Total 4 Junior Year - Spring Semester Hrs 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 Hrs Semester Total 15 Semester Total 15 Semester Total 15 Semester Total 15 Semester Total	Sophomore Year - Fall Semester	Hrs	Sophomore Year - Spring Semester	Hrs
Modern Language Requirement* Semester Total Junior Year - Fall Semester Hrs Junior Year - Spring Semester Hr SOSC 3010 Writing in the Social Sciences Jupper-Level Elective in American History Jupper-Level Elective in American History Jupper-Level Elective in World History*** Semester Total Semester Total Semester Total Hrs Semior Year - Spring Semester Hr Social Sciences Hrs Semior Year - Spring Semester Hr Social Sciences Hrs Semior Year - Spring Semester Hr Social	HIST 2400 History of the Early World	3	HIST 2401 History of the Early Modern World	3
Semester Total 15 Semester Total 15	General Education	9	General Education	9
Junior Year - Fall Semester SOSC 3010 Writing in the Social Sciences Upper-Level Elective in American History 3 Upper-Level Elective in World History*** 3 Upper-Level Electives 9 Free Choice Electives 9 Hrs Semester Total 15 Semester Total 15	Modern Language Requirement*	3	Free Choice Electives	3
SOSC 3010 Writing in the Social Sciences Upper-Level Elective in American History 3 Upper-Level Elective in World History*** 3 Upper-Level Electives World History*** 3 Free Choice Electives 9 Free Choice Electives 9 Free Choice Electives 9 Semester Total 15 Semester Total 15 Senior Year - Fall Semester Upper-Level Elective in World History*** 6 HIST 4500 Senior Capstone in History# 3	Semester Total	15	Semester Total	15
SOSC 3010 Writing in the Social Sciences Upper-Level Elective in American History 3 Upper-Level Elective in World History*** 3 Upper-Level Electives World History*** 3 Free Choice Electives 9 Free Choice Electives 9 Free Choice Electives 9 Semester Total 15 Semester Total 15 Senior Year - Fall Semester Upper-Level Elective in World History*** 6 HIST 4500 Senior Capstone in History# 3				
SOSC 3010 Writing in the Social Sciences Upper-Level Elective in American History 3 Upper-Level Elective in World History*** 3 Upper-Level Electives World History*** 3 Free Choice Electives 9 Free Choice Electives 9 Free Choice Electives 9 Semester Total 15 Semester Total 15 Senior Year - Fall Semester Upper-Level Elective in World History*** 6 HIST 4500 Senior Capstone in History# 3	Junior Year - Fall Semester	Hrs	Junior Year - Spring Semester	Hrs
Free Choice Electives 9 Free C	SOSC 3010 Writing in the Social Sciences	3		3
Semester Total 15 Semester Total	Upper-Level Elective in American History	3	Upper-Level Elective in World History***	3
Senior Year - Fall Semester Hrs Senior Year - Spring Semester Hr Upper-Level Elective in World History*** 6 HIST 4500 Senior Capstone in History# 3	Free Choice Electives	9	Free Choice Electives	9
Upper-Level Elective in World History*** 6 HIST 4500 Senior Capstone in History# 3	Semester Total	15	Semester Total	15
Upper-Level Elective in World History*** 6 HIST 4500 Senior Capstone in History# 3	Senior Year - Full Semester	Hrs	Senior Year - Spring Semester	Hrs
	••			
	'''			15
Semester Total 15		-		

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.
- #HIST 4500 Senior Capstone in History is usually only offered in the spring semesters and has SOSC 3010 Writing in the Social Sciences as a prerequisite. Students may not take SOSC 3010 and HIST 4500 in the same 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

History Major, B.S. Degree (43-421)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) HIST 1350 History of the United States to 1877 (GE) General Education Semester Total AE 1400 Freshman Seminar*	Hrs 3 3 9 15 1	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) HIST 1351 History of the United States from 1877 (GE) HIST 2402 History of Modern World General Education Semester Total	Hrs 3 3 3 6 15
Sophomore Year - Fall Semester HIST 2400 History of the Early World General Education Semester Total	Hrs 3 12 15	Sophomore Year - Spring Semester HIST 2401 History of the Early Modern World General Education Free Choice Electives Semester Total	Hrs 3 3 9 15
Junior Year - Fall Semester SOSC 3010 Writing in the Social Sciences Upper-Level Elective in American History Free Choice Electives Semester Total	Hrs 3 3 9 15	Junior Year - Spring Semester Upper-Level Elective in American History Upper-Level Elective in World History** Free Choice Electives Semester Total	Hrs 3 3 9 15
Senior Year - Fall Semester Upper-Level Elective in World History** Upper-Level Elective in History Free Choice Electives Semester Total	Hrs 6 3 6 15	Senior Year - Spring Semester HIST 4500 Senior Capstone in History# Free Choice Electives Semester Total	Hrs 3 12 15

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.
- #HIST 4500 Senior Capstone in History is usually only offered in the spring semesters and has SOSC 3010 Writing in the Social Sciences as a prerequisite. Students may not take SOSC 3010 and HIST 4500 in the same 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Hospitality Management Major, B.S.B.A. Degree (46-613)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CIS 1600 Business Information Management (GE)* ENGL 1020 Composition I (GE) HM 1800 Introduction to Hospitality (fall only) MATH 1111 College Algebra (GE)* General Education Semester Total AE 1400 or BADM 1400 Freshman Seminar**	Hrs 3 3 3 3 1 15	Freshman Year - Spring Semester COMM 1000 Public Speaking or COMM 1050 Fundamentals of Oral Communication Competency (GE) ECON 1010 Principles of Macroeconomics (GE)* ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 3 3 6 15
Sophomore Year - Fall Semester ACCT 2101 Principles of Financial Accounting* BLAW 2720 Legal Environment of Business* ECON 1011 Principles of Microeconomics* General Education Semester Total	Hrs 3 3 7 16	Sophomore Year - Spring Semester ACCT 2102 Principles of Managerial Accounting* FIN 2801 Business Statistics I* HM 2830 Hospitality Case Analysis General Education Semester Total	Hrs 3 3 1 9
Summer Semester HM 3880 Internship (typically completed during the summer after 2nd or 3rd year - may be done during a regular semester.) Semester Total	Hrs 3 3	Note: Complete all BSBA Admission requirements.*	
Junior Year - Fall Semester FIN 3801 Business Statistics II FIN 3850 Principles of Finance HM 2830 Hospitality Case Analysis HM 3800 Lodging Management (fall only) MGT 3325 Business Communications Semester Total	Hrs 3 3 1 3 1 3 3 13	Junior Year - Spring Semester HM 3844 Restaurant Operations (spring only) (IBE Block-beet how)**** CIS 3630 Management of Organizations*** MKT 3405 Marketing Policy*** IBE Practicum (CIS 3685/MKT 3485/MGT 3385)*** Semester Total	Hrs 3 3 3 3 15
Senior Year - Fall Semester HM 4820 Sustainability & Operations Management HRM 3920 Human Resource Management MGT 3320 System, Teams, & Organizational Behavior MGT 3360 Production/Operations Management MGT 4357 Organizational Policy & Strategy Semester Total	Hrs 3 3 3 3 15	Senior Year - Spring Semester HM 3825 Events Management (spring only) HM 4830 Tourism Marketing (spring only) HM 4845 Senior Seminar (spring only) Free Choice Electives** Semester Total	Hrs 3 3 3 1 12

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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Hotel and Restaurant Administration Major, B.S. Degree (43-275)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) HM 1800 Introduction to Hospitality (Fall only) General Education Semester Total AE 1400 Freshman Seminar*	Hrs 3 9 15	Freshman Year - Spring Semester CHEM 1104 Introduction to the Sciences: Chemistry (GE) COMM 1000 Public Speaking or COMM 1050 Fundamentals of Oral Communication Competency (GE) ECON 1010 Principles of Macroeconomics (GE) ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Managing Information Semester Total	Hrs 4 3 3 3 2-3 15-16
Summer Semester Following Freshman or Sophomore Year HM 3810 Internship** Semester Total	Hrs 3 3		
Sophomore Year - Fall Semester ACCT 2101 Principles of Financial Accounting FOOD 2322 Food Preparation HM 2830 Hospitality Management Case Analysis*** General Education Semester Total	Hrs 3 3 1 9	Sophomore Year - Spring Semester BLAW 2720 Legal Environment of Business FOOD 3332 Quantity Food Production & Service GEOG 2212 World Geography (GE) HM 3844 Restaurant Operations General Education Semester Total	Hrs 3 3 3 3 15
Junior Year - Fall Semester HM 3800 Lodging Management (Fall only) HM 3845 Hospitality Operations Analysis MGT 3320 Systems, Teams, & Organizational Behavior MGT 3325 Business Communication Semester Total	Hrs 3 3 3 1 12	Junior Year - Spring Semester HM 2830 Hospitality Management Case Analysis*** HM 3825 Events Management (Spring only) HM 4830 Tourism Marketing (Spring only) HRM 3920 Human Resource Management Free Choice Electives Semester Total	Hrs 1 3 3 4 14
Summer Semester Following Junior Year HM 4810 Internship Semester Total	Hrs 5 5		
Senior Year - Fall Semester HM 4820 Sustainability & Operations Management Free Choice Electives Semester Total	Hrs 3 9 12	Senior Year - Spring Semester HM 2830 Hospitality Management Case Analysis*** HM 4845 Senior Seminar (Spring only) Free Choice Electives Semester Total	Hrs 1 3 8-9 12-13

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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Innovative Technologies, B.S. Degree (Option 1: Production Management) (43-01588)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester COMM 1000 Public Speaking (GE) ENGL 1020 Composition 1 (GE) ET 1010 Applied Electricity* MATH 1111 College Algebra (GE) General Education Semester Total	Hrs 3 4 3 3 16	Freshman Year - Spring Semester CADD 1105 Basic AutoCAD CADD 1110 Fundamentals of Drafting CADD 1170 Introduction to Computer-Aided Drafting CTE 3060 Technical Writing (GE) ENGT 1012 Global Production Technology General Education Semester Total	Hrs 1 3 2 3 2 14
Sophomore Year - Fall Semester ACCT 2101 Principles of Financial Accounting CHEM 1103 Introduction to the Sciences: Chemistry (GE) ENGT 2040 Engineering Material Science ENGT 2530 Machine Tool Technology General Education Semester Total	Hrs 3 3 4 3 16	Sophomore Year - Spring Semester CADD 2120 Machine Drafting** ECON 1010 Principles of Macroeconomics (GE) PHYS 1104 Introduction to the Sciences: Physics (GE) General Education Semester Total	Hrs 3 3 4 3 13
Junior Year - Fall Semester CADD 4171 Production Design Drafting*** ENGT 3520 Engineering Economy GEOG 3201 The Cultural Landscape (GE) SAFE 3070 Safety Leadership General Education Semester Total	Hrs 3 3 3 3 15	Junior Year - Spring Semester CADD 4124 Geometric Dimen. & Toler. Principles for ENGT ENGT 3530 Inspection and Quality Control* ENGT 3562 Computer Numerical Control (CNC)* INDM 4260 Organizational Dynamics General Education Managing Information Semester Total	Hrs 3 3 3 3 2 14
Junior-to-Senior Year - Summer Semester SOT 3022 Internship in Technology Semester Total	Hrs 3 3		
Senior Year - Fall Semester ATM 4032 Hydraulics & Pneumatics ENGT 4520 Robotics and Automation INDM 4210 Industrial Management INDM 4240 Facilities Engineering INDM 4250 Project Management Semester Total	Hrs 3 3 3 3 15	Senior Year - Spring Semester ENGT 4580 Quality Systems Engineering ENGT 4110 Engineering Technology Problem Solving INDM 4015 Legal Aspects of Industry* INDM 4220 Human Factors Engineering Free Choice Elective Semester Total	Hrs 3 3 3 2 14

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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Innovative Technologies, B.S. Degree (Option 2: Product Research and Development) (43-02588)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester COMM 1000 Public Speaking (GE) ENGL 1020 Composition I (GE) MATH 1111 College Algebra (GE) PSY 1100 General Psychology (GE) General Education Semester Total	Hrs 3 3 3 3 3 15	Freshman Year - Spring Semester CADD 1105 Basic AutoCAD CADD 1110 Fundamentals of Drafting CADD 1170 Introduction to Computer-Aided Drafting CTE 3060 Technical Writing (GE) ENGT 1012 Global Production Technology General Education Semester Total	Hrs 1 3 2 3 2 1 4
Sophomore Year - Fall Semester ACCT 2101 Principles of Financial Accounting CHEM 1103 Introduction to the Sciences: Chemistry (GE) ENGT 2040 Engineering Material Science ENGT 2530 Machine Tool Technology General Education Managing Information Semester Total	Hrs 3 4 3 2-3 15-16	Sophomore Year - Spring Semester CADD 2120 Machine Drafting* ECON 1010 Principles of Macroeconomics (GE) PHYS 1104 Introduction to the Sciences: Physics (GE) PSY 2110 Research and Design Analysis I Semester Total	Hrs 3 4 4 14
Junior Year - Fall Semester CADD 4171 Production Design Drafting** GEOG 3201 The Cultural Landscape (GE) PSY 2120 Research and Design Analysis II General Education Semester Total	Hrs 3 3 4 3 13	Junior Year - Spring Semester ENT 4315 Entrepreneurial Business Planning INDM 4230 Lean and Quality Management INDM 4260 Organizational Dynamics SAFE 3070 Safety Leadership General Education Semester Total	Hrs 3 3 3 3 15
Junior-to-Senior Year - Summer Semester INDM 4280 Industrial Statistics SOT 3022 Internship in Technology Semester Total	Hrs 3 3 6		
Senior Year - Fall Semester INDM 4210 Industrial Management INDM 4250 Project Management SOT 4000 Special Projects in Technology Free Choice Electives Semester Total	Hrs 3 3 3 5 14	Senior Year - Spring Semester ENGT 4110 Engineering Technology Problem Solving ENGT 4580 Quality Systems Engineering INDM 4220 Human Factors Engineering Free Choice Electives Semester Total	Hrs 3 3 3 5 14

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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Innovative Technologies, B.S. Degree (Option 3: Robotics and Automation) (43-03588)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester COMM 1000 Public Speaking (GE) ENGL 1020 Composition I (GE) ET 1010 Applied Electricity* MATH 1111 College Algebra (GE) General Education Semester Total	Hrs 3 4 3 16	Freshman Year - Spring Semester CADD 1105 Basic AutoCAD CADD 1110 Fundamentals of Drafting CADD 1170 Introduction to Computer-Aided Drafting CTE 3060 Technical Writing (GE) ENGT 1012 Global Production Technology General Education Semester Total	Hrs 1 3 2 3 2 3 14
Sophomore Year - Fall Semester ACCT 2101 Principles of Financial Accounting CHEM 1103 Introduction to the Sciences: Chemistry (GE) ET 1050 Digital Principles & Applications* General Education Semester Total	Hrs 3 3 4 5-6 15-16	Sophomore Year - Spring Semester ECON 1010 Principles of Macroeconomics (GE) PHYS 1104 Introduction to the Sciences: Physics (GE) General Education Semester Total	Hrs 3 4 6 13
Junior Year - Fall Semester ET 3017 Industrial Electronics GEOG 3201 The Cultural Landscape (GE) SAFE 3070 Safety Leadership Free Choice Electives Semester Total	Hrs 4 3 6 16	Junior Year - Spring Semester ENGT 3562 Computer Numerical Control (CNC)* INDM 4260 Organizational Dynamics Free Choice Electives Semester Total	Hrs 3 3 8 14
Junior-to-Senior Year - Summer Semester SOT 3022 Internship in Technology Semester Total	Hrs 3 3		
Senior Year - Fall Semester ENGT 4520 Robotics and Automation INDM 4210 Industrial Management INDM 4250 Project Management Free Choice Electives Semester Total	Hrs 3 3 3 6 15	Senior Year - Spring Semester ENGT 4110 Engineering Technology Problem Solving ENGT 4580 Quality Systems Engineering Free Choice Electives Semester Total	Hrs 3 3 8 14

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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Interior Design Major, B.F.A. Degree (47-261)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ART 1110 Drawing I ART 1300 Interior Design Drafting I ART 1315 2-D Design ENGL 1020 Composition I (GE) General Education Semester Total AE 1400 Freshman Seminar*	Hrs 3 3 3 3 15	Freshman Year - Spring Semester ART 1120 Drawing II ART 1325 Color and Design ART 2310 Interior Design Studio I ART 2335 3-D Design ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) Semester Total	Hrs 3 3 3 3 15
Sophomore Year - Fall Semester ART 2300 Interior Design Drafting II ART 2305 Interior Design Presentation Techniques ART 2320 Building Systems & Sustainability ART 2340 Materials, Methods, and Specifications General Education Semester Total	Hrs 3 3 3 3 15	Sophomore Year - Spring Semester ART 1800 Ideas & the Visual Arts (GE) ART 2350 Interior Design Building Codes and Regulations ART 2360 Interior Design Environmental Systems ART 3310 Interior Design Studio II ART Major Elective** Semester Total	Hrs 3 3 3 3 1 5
Junior Year - Fall Semester ART 1835 Global Arts and Culture (GE) ART 3330 Interior Design Studio III ART 3350 Construction Documentation for Interior Design ART 3800 History of Furniture and Interiors I ART Major Elective** General Education Semester Total	Hrs 3 3 3 3 3 1 8	Junior Year - Spring Semester ART 3850 History of Furniture and Interiors II ART 3320 Professional Practice for Interior Design I ART 3340 Interior Detailing & Furniture Design ART 4340 Interior Design Studio IV General Education Semester Total	Hrs 3 1 3 6 16
Junior Year - Summer Semester ART 4310 Design Internship Semester Total	Hrs l 1		
Senior Year - Fall Semester ART 4350 Interior Design Thesis I ART 4221 Art Theory and Criticism ART 4850 20th Century Art & Architecture General Education Semester Total	Hrs 3 3 6 15	Senior Year - Spring Semester ART 4320 Professional Practice for Interior Designers II*** ART 4360 Interior Design Thesis II General Education Semester Total	Hrs 2 3 9 14

Interior Design Major, B.F.A. Degree - 124 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 with the ART prefix.
- ***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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

International Studies Major, B.A. Degree (42-563)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) IS 1000 Introduction to International Studies (GE) Modern Language Requirement (GE)* General Education Semester Total AE 1400 Freshman Seminar**	Hrs 3 3 6 15	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) POLS 2520 Comparative Government and Politics Modern Language Requirement* General Education Semester Total	Hrs 3 3 6 15
Sophomore Year - Fall Semester POLS 2530 International Relations (GE) Major Elective in a Geographic Specialization*** Modern Language Requirement* General Education Semester Total	Hrs 3 3 6 15	Sophomore Year - Spring Semester GEOG 2246 Economic Geography Major Elective in a Content Specialization# Major Elective in a Geographic Specialization*** Modern Language Requirement* General Education Semester Total	Hrs 3 3 3 3 15
Junior Year - Fall Semester REL 3210 Comparative World Religions SOC 3885 Globalization and the Future Major Electives in a Content Specialization# General Education Semester Total	Hrs 3 6 3 15	Junior Year - Spring Semester Free Choice Electives## (Suggested Overseas Study, Internship or Service Learning experience) Semester Total	Hrs 15 15
Senior Year - Fall Semester ANTH 4870 Comparative Cultures Major Elective in a Content Specialization# General Education Free Choice Electives Semester Total	Hrs 3 6 3 15	Senior Year - Spring Semester IS 4950 Senior Seminar Free Choice Electives Semester Total	Hrs 3 12 15

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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Management Major, B.S.B.A. Degree (46-268)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CIS 1600 Business Information Management (GE)* ECON 1010 Principles of Macroeconomics (GE)* ENGL 1020 Composition I (GE) MATH 1111 College Algebra (GE)* General Education or MGT 1320 for an Exhibiting Leadership Major Elective++ Semester Total AE 1400 or BADM 1400 Freshman Seminar**	Hrs 3 3 3 3 1 5	Freshman Year - Spring Semester COMM 1000 Public Speaking or COMM 1050 Fundamentals of Oral Communication Competency (GE) ECON 1011 Principles of Microeconomics* ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 3 3 3 6 15
Sophomore Year - Fall Semester ACCT 2101 Principles of Financial Accounting* BLAW 2720 Legal Environment of Business* General Education Semester Total	Hrs 3 3 10 16	Sophomore Year - Spring Semester ACCT 2102 Principles of Managerial Accounting* FIN 2801 Business Statistics I* General Education Free Choice Elective Semester Total Note: Complete all BSBA Admission requirements.*	Hrs 3 3 6 3 15
Junior Year - Fall Semester FIN 3801 Business Statistics II (IBE Block-below)*** CIS 3630 Management Information Systems*** MGT 3315 Management of Organizations*** MKT 3405 Marketing Policy*** IBE Practicum (CIS 3685/MKT 3485/MGT 3385)*** Semester Total	Hrs 3 3 3 3 15	Junior Year - Spring Semester FIN 3850 Principles of Finance HRM 3920 Human Resource Management MGT 3320 System, Teams, & Organizational Behavior MGT 3325 Business Communications MGT 3360 Production/Operations Management Semester Total	Hrs 3 3 3 3 3 1 5
Senior Year - Fall Semester MGT 3345 International Management + MGT 4310 Quality and Innovation MGT 4325 Management Communication HM 4820 Sustainability & Operations Management or MGT 4370 Supply Chain Management + Exhibiting Leadership Major Elective + + or General Education (choice will depend on what was taken in first semester) Free Choice Electives (internship recommended) Semester Total	Hrs 1-3 3 3 3 1-2 14-17	Senior Year - Spring Semester HM 4820 or MGT 4370 or Free Choice Elective + (if MGT 3345 was taken for 1 hour in the prior semester, take HM 4820 or MGT 4370; if MGT 3345 was taken for 3 hours, take 1 hour of Free Choice Elective) MGT 4320 Leading & Managing Teams & Organizations MGT 4357 Organizational Policy & Strategy Exhibiting Leadership Major Elective + + Free Choice Electives (internship recommended) Semester Total	1 or 3 3 3 3 13-15

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.
- +Students are required to have 6-7 credit hours of Management Global Perspective major electives. Students must choose MGT 3345 for at least one credit. Students may choose MGT 3345 for one or three credits. MGT 3345 may not be taken for both one hour and three hours. Students who take MGT 3345 for 1 credit hour will take both HM 4820 and MGT 4370. Students who take MGT 3345 for 3 credit hours will choose to take either HM 4820 or MGT 4370. If the latter option is selected students will need 1 additional hour of free choice elective. See the 2014 Undergraduate Catalog for more details.
- ++Students must select 6 credit hours of Exhibiting Leadership major electives from the following list: MGT 1320, 2350, 3335, 3350, ESE 3720 and 3725, or ISP 4000. MGT 1320 is recommended only for the fall semester for first time freshmen. See the 2014 Undergraduate Catalog for more details.
- A 2.25 cumulative GPA is required for graduation in this major.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before
 earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second
 semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for
 the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more
 information.

Marketing Major, B.S.B.A. Degree (46-269)

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Freshman Year - Fall Semester CIS 1600 Business Information Management (GE)* ECON 1010 Principles of Macroeconomics (GE)* ENGL 1020 Composition I (GE) MATH 1111 College Algebra (GE)* General Education Semester Total MKT 1400 Orientation to Marketing**	Hrs 3 3 3 3 1 5	Freshman Year - Spring Semester COMM 1000 Public Speaking or COMM 1050 Fundamentals of Oral Communication Competency (GE) ECON 1011 Principles of Microeconomics* ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	3 3 3 6 15
Sophomore Year - Fall Semester ACCT 2101 Principles of Financial Accounting* BLAW 2720 Legal Environment of Business* General Education Semester Total	Hrs 3 3 9 15	Sophomore Year - Spring Semester ACCT 2102 Principles of Managerial Accounting* FIN 2801 Business Statistics I* General Education Free Choice Electives Semester Total Note: Complete all B.S.B.A. Admission requirements.*	Hrs 3 7 2 15
Junior Year - Fall Semester CIS 3630 Management Information Systems# FIN 3801 Business Statistics II FIN 3850 Principles of Finance MGT 3315 Management of Organizations# MKT 3405 Marketing Policy# Semester Total	Hrs 3 3 3 3 1 5	Junior Year - Spring Semester MCT 3325 Business Communications MCT 3360 Production/Operations Management MKT 3430 Professional Sales MKT 3480 Consumer Behavior Marketing Major Elective***# Semester Total	Hrs 3 3 3 3 1 5
Senior Year - Fall Semester MKT 4460 International Marketing MKT 4470 Marketing Research Marketing Major Electives*** Free Choice Electives Semester Total	Hrs 3 6 3 15	Senior Year - Spring Semester MGT 4357 Organizational Policy & Strategy MKT 4490 Marketing Management Marketing Major Electives*** Free Choice Electives Semester Total	Hrs 3 3 6 3 15

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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Mathematics Major, B.S. Degree (43-454)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester	Hrs	Freshman Year - Spring Semester	Hrs	
CS 1100 Computer Programming I	3	ENGL 1030 Composition II or CTE 3060 Technical Writing (GE)	3	
ENGL 1020 Composition I (GE)	3	MATH 1152 Calculus & Analytic Geometry II	5	
MATH 1151 Calculus & Analytic Geometry I (GE)	5	MATH 2410 Discrete Mathematics	3	
General Education	3	General Education	3	
Semester Total	14	Semester Total	14	
AE 1400 Freshman Seminar*	1			
Sophomore Year - Fall Semester	Hrs	Sophomore Year - Spring Semester	Hrs	
MATH 2153 Calculus & Analytic Geometry III	3	MATH 3151 Differential Equations**	3	
MATH 3710 Linear Algebra	3	Major Elective***	3	
General Education	9	General Education	9	
Semester Total	15	Semester Total	15	
Junior Year - Fall Semester	Hrs	Junior Year - Spring Semester	Hrs	
MATH 3311 Introduction to Mathematical Statistics**	3	Major Elective***	3	
MATH 4710 Algebraic Structures**	3	Free Choice Electives	13	
General Education	9	Semester Total	16	
Semester Total	15	3563.6. 1514.		
Senior Year - Fall Semester	Hrs	Senior Year - Spring Semester	Hrs	
MATH 4150 Advanced Calculus I**	3	MATH 4233 The Sci., Historical, & Sociological Impact of Math**	3	
MATH 4711 Introduction to Modern Algebra**	3	Major Elective***	3	
Free Choice Electives	10	Free Choice Electives	9	
Semester Total	16	Semester Total	15	

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.
- ***This major requires nine hours of Major Electives. See the Undergraduate Catalog for the list of 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.
- 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Mathematics Major, Accelerated M.S. Degree (43-607)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CS 1100 Computer Programming I ENGL 1020 Composition I (GE) MATH 1151 Calculus & Analytic Geometry I (GE) General Education Semester Total AE 1400 Freshman Seminar*	Hrs 3 3 5 14	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) MATH 1152 Calculus & Analytic Geometry II MATH 2410 Discrete Mathematics General Education Semester Total	Hrs 3 5 3 14
Sophomore Year - Fall Semester MATH 2153 Calculus & Analytic Geometry III MATH 3710 Linear Algebra General Education Semester Total	Hrs 3 3 9 15	Sophomore Year - Spring Semester MATH 3151 Differential Equations** Major Elective*** General Education Semester Total	Hrs 3 9 15
Junior Year - Fall Semester MATH 3311 Introduction to Mathematical Statistics** MATH 4710 Algebraic Structures** General Education Semester Total	Hrs 3 3 9	Junior Year - Spring Semester# Major Elective*** Free Choice Electives Semester Total	Hrs 3 13 16
Senior Year - Fall Semester MATH 4150 Advanced Calculus I** MATH 4711 Introduction to Modern Algebra** Free Choice Electives Semester Total	Hrs 3 3 9 15	Senior Year - Spring Semester## MATH 4233 The Sci., Historical, & Sociological Impact of Math** Major Elective*** Graduate-level Elective in MATH### Free Choice Electives Semester Total	Hrs 3 3 6 15
Fifth Year - Fall Semester MATH 4211 Topology I Graduate-level Electives in MATH## Semester Total	Hrs 3 9 12	Fifth Year - Spring Semester MATH 5150 Advanced Calculus II or MATH 5180 Real Analysis MATH 5711 Adv. Group & Field Theory or MATH 5722 Adv. Ring & Module Theory Graduate-level Elective in MATH### Semester Total	Hrs 3 3 9

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.
- ***This program requires nine hours of Major Electives. See the Undergraduate Catalog for the list of choices.
- #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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Mathematics Major, B.S. in Ed. Degree (41-459)

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Freshman Year - Fall Semester CS 1100 Computer Programming I ENGL 1020 Composition I (GE) MATH 1151 Calculus & Analytic Geometry I (GE) MATH 1850 Orientation Seminar* General Education Science with Laboratory Semester Total	Hrs 3 3 5 5 4 15.5	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) HIST 1350 or 1351 History of the United States (GE) MATH 1152 Calculus & Analytic Geometry II MATH 2410 Discrete Mathematics General Education Managing Information Semester Total	Hrs 3 3 5 3 2-3 16-17
Sophomore Year - Fall Semester EDFL 2100 Foundations of Education EDFL 2240 Educational Psychology (GE) FLDX 2150 Introductory Field Experience EDSP 2100 Education of the Exceptional Child MATH 2221 Foundations of Geometry* MATH 3710 Linear Algebra Semester Total	Hrs 2 3 1 2 3 3 1 4	Sophomore Year - Spring Semester MATH 2861 Advanced Perspectives on HS Mathematics* MATH 4851 Prob. & Statistics for Mid./High School Math* POLS 1510 American Government (GE) General Education Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 3 3 3 6 15
Junior Year - Fall Semester MATH 3850 Strategies in Teaching Secondary Math* MATH 4710 Algebraic Structures* PSY 4230 Adolescent Psychology General Education Semester Total	Hrs 3 3 6 15	Junior Year - Spring Semester EDFL 4210 The Teaching of Reading in the Secondary School MATH 2862 Adv. Perspective on Secondary Geometry & Trig. MATH 4233 The Scientific, Historical, Soc. Impact of Math* General Education Free Choice Elective Semester Total	Hrs 2 3 3 6 2.5 16.5
Senior Year - Fall Semester EDFL 3500 Secondary Teaching & Behavior Management FLDX 3550 Practicum in Secondary Instruction EDFL 4300 Educational Measurement & Evaluation MATH 4880 Issues and Methods of Teaching Secondary Math Free Choice Electives Semester Total	Hrs 3 1 2 2 8 16	Senior Year - Spring Semester+ FLDX 4595 Student Teaching Secondary I FLDX 4468 Student Teaching Secondary II Semester Total	Hrs 6 6 12

Mathematics Major, B.S. in Ed. Degree - 120 hours

- $\bullet\,$ *This course is only offered during the semester indicated.
- +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 Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

Medical Technology, B.S. Degree (43-384)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester BIOL 1000 The Discipline of Biology and Earth Science BIOL 1110 Principles of Biology or BIOL 1112 Animal Biology* CHEM 1131 General Chemistry I (GE)	Hrs 1 3-4 5	Freshman Year - Spring Semester BIOL 2512 Cell Biology BIOL 3401 Human Anatomy CHEM 1132 General Chemistry II	Hrs 3 3 5
ENGL 1020 Composition I (GE) MATH 1111 College Algebra (GE) Semester Total	3 3 15-16	ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	3 3 1 7
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Sophomore Year - Fall Semester	Hrs	Sophomore Year - Spring Semester	Hrs
BIOL 3402 Human Physiology	5	BIOL 3611 Microbiology	4
BIOL 3511 Genetics	4 4	BIOL 4514 Molecular Biology	3 3
CHEM 3341 Organic Chemistry I General Education	3	MATH 1300 Basic Statistics (GE)** or PSY 4520 Statistics for Behavioral Sciences General Education	3 6
Semester Total	16	Semester Total	16
Junior Year - Fall Semester BIOL 4002 Life Science Senior Seminar BIOL 4311 Parasitology CHEM 3421 Intermediate Biochemistry General Education Semester Total	Hrs 1 4 3 8	Junior Year - Spring Semester BIOL 3413 Immunology BIOL 4516 Hematology/Virology + General Education Semester Total	Hrs 3 9 15
Senior Year - Summer Semester	Hrs		
BIOL 4015 Clinical Immunohematology	4		
BIOL 4016 Clinical Urinalysis Semester Total	2 6		
Semester lordi	0		
Senior Year - Fall Semester BIOL 4017 Clinical Microbiology BIOL 4018 Clinical Immunology	Hrs 7 5	Senior Year - Spring Semester BIOL 4019 Clinical Biochemistry BIOL 4020 Clinical Hematology	Hrs 7 4
Semester Total	1 2	BIOL 4020 Clinical Hematology BIOL 4021 Clinical Special Topics	1
		Semester Total	12

Medical Technology, B.S. Degree - 122-126 hours++

- *BIOL 1112 is recommended over BIOL 1110.
- **If MATH 1300 is chosen, it will count towards both the major and in general education.
- +BIOL 4516 is only taught in the spring semesters of even numbered years. Adjust your schedule accordingly.
- ++Total degree hours vary based on course choices made in the major (BIOL 1110 or 1112) and possible overlap with general education (MATH 1300 chosen over PSY 4520).
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Middle School Education Major - Business Education Subject Area, B.S. in Ed. Degree (41-840)

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Freshman Year - Fall Semester BTE 1210 Essentials of Managing Information (GE) ENGL 1020 Composition I (GE) POLS 1510 American Government (GE) General Education Semester Total	Hrs 2 3 3 6 14	Freshman Year - Spring Semester CTE 3060 Technical Writing (GE) EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDFL 2240 Educational Psychology (GE) EDSP 2100 Education of Exceptional Child HIST 1350 or 1351 History of the United States (GE) General Education Math Semester Total	Hrs 3 2 1 3 2 3 17
Sophomore Year - Fall Semester BTE 4535 Data Input Technologies Second Subject Area* General Education Science w/lab General Education Semester Total	Hrs 2 3 4 6 15	Sophomore Year - Spring Semester BTE 4536 Integrated Productivity Applications CTE 3110 Financial Management Education Second Subject Area* General Education Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 3 3 6 6 18
Junior Year - Fall Semester BTE 4560 Emerging Technologies for Business CTE 3060 Technical Writing 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 (overlap with General Education Class)* Semester Total	Hrs 3 3 4 3 2 3 18	Junior Year - Spring Semester CTE 4501 Managing Classroom Technologies EDFL 3240 Appl. of Lang., Literacy, & Lit. in the ML Classroom (spring only) EDFL 4135 Middle Level Curriculum & Assessment (spring only) PSY 4230 Psychology of Adolescence Second Subject Area* Semester Total	Hrs 2 4 3 3 6 18
Senior Year - Fall Semester BTE 4210 Methods of Teaching Business & Marketing Edu. CTE 4280 Implementing CTE Program and Lab Management EDFL 4340 The Engaging Middle Level Classroom (fall only) Second Subject Area Teaching Methods Course Second Subject Area* General Education Semester Total	Hrs 3 3 3 3 3 1 8	Senior Year - Spring Semester** FLDX 4497 Student Teaching Middle School I FLDX 4498 Student Teaching Middle School II Semester Total	Hrs 6 6 12

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 Engineering and Technology. Each subject area is 23-25 hours plus a teaching methods course. This plan is based on a 24 credit-hour second subject area. 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 and/or increase free choice elective 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.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

Middle School Education Major - Engineering and Technology Subject Area, B.S. in Ed. Degree (41-840)

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Freshman Year - Fall Semester ENGL 1020 Composition I (GE) POLS 1510 American Government (GE) CTE Major Area Elective (CTE 2000 recommended for overlap with general education Managing Information)* General Education Semester Total	Hrs 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Freshman Year - Spring Semester CTE Major Area Elective* EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDFL 2240 Educational Psychology (GE) EDSP 2100 Education of Exceptional Child ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Math Semester Total	Hrs 3 2 1 3 2 3 1 7
Sophomore Year - Fall Semester CTE Major Area Elective* HIST 1350 or 1351 History of the United States (GE) General Education Science w/lab Second Subject Area** Second Subject Area (overlap with General Education Class)* Semester Total	Hrs 3 4 3 16	Sophomore Year - Spring Semester CTE Major Area Elective* Second Subject Area** General Education Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 3 6 6 15
Junior Year - 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 CTE Major Area Elective* General Education Semester Total	Hrs 4 3 2 3 15	Junior Year - Spring Semester EDFL 3240 Appl. of Lang., Literacy, & Lit. in the ML Classroom (spring only) EDFL 4135 Middle Level Curriculum & Assessment (spring only) PSY 4230 Psychology of Adolescence CTE Major Area Elective* Second Subject Area** Semester Total	Hrs 4 3 3 3 16
Senior Year - Fall Semester CTE 4125 Methods of Teaching Problem-based Learning EDFL 4340 The Engaging Middle Level Classroom (fall only) CTE Major Area Elective* Second Subject Area** General Education Semester Total	Hrs 3 2 3 6 3 15	Senior Year - Spring Semester*** FLDX 4497 Student Teaching Middle School I FLDX 4498 Student Teaching Middle School II Semester Total	Hrs 6 6 12

Middle School Education Major - Engineering and Technology Subject Area, B.S. in Ed. Degree - 121 hours

- *Twenty-one hours of CTE Major Area Electives are required. Students should work with their program coordinator for course recommendations.
- **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 Engineering and Technology. Each subject area is 23-25 hours plus a teaching methods course. This plan is based on a 24 credit-hour second subject area. 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 and/or increase free choice elective 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.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

Middle School Education Major - Language Arts Subject Area, B.S. in Ed. Degree (41-840)

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Freshman Year - Fall Semester ENGL 1020 Composition I (GE) POLS 1510 American Government (GE) General Education Math General Education Semester Total	Hrs 3 3 3 6 15	Freshman Year - Spring Semester EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDFL 2240 Educational Psychology (GE) EDSP 2100 Education of Exceptional Child ENGL 1030 Composition II HIST 1350 or 1351 History of the United States (GE) General Education Managing Information Semester Total	Hrs 2 1 3 2 3 3 2-3 16-17
Sophomore Year - Fall Semester Language Arts Subject Area Electives* Second Subject Area** (overlap with general education) General Education Science w/lab General Education Semester Total	Hrs 4 3 4 3 14	Sophomore Year - Spring Semester Second Subject Area** ENGL 2200, 2205, 2210, 2215, or 2220 (GE) General Education Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 9 3 3 15
Junior Year - 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*** Free Choice Elective (need depends on overlap between major choices and general education) Semester Total	Hrs 4 3 2 6	Junior Year - 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 Semester Total	Hrs 4 3 4 3 2 16
Senior Year - Fall Semester EDFL 4235 Methods of Teaching Middle Level English LA EDFL 4240 Teaching English Language Arts EDFL 4340 The Engaging Middle Level Classroom (fall only) Second Subject Area* Semester Total	Hrs 3 4 3 6	Senior Year - Spring Semester*** FLDX 4497 Student Teaching Middle School I FLDX 4498 Student Teaching Middle School II Semester Total	Hrs 6 6 12

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 Engineering and Technology. Each subject area is 23-25 hours plus a teaching methods course. This plan is based on a 24 credit-hour second subject area. 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 and/or increase free choice elective 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.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

Middle School Education Major - Math Subject Area, B.S. in Ed. Degree (41-840)

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Freshman Year - Fall Semester ENGL 1020 Composition I (GE) MATH 1620 Contemporary Math (GE)* POLS 1510 American Government (GE) General Education Semester Total	Hrs 3 3 3 6 15	Freshman Year - Spring Semester EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDFL 2240 Educational Psychology (GE) EDSP 2100 Education of Exceptional Child ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) HIST 1350 or 1351 History of the United States (GE) General Education Managing Information Semester Total	Hrs 2 1 3 2 3 3 2-3 16-17
Sophomore Year - Fall Semester MATH 2821 Elements of Algebra* Second Subject Area** General Education Science with a Laboratory General Education Semester Total	Hrs 3 6 4 3 16	Sophomore Year - Spring Semester EDFL 4300 Educational Measurement & Evaluation MATH 2822 Elements of Geometry* Second Subject Area** General Education Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 2 3 6 6 17
Junior Year - 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) MATH 2823 Introduction to Infinite Processes* Second Subject Area** Semester Total	Hrs 4 3 5 15	Junior Year - Spring Semester EDFL 3240 Appl. of Lang., Literacy, & Lit. in the ML Classroom (spring only) EDFL 4135 Middle Level Curriculum & Assessment (spring only) PSY 4230 Psychology of Adolescence MATH 3800 Intro. Teaching Elementary and MS Math* MATH 3802 Concepts and Methods Middle School Math* MATH 4851 Probability and Statistics Mid/HS Math* Semester Total	Hrs 4 3 2 2 3 18
Senior Year - Fall Semester EDFL 4340 The Engaging Middle Level Classroom (fall only) MATH 3840 Strategies for Teaching Middle School Math* Second Subject Area (overlap with General Education Class)** Second Subject Area Semester Total	Hrs 3 3 3 1 12	Senior Year - Spring Semester** FLDX 4497 Student Teaching Middle School I FLDX 4498 Student Teaching Middle School II Semester Total	Hrs 6 6 12

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 Engineering and Technology. Each subject area is 23-25 hours plus a teaching methods course. This plan is based on a 24 credit-hour second subject area. 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 and/or increase free choice elective 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.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

Middle School Education Major - Science Subject Area, B.S. in Ed. Degree (41-840)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester Any BIOL, CHEM, EASC, PHYS Course listed in General Education ENGL 1020 Composition I (GE) POLS 1510 American Government (GE) General Education Math Semester Total	Hrs 3 3 3 6 15	Freshman Year - Spring Semester Any BlOL, CHEM, EASC, PHYS Course with a lab listed in General Education EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDFL 2240 Educational Psychology (GE) EDSP 2100 Education of Exceptional Child ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Communication Semester Total	Hrs 4 2 1 3 2 3 16
Sophomore Year - Fall Semester HIST 1350 or 1351 History of the United States (GE) General Education Semester Total	Hrs 3 11 14	Sophomore Year - Spring Semester Second Subject Area* Any BIOL, CHEM, EASC, PHYS Courses Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 6 6 15
Junior Year - Fall Semester Any BIOL, CHEM, EASC, PHYS Course 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* Semester Total	Hrs 4 4 3 2 3 16	Junior Year - Spring Semester Any BIOL, CHEM, EASC, PHYS Course EDFL 3240 Appl. of Lang., Literacy, & Lit. in the ML Classroom (spring only) EDFL 4135 Middle Level Curriculum & Assessment (spring only) PSY 4230 Psychology of Adolescence Second Subject Area* Semester Total	Hrs 4 4 3 3 1 16
Senior Year - Fall Semester EDFL 4340 The Engaging Middle Level Classroom (fall only) STCH 4050 Science Teaching Methods Second Subject Area Free Choice Elective (hours needed will depend on major choices and possible overlap with general education) Semester Total	Hrs 3 3 9	Senior Year - Spring Semester** FLDX 4497 Student Teaching Middle School I FLDX 4498 Student Teaching Middle School II Semester Total	Hrs 6 6 12

Middle School Education Major - Science Subject Area, B.S. in Ed. Degree - 122 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 Engineering and Technology. Each subject area is 23-25 hours plus a teaching methods course. This plan is based on a 24 credit-hour second subject area. 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 and/or increase free choice elective 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.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

Middle School Education Major - Social Science Subject Area, B.S. in Ed. Degree (41-840)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) POLS 1510 American Government (GE) General Education Math General Education Semester Total	Hrs 3 3 3 6 15	Freshman Year - Spring Semester EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDFL 2240 Educational Psychology (GE) EDSP 2100 Education of Exceptional Child ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) HIST 1350 or 1351 History of the United States (GE) General Education Managing Information Semester Total	Hrs 2 1 3 2 2 3 3 2-3 16-17
Sophomore Year - Fall Semester Any ANTH, ECON, GEOG, HIST, POLS, or SOC class from the Engagement category in General Education Second Subject Area* General Education Science w/lab General Education Semester Total	Hrs 3 4 5 15	Sophomore Year - Spring Semester Any ANTH, ECON, GEOG, HIST, POLS, or SOC class Second Subject Area* General Education Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 6 6 3 15
Junior Year - Fall Semester Any ANTH, ECON, GEOG, HIST, POLS, or SOC class 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 (overlap with General Education Class)* Free Choice Elective Semester Total	Hrs 3 4 3 2 3 1 16	Junior Year - Spring Semester Any ANTH, ECON, GEOG, HIST, POLS, or SOC class EDFL 3240 Appl. of Lang., Literacy, & Lit. in the ML Classroom (spring only) EDFL 4135 Middle Level Curriculum & Assessment (spring only) PSY 4230 Psychology of Adolescence Second Subject Area* Semester Total	Hrs 3 4 3 3 16
Senior Year - Fall Semester ECEL 3420 Teaching Social Studies & Economics Elem. School EDFL 4340 The Engaging Middle Level Classroom (fall only) Second Subject Area* Semester Total	Hrs 3 3 9 15	Senior Year - Spring Semester** FLDX 4497 Student Teaching Middle School I FLDX 4498 Student Teaching Middle School II Semester Total	Hrs 6 6 12

Middle School Education Major - Social Science Subject Area, B.S. in Ed. Degree - 120 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 Engineering and Technology. Each subject area is 23-25 hours plus a teaching methods course. This plan is based on a 24 credit-hour second subject area. 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 and/or increase free choice elective 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.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

Middle School Education Major - Speech/Theatre Subject Area, B.S. in Ed. Degree (41-840)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) POLS 1510 American Government (GE) THEA 2400 Discovering Theatre (GE) General Education Semester Total	Hrs 3 3 3 6 15	Freshman Year - Spring Semester EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDFL 2240 Educational Psychology (GE) EDSP 2100 Education of Exceptional Child ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Math Any COMM/THEA Subject Area Class Semester Total	Hrs 2 1 3 2 3 3 3 3 17
Sophomore Year - Fall Semester Any COMM/THEA Subject Area Class EDSP 2100 Education of Exceptional Child HIST 1350 or 1351 History of the United States (GE) General Education Science w/lab General Education Semester Total	Hrs 3 3 4 5	Sophomore Year - Spring Semester Any COMM/THEA Subject Area Classes Second Subject Area* General Education Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 6 9 3 18
Junior Year - Fall Semester Any COMM/THEA Subject Area Class 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 (overlap with General Education Class)* Semester Total	Hrs 3 4 3 2 3 15	Junior Year - Spring Semester EDFL 3240 Appl. of Lang., Literacy, & Lit. in the ML Classroom (spring only) EDFL 4135 Middle Level Curriculum & Assessment (spring only) PSY 4230 Psychology of Adolescence Any COMM/THEA Subject Area Classes Semester Total	Hrs 4 3 6 16
Senior Year - Fall Semester EDFL 4340 The Engaging Middle Level Classroom (fall only) THEA 4984 Methods of Teaching Speech & Theatre Second Subject Area* Semester Total	Hrs 3 2 12 17	Senior Year - Spring Semester** FLDX 4497 Student Teaching Middle School I FLDX 4498 Student Teaching Middle School II Semester Total	Hrs 6 6 12

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 Engineering and Technology. Each subject area is 23-25 hours plus a teaching methods course. This plan is based on a 24 credit-hour second subject area. 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 and/or increase free choice elective 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.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

Modern Languages Major - Area 1: Language and Culture, B.A. Degree (42-01574)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) Intermediate (FREN, GER, or SPAN)*+ General Education Semester Total AE 1400 Freshman Seminar**	Hrs 3 3 9 15	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) Intermediate II (FREN, GER, or SPAN)* General Education Semester Total	Hrs 3 3 9 15
Sophomore Year - Fall Semester 2000/3000 level course (FREN, GER, or SPAN)* 3000 level course (FREN, GER, or SPAN)* General Education Semester Total	Hrs 3 3 9 15	Sophomore Year - Spring Semester 3000 level courses (FREN, GER, or SPAN)* General Education Semester Total	Hrs 6 9 15
Junior Year - Fall Semester 3000 level course (FREN, GER, or SPAN)* 3000/4000 level course (FREN, GER, or SPAN)* Free Choice Electives Semester Total	Hrs 3 3 9 15	Junior Year - Spring Semester 4000 level courses (FREN, GER, or SPAN)* Free Choice Electives Semester Total	Hrs 6 9 15
Senior Year - Fall Semester 4000 level course (FREN, GER, or SPAN)* Free Choice Electives Semester Total	Hrs 3 12 15	Senior Year - Spring Semester GISL 4244 Cross-Cultural Cinema 4000 level course (FREN, GER, or SPAN)* Free Choice Electives Semester Total	Hrs 3 3 9 15

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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Modern Languages Major - Area 2: Prof. Apps. - Marketing Concentration, B.A. Degree (42-02574)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) Intermediate I (FREN, GER, or SPAN)* + General Education Semester Total AE 1400 Freshman Seminar**	Hrs 3 9 15	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) Intermediate II (FREN, GER, or SPAN)* General Education Semester Total	Hrs 3 3 9 15
Sophomore Year - Fall Semester 2000/3000 level course (FREN, GER, or SPAN)* 3000 level course (FREN, GER, or SPAN)* General Education Semester Total	Hrs 3 3 9 15	Sophomore Year - Spring Semester Major Marketing Concentration Elective 3000 level courses (FREN, GER, or SPAN)* General Education Semester Total	Hrs 3 6 6 15
Junior Year - Fall Semester MKT 3405 Marketing Policy Major Marketing Concentration Elective 3000 level course (FREN, GER, or SPAN)* 3000/4000 level course (FREN, GER, or SPAN)* General Education Semester Total	Hrs 3 3 3 3 15	Junior Year - Spring Semester MGT 3315 Management of Organizations MKT 3430 Professional Sales 4000 level courses (FREN, GER, or SPAN)* Free Choice Electives Semester Total	Hrs 3 3 6 3 15
Summer between Junior & Senior Year - Summer Semester MKT 3435 Internship in Marketing Semester Total Senior Year - Fall Semester Major Marketing Concentration Elective MKT 3480 Consumer Behavior 4000 level course (FREN, GER, or SPAN)* Free Choice Elective Semester Total	Hrs 6 6 Hrs 3 3 3 3 1 1 2	Senior Year - Spring Semester GISL 4244 Cross-Cultural Cinema MKT 4460 International Marketing ML 4050 Language in the Professions/Translation Free Choice Electives Semester Total	Hrs 3 3 3 3 12

Modern Languages Major - Area 2: Professional Applications - Marketing Concentration, B.A. Degree - 120 hours

- *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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Modern Languages Major - Area 2: Prof. Apps. - Criminal Justice Concentration, B.A. Degree (42-02574)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CJ 1000 Introduction to Criminal Justice (GE) ENGL 1020 Composition I (GE) Intermediate I (FREN, GER, or SPAN)* + General Education Semester Total AE 1400 Freshman Seminar**	Hrs 3 3 3 6 15	Freshman Year - Spring Semester CJ 2315 The Criminal Court System ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) Intermediate II (FREN, GER, or SPAN)* General Education Semester Total	Hrs 3 3 3 6 15
Sophomore Year - Fall Semester CJ 3006 Corrections 2000/3000 level course (FREN, GER, or SPAN)* 3000 level course (FREN, GER, or SPAN)* General Education Semester Total	Hrs 3 3 3 6 15	Sophomore Year - Spring Semester CI 3010 Policing a Democratic Society 3000 level courses (FREN, GER, or SPAN)* General Education Semester Total	Hrs 3 6 6 15
Junior Year - Fall Semester CJ 3020 Comparative Justice Systems 3000 level course (FREN, GER, or SPAN)* 3000/4000 level course (FREN, GER, or SPAN)* General Education Semester Total	Hrs 3 3 3 6 15	Junior Year - Spring Semester CJ 4503 Dynamics of Criminal Behavior CJ Elective 4000 level courses (FREN, GER, or SPAN)* Free Choice Elective Semester Total	Hrs 3 3 6 3 15
Summer between Junior & Senior Year - Summer Semester CJ 4602 Internship in Criminal Justice Semester Total Senior Year - Fall Semester CJ Electives 4000 level course (FREN, GER, or SPAN)* General Education Free Choice Elective Semester Total	Hrs 3 3 Hrs 6 3 3 15	Senior Year - Spring Semester GISL 4244 Cross-Cultural Cinema ML 4050 Language in the Professions/Translation Free Choice Electives Semester Total	Hrs 3 3 6 12

Modern Languages Major - Area 2: Professional Applications - Criminal Justice Concentration, B.A. Degree - 120 hours

- *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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Modern Languages Major - Area 2: Prof. Apps. - Hospitality Management Concentration, B.A. Degree (42-02574)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) HM 1800 Introduction to Hospitality (Fall only) Intermediate I (FREN, GER, or SPAN)* + General Education Semester Total AE 1400 Freshman Seminar**	Hrs 3 3 6 15	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) Intermediate II (FREN, GER, or SPAN)* General Education Semester Total	Hrs 3 3 9 15
Sophomore Year - Fall Semester ACCT 2100 Survey of Accounting 2000/3000 level course (FREN, GER, or SPAN)* 3000 level course (FREN, GER, or SPAN)* General Education Semester Total	Hrs 3 3 6 15	Sophomore Year - Spring Semester HM 2830 Hotel-Restaurant Sanitation & Safety*** 3000 level courses (FREN, GER, or SPAN)* General Education Semester Total	Hrs 1 6 1 1 1 3
Junior Year - Fall Semester FOOD 3333 Food Systems Management (Fall only) 3000 level course (FREN, GER, or SPAN)* 3000/4000 level course (FREN, GER, or SPAN)* General Education Free Choice Elective Semester Total	Hrs 3 3 3 3 15	Junior Year - Spring Semester HM 2830 Hotel-Restaurant Sanitation & Safety*** MGT 3315 Management of Organizations 4000 level courses (FREN, GER, or SPAN)* General Education Free Choice Elective Semester Total	Hrs 1 3 3 6 2 15
Summer between Junior & Senior Year - Summer Semester HM 4810 Internship Semester Total Senior Year - Fall Semester HM 2830 Hotel-Restaurant Sanitation & Safety*** HM 4850 Hospitality Operations Analysis (Fall only) 4000 level course (FREN, GER, or SPAN)* Free Choice Electives Semester Total	Hrs 5 5 5 Hrs 1 3 3 8 1 5	Senior Year - Spring Semester GISL 4244 Cross-Cultural Cinema HM 4840 Legal Aspects of Hotel and Rest. Mgmt. (Spring only) ML 4050 Language in the Professions/Translation 4000 level courses (FREN, GER, or SPAN)* Semester Total	Hrs 3 3 3 3 12

Modern Languages Major - Area 2: Professional Applications - Hospitality Management Concentration, B.A. Degree - 120 hours

- *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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Modern Languages Major - Area 2: Prof. Apps. - Public Relations Concentration, B.A. Degree (42-02574)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) Intermediate I (FREN, GER, or SPAN)*+ General Education Semester Total AE 1400 Freshman Seminar**	Hrs 3 3 9 15	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) Intermediate II (FREN, GER, or SPAN)* General Education Semester Total	Hrs 3 3 9 15
Sophomore Year - Fall Semester COMM 2620 Introduction to Public Relations 2000/3000 level course (FREN, GER, or SPAN)* 3000 level course (FREN, GER, or SPAN)* General Education Semester Total	Hrs 3 3 3 6 15	Sophomore Year - Spring Semester COMM 2625 Writing & Editing for Public Relations 3000 level courses (FREN, GER, or SPAN)* General Education Semester Total	Hrs 3 6 6 15
Junior Year - Fall Semester COMM 3620 Strategic Planning for Public Relations 3000 level course (FREN, GER, or SPAN)* 3000/4000 level course (FREN, GER, or SPAN)* General Education Free Choice Elective Semester Total	Hrs 3 3 3 3 1 5	Junior Year - Spring Semester COMM 3010 Interpersonal Communication COMM 4680 Advanced PR Writing 4000 level courses (FREN, GER, or SPAN)* Free Choice Elective Semester Total	Hrs 3 3 6 3 15
Summer between Junior & Senior Year - Summer Semester COMM 4605 PR Internship Semester Total	Hrs 3 3		
Senior Year - Fall Semester COMM 3100 Communication Research Methods COMM 3340 Intercultural Communication (GE) COMM 4670 Strategic Crisis Communication POLS 4520 Principles of International Development Free Choice Elective Semester Total	Hrs 3 3 3 3 1 5	Senior Year - Spring Semester GISL 4244 Cross-Cultural Cinema ML 4050 Language in the Professions/Translation 4000 level courses (FREN, GER, or SPAN)* Free Choice Elective Semester Total	Hrs 3 3 3 1 12

Modern Languages Major - Area 2: Professional Applications - Public Relations Concentration, B.A. Degree - 120 hours

- *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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Modern Languages Major - Area 2: Prof. Apps. - Education Concentration (K-12 Cert.), B.A. Degree (42-02574)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition 1 (GE) POLS 1510 American Government (GE) Intermediate I (FREN, GER, or SPAN)* + General Education Science w/lab** General Education Math Semester Total AE 1400 Freshman Seminar***	Hrs 3 3 4 3 16	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) HIST 1350 or 1351 History of the United States (GE) Intermediate II (FREN, GER, or SPAN)* General Education Managing Information General Education Semester Total	Hrs 3 3 3 2-3 3 14-15
Sophomore Year - Fall Semester EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDFL 2240 Educational Psychology EDSP 2100 Education of the Exceptional Child 2000/3000 level course (FREN, GER, or SPAN)* 3000 level course (FREN, GER, or SPAN)* Semester Total	Hrs 2 1 3 2 2 3 3 14	Sophomore Year - Spring Semester 3000 level courses (FREN, GER, or SPAN)* General Education Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 6 9 15
Junior Year - Fall Semester 3000 level course (FREN, GER, or SPAN)* 4000 level course (FREN, GER, or SPAN)* General Education Free Choice Electives Semester Total	Hrs 3 3 3 7 16	Junior Year - Spring Semester CD 2000 The Bases of Speech and Language EDFL 4210 The Teaching of Reading in the Secondary School EDFL 4300 Educational Measurement & Evaluation 4000 level courses (FREN, GER, or SPAN)* General Education Free Choice Electives Semester Total	Hrs 2 2 2 2 6 3 2 17
Senior Year - Fall Semester EDFL 3500 Secondary Teaching & Behavior Management FLDX 3550 Practicum in Secondary Instruction ML 4054 Methods of Teaching Foreign Language PSY 4230 Adolescent Psychology (GE) 4000 level course (FREN, GER, or SPAN)* Free Choice Electives Semester Total	Hrs 3 1 3 3 3 1 16	Senior Year - Spring Semester FLDX 4495 Student Teaching Elementary I FLDX 4468 Student Teaching Secondary II Semester Total	Hrs 8 4 12

Modern Languages Major - Area 2: Professional Applications - Education Concentration (K-12 Certification), B.A. Degree 120 hours

- *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.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

Music Major, B.A. Degree (42-436)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester	Hrs	Freshman Year - Spring Semester	Hrs	
ENGL 1020 Composition I (GE)	3	ENGL 1030 Composition II or CTE 3060 Technical Writing (GE)	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 (GE)	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 (GE)**	3	Modern Language Requirement**	3	
Semester Total	14	General Education	3	
AE 1400 Freshman Seminar***	1	Semester Total	15	
Sophomore Year - Fall Semester	Hrs	Sophomore Year - Spring Semester	Hrs	
ENGL 2220 World Masterpieces (GE)**	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	
Semester Total	16	Semester Total	16	
Junior Year - Fall Semester	Hrs	Junior Year - Spring Semester	Hrs	
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0	
MUS 3211 Music History to 1800*	3	MUS 3212 Music History 1800-Present (GE)*	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	3	
Semester Total	16.5	Semester Total	13.5	
Senior Year - Fall Semester	Hrs	Senior Year - Spring Semester	Hrs	
Major Instrument or Voice, 3000 Level	1.5	MUS 4000 Special Projects, 4060 Senior Recital, 4430 Sem. in		
Elective in Music	3	Music Techology, or 4514 Piano Pedagogy IV - Seminar	2-3	
Minor Coursework	3	Major Instrument or Voice, 3000 Level	1.5	
Free Choice Electives	8	Minor Coursework	3	
Semester Total	15.5	Free Choice Electives	6-7	
		Semester Total	13.5	

Music Major, B.A. Degree - 120 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Music Major (Area 1 Instrumental - odd year start), B.M. Degree (44-01472)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester	Hrs	Freshman Year - Spring Semester	Hrs
ENGL 1020 Composition I (GE)	3	ENGL 1030 Composition II or CTE 3060 Technical Writing (GE)	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 (GE)	3
Major Large Instrument Ensemble	ī	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
Semester Total	14	(Piano Class II)**	(1)
Jeniesier Iolai		Semester Total	15
		Semesier loidi	13
Sophomore Year - Fall Semester	Hrs	Sophomore Year - Spring Semester	Hrs
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*	3	MUS Electives	i
Instrumental Music Elective	1	Instrumental Music Elective	i
Major Instrument, 1000 Level	2	Major Instrument, 1000 Level	2
Major Large Instrument Ensemble	1	Major Large Instrument Ensemble	1
(Piano Class III)**	-	. •	•
General Education	(1) 6	(Piano Class IV)** General Education	(1) 6
	-		-
Semester Total	17	Semester Total	15
Junior Year - Fall Semester	Hrs	Junior Year - Spring Semester	Hrs
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 2112 Theory IV*	3	MUS 3060 Junior Recital	ĺ
MUS 2122 Aural Training IV*	1	MUS 3212 Music History 1800-Present (GE)*	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	3
Major Large Instrument Ensemble	1	Semester Total	14
Semester Total	1 <i>7</i>	Semester total	14
Semester lotal	17		
Senior Year - Fall Semester	Hrs	Senior Year - Spring Semester	Hrs
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	i
General Education	6	General Education (only 3 hours of General Education are	
Semester Total	15	needed here if the other 3 hours were taken in the first	
Schiosici isidi	13	semester instead of MUS 1100)	3-6
		Free Choice Elective	3-0 1
		Semester Total	13-15
		Jeiliesier Iviui	13-13

Music Major (Area 1 Instrumental - odd year start), B.M. Degree - 120 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Music Major (Area 1 Instrumental - even year start), B.M. Degree (44-01472)

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Freshman Year - Fall Semester	Hrs	Freshman Year - Spring Semester	Hrs
ENGL 1020 Composition I (GE)	3	ENGL 1030 Composition II or CTE 3060 Technical Writing (GE)	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 (GE)	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
Semester Total	14	(Piano Class II)**	(1)
Schiester lotal		Semester Total	15
		Schiester Iolai	.5
Sophomore Year - Fall Semester	Hrs	Sophomore Year - Spring Semester	Hrs
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*	3	MUS Electives	i
Instrumental Music Elective	1	Instrumental Music Elective	i
	2	Major Instrument, 1000 Level	2
Major Instrument, 1000 Level	1	· · · · · · · · · · · · · · · · · · ·	1
Major Large Instrument Ensemble (Piano Class III)**		Major Large Instrument Ensemble (Piano Class IV)**	•
General Education	(1)	General Education	(1)
Semester Total	6 1 7	Semester Total	6 15
Semester lordi	17	Semester lotal	15
Junior Year - Fall Semester	Hrs	Junior Year - Spring Semester	Hrs
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 2112 Theory IV*	3	MUS 3060 Junior Recital	ì
MUS 2122 Aural Training IV*	1	MUS 3212 Music History 1800-Present (GE)*	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	ì
Major Large Instrument Ensemble	1	General Education	3
General Education	3	Semester Total	14
Semester Total	1 <i>7</i>	Semesici ioidi	1-7
Senior Year - Fall Semester	Hrs	Senior Year - Spring Semester	Hrs
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	ì
Small Instrumental Ensemble	ì	General Education (only 3 hours of General Education are	•
General Education	3	needed here if the other 3 hours were taken in the first	
Semester Total	15	semester instead of MUS 1100)	3-6
		Free Choice Elective	1
		Semester Total	13-15
			10-13

Music Major (Area 1 Instrumental - even year start), B.M. Degree - 120 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Hrs

Freshman Year - Fall Semester

Music Major (Area 2 Jazz-Commercial Music - odd year start), B.M. Degree (44-02472)

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Freshman Year - Spring Semester

Freshman Year - Fall Semester	Hrs	Freshman Year - Spring Semester	Hrs
ENGL 1020 Composition I (GE)	3	ENGL 1030 Composition II or CTE 3060 Technical Writing (GE)	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
MUS 1400 Computer Music Notation	.5	MUS 1281 History & Development of Jazz (GE)*	3
MUS 1450 Audio and Acoustics (GE)	3	Major Instrument, 1000 Level	2
Major Large Jazz Ensemble	1	Major Large Jazz Ensemble	1
Major Instrument, 1000 Level	2	Major Large Non-Jazz Ensemble	1
(Piano Class I)**	(1)	(Piano Class II)**	(1)
General Education	3	Semester Total	14
Semester Total	16.5		
Sophomore Year - Fall Semester	Hrs	Sophomore Year - Spring Semester	Hrs
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 1112 Theory II*	3	MUS 1410 or 1420 or 1430 or 1440	.5
	ა 1	MUS 2111 Theory III*	.5 3
MUS 1325 Music of the World's Cultures (CE)	3	•	
MUS 1225 Music of the World's Cultures (GE)	2	MUS 2121 Aural Training III*	1 3
MUS 2180 Jazz Improvisation I*	3	MUS 2141 Composition I	-
MUS 2300 Fundamentals of Conducting*	-	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)	General Education	3
Semester Total	16	Semester Total	15.5
Junior Year - Fall Semester	Hrs	Junior Year - Spring Semester	Hrs
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 (GE)*	3
MUS 4125 Form & Analysis (only offered Fall semesters of odd numbered years)	3	MUS 4181 Advanced Jazz Improvisation (fall only) or	
Major Large Jazz Ensemble	1	MUS 4186 Advanced Jazz-Commercial Arranging***	2
Major Instrument, 3000 Level	3	Major Large Jazz Ensemble	1
Semester Total	14	Major Instrument, 3000 Level	3
		General Education	3
		Semester Total	14
Senior Year - Fall Semester	Hrs	Senior Year - Spring Semester	Hrs
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 4181 Advanced Jazz Improvisation* or		MUS 4060 Senior Recital	2
MUS 4186 Advanced Jazz-Commercial Arranging***	2	MUS 4185 Jazz-Commercial Arranging (only offered	
MUS electives	2	Spring semesters of odd numbered years)	3
Major Instrument, 3000 Level	3	Major Instrument, 3000 Level	3
General Education (or save 3 hours for next semester if full-time status is needed)	9	General Education (only 6 hours of General Education are	
Semester Total	16	needed here if the other 3 hours were taken in the first semester instead of MUS 1100)	3-6
Fifth Year - Fall Semester	Hrs	Free Choice Electives (not needed if MUS 1100 taken)	0-1
MUS 4181 Advanced Jazz Improvisation* or		Semester Total	11-14
MUS 4186 Advanced Jazz-Commercial Arranging***	2		
Semester Total	2		

Music Major (Area 2 Jazz-Commercial Music - odd year start), B.M. Degree - 120

- +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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Music Major (Area 2 Jazz-Commercial Music - even year start), B.M. Degree (44-02472)

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Freshman Year - Fall Semester ENGL 1020 Composition I (GE) MUS 1000 Recital Attendance MUS 1085 Jazz-Rock Combo MUS 1100 Fundamentals of Music+* or General Education MUS 1400 Computer Music Notation MUS 1450 Audio and Acoustics (GE) Major Large Jazz Ensemble Major Instrument, 1000 Level (Piano Class I)** General Education Semester Total	Hrs 3 0 1 3 .5 3 1 2 (1) 3 16.5	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) MUS 1000 Recital Attendance MUS 1111 Theory I* MUS 1121 Aural Training I* Major Instrument, 1000 Level Major Large Jazz Ensemble Major Large Non-Jazz Ensemble (Piano Class II)** General Education Semester Total	Hrs 3 0 3 1 2 1 (1) 6 17
Sophomore Year - Fall Semester MUS 1000 Recital Attendance MUS 1112 Theory II* MUS 1122 Aural Training II* MUS 11225 Music of the World's Cultures (GE) MUS 2180 Jazz Improvisation I* MUS 2300 Fundamentals of Conducting* Major Large Jazz Ensemble Major Instrument, 1000 Level Major Large Non-Jazz Ensemble (Piano Class III)** Semester Total	Hrs 0 3 1 3 2 3 1 1 2 1 (1) 16	Sophomore Year - Spring Semester MUS 1281 History & Development of Jazz (GE)* MUS 1281 History & Development of Jazz (GE)* MUS 1410 or 1420 or 1430 or 1440 MUS 2111 Theory III* MUS 2121 Aural Training III* MUS 2121 Composition I MUS 2181 Jazz Improvisation II* Major Large Jazz Ensemble Major Instrument, 1000 Level (Piano Class IV)** Semester Total	Hrs 0 3 5 3 1 3 2 1 2 (1) 15.5
Junior Year - Fall Semester MUS 1000 Recital Attendance MUS 2112 Theory IV* MUS 2122 Aural Training IV* MUS 3211 Music History to 1800* MUS 4181 Advanced Jazz Improvisation* or MUS 4186 Advanced Jazz-Commercial Arranging*** Major Large Jazz Ensemble Major Instrument, 3000 Level General Education Semester Total	Hrs 0 3 1 3 2 1 3 3 3 16	Junior Year - Spring Semester MUS 1000 Recital Attendance MUS 1085 Jazz-Rock Combo MUS 3060 Junior Recital MUS 3212 Music History 1800-Present (GE)* MUS 4185 Jazz-Commercial Arranging (only offered Spring semesters of odd numbered years) Major Large Jazz Ensemble Major Instrument, 3000 Level General Education Semester Total	Hrs 0 1 1 3 3 1 5
Senior Year - Fall Semester MUS 1000 Recital Attendance MUS 4125 Form & Analysis (only offered Fall semesters of odd numbered years) MUS 4181 Advanced Jazz Improvisation* or MUS 4186 Advanced Jazz-Commercial Arranging*** MUS electives Mujor Instrument, 3000 Level General Education Semester Total	Hrs 0 3 2 2 2 3 3 3 1 3	Senior Year - Spring Semester MUS 1000 Recital Attendance MUS 4060 Senior Recital MUS 4181 Advanced Jazz Improvisation (fall only) or MUS 4186 Advanced Jazz-Commercial Arranging*** Major Instrument, 3000 Level General Education (6 hours of General Education are needed here if the other 3 hours were taken in the first semester instead of MUS 1100) Free Choice Electives Semester Total	Hrs 0 2 2 3 3-6 0-1 11-13

Music Major (Area 2 Jazz-Commercial Music - even year start), B.M. Degree - 120

- +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 is only offered as needed by the department. See department for projected course offerings.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

FOUR-YEAR ACADEMIC GUIDE

Music Major (Area 3 Music Technology), B.M. Degree (44-03472)

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Freshman Year - Fall Semester	Hrs	Freshman Year - Spring Semester	Hrs
ENGL 1020 Composition I (GE)	3	ENGL 1030 Composition II or CTE 3060 Technical Writing (GE)	3
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
(MUS 1100 Fundamentals of Music) +*	(3)	MUS 1111 Theory I	3
MUS 1400 Computer Music Notation	.5	MUS 1121 Aural Training I*	1
MUS 1450 Audio & Acoustics (GE)	3	MUS 2410 Digital Audio Production*	3 0
Approved Elective in Music++	1	MUS 2420 Technology Practicum	U 1
Electronics or Computer Programming Elective (Choose from CS 1100, ET 1010, or ET 1020)	3-4	Major Instrument or Voice, 1000 Level	i
Major Instrument or Voice, 1000 Level	3- 4 1	Major Large Instrumental or Vocal Ensemble (Piano Class II)***	(1)
Major Large Instrumental or Vocal Ensemble	i	General Education	3
(Piano Class I)***	(1)	Semester Total	15-16
Semester Total	12.5-		
	17.5		
Sophomore Year - Fall Semester	Hrs	Sophomore Year - Spring Semester	Hrs
ECON 1010 Principles of Macroeconomics (GE)	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 4400 Audio for X*	3
MUS 2400 Sound Reinforcement & Music Production*	3	MUS 4420 Advanced Music 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)*** General Education	(1) 3	General Education Semester Total	5 14-15
Semester Total	15-16	Semester total	14-13
Junior Year - Fall Semester	Hrs	Junior Year - Spring Semester	Hrs
MUS 1000 Recital Attendance	0	COMM 3425 Audio for Digital Cinema	3
MUS 1225 Music of the World's Cultures (GE)	3	MUS 1000 Recital Attendance	0
MUS 4040 Music Business Practices	3 3	MUS 3212 Music History 1800-Present (GE)* MUS 4115 Instrumentation*	3 3
MUS 2112 Theory IV* MUS 2122 Aural Training IV*	3 1	MUS 4113 Instrumentation MUS 4190 Electronic Music Composition or	3
MUS 3211 Music History to 1800*	3	MUS 4195 Max & MSP (each class offered every other year)	3
MUS 4410 Electronic Music Production Techniques	3	Approved Elective in Music++	2
MUS 4420 Advanced Music Technology Practicum	0	Semester Total	14
Semester Total	16	3533.5. 1512.	
Senior Year - Fall Semester	Hrs	Senior Year - Spring Semester	Hrs
MUS 1000 Recital Attendance	0	MUS 4190 Electronic Music Composition or	
MUS 4040 Music Business Practices	3	MUS 4195 Max & MSP (each class offered every other year)	3
MUS 4430 Seminar in Music Technology	2	MUS 4430 Seminar in Music Technology	2
Music Academic Studies Elective#	3	Music Academic Studies Elective#	3
General Education	6	Approved Elective in Music++	1
Semester Total	14	General Education# (If MUS 1220 or 1281 are chosen in the major,	2.4
		only 3 hours are required here) Semester Total	3-6 12-15
		After Junior or Senior Year - Summer Semester	Hrs
		MUS 4450 Internship in Music Technology	6
		Semester Total	6
Music Major (Area 3 Music Technology) R M	Degree - 122 5		

Music Major (Area 3 Music Technology), B.M. Degree - 122.5

- +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.
- ++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. If the four hours of Piano Class are not taken, four hours of Approved Electives in Music will be required to reach the total of 8 hours required.
- #This major area requires six hours of Music Academic Studies Electives. Choose from MUS 1220, 1281, 3141, 4000, 4101, 4125, or 4185. If chosen, MUS 1220 or 1281 will count for 3 hours of credit in the section "Additional Hours for Knowledge Area I" section of general education.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Music Major (Area 4 Piano - odd year start), B.M. Degree (44-04472)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) MUS 1000 Recital Attendance MUS 1100 Fundamentals of Music+* or General Education MUS 1510 Piano I MUS 2221 Introduction to Music Literature I* Major Large Instrumental or Vocal Ensemble General Education Semester Total	Hrs 3 0 3 2 2 1 5	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) MUS 1000 Recital Attendance MUS 1111 Theory I* MUS 1121 Aural Training I* MUS 1225 Music of the World's Cultures (GE) MUS 1510 Piano I MUS 2222 Introduction to Music Literature II* Major Large Instrumental or Vocal Ensemble	Hrs 3 0 3 1 3 2 2
Sophomore Year - Fall Semester MUS 1000 Recital Attendance MUS 1112 Theory II* MUS 1122 Aural Training II* MUS 1510 Piano I MUS 2300 Fundamentals of Conducting* MUS 2515 Piano Accompanying (only offered Fall semesters of even numbered years) Major Large Instrumental or Vocal Ensemble MUS Electives** General Education Semester Total	Hrs 0 3 1 2 3 2 1 1 3 16	Sophomore Year - Spring Semester MUS 1000 Recital Attendance MUS 1095 Keyboard Ensemble MUS 1510 Piano I MUS 2111 Theory III* MUS 2121 Aural Training III* Major Large Instrumental or Vocal Ensemble General Education Semester Total	15 Hrs 0 1 2 3 1 1 7 15
Junior Year - Fall Semester MUS 1000 Recital Attendance MUS 2112 Theory IV* MUS 2122 Aural Training IV* MUS 3211 Music History to 1800* MUS 3510 Piano II MUS 4125 Form & Analysis (only offered Fall semesters of odd numbered years) MUS 4511 Piano Pedagogy I - Beginner (only offered Fall semesters of odd numbered years) Semester Total	Hrs 0 3 1 3 3 3 3 16	Junior Year - Spring Semester MUS 1000 Recital Attendance MUS 3060 Junior Recital MUS 3095 Piano Accompanying Practicum MUS 3212 Music History 1800-Present (GE)* MUS 3510 Piano II Major Large Instrumental or Vocal Ensemble General Education Semester Total	Hrs 0 1 1 3 3 3 1 6 15
Senior Year - Fall Semester MUS 1000 Recital Attendance MUS 3510 Piano II MUS 4201 Piano Literature through Beethoven (only offered Fall semesters of even numbered years) MUS Electives** Major Large Instrumental or Vocal Ensemble General Education Free Choice Elective Semester Total	Hrs 0 3 2 2 3 1 6 1 16	Senior Year - Spring Semester MUS 1000 Recital Attendance MUS 3510 Piano II MUS 4060 Senior Recital MUS 4101 Counterpoint I or MUS 4115 Instrumentation MUS 4202 Piano Literature Romantic Era-Present (only offered Spring semesters of odd numbered years) 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) Free Choice Electives (0 hours needed if MUS 1100 was taken) Semester Total	Hrs 0 3 2 2 3 3 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4

Music Major (Area 4 Piano - odd year start), B.M. Degree - 122

- +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. Students who don't take MUS 1100 will need an additional 3 hours of free choice elective to reach 120 hours for graduation.
- *This course is only offered during the semester listed.
- **For the four required hours of MUS Electives in the Area seek advice from your departmental advisor.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Music Major (Area 4 Piano - even year start), B.M. Degree (44-04472)

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Freshman Year - Fall Semester	Hrs	Freshman Year - Spring Semester	Hrs
ENGL 1020 Composition I (GE)	3	ENGL 1030 Composition II or CTE 3060 Technical Writing (GE)	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 1*	2	MUS 1225 Music of the World's Cultures (GE)	3
Major Large Instrumental or Vocal Ensemble	1	MUS 1510 Piano I	2
General Education	5	MUS 2222 Introduction to Music Literature II*	2
Semester Total	16	Major Large Instrumental or Vocal Ensemble Semester Total	1 15
Sophomore Year - Fall Semester	Hrs	Sophomore Year - Spring Semester	Hrs
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*	3	MUS 2121 Aural Training III*	1
Major Large Instrumental or Vocal Ensemble	1	Major Large Instrumental or Vocal Ensemble	1
MUS Electives**	1	General Education	7
General Education	6	Semester Total	15
Semester Total	17		
Junior Year - Fall Semester	Hrs	Junior Year - Spring Semester	Hrs
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		MUS 3212 Music History 1800-Present (GE)*	3
semesters of even numbered years)	2	MUS 3510 Piano II	3
MUS 3211 Music History to 1800*	3	MUS 4202 Piano Literature Romantic Era-Present (only	
MUS 3510 Piano II	3	offered Spring semesters of odd numbered years)	2
MUS 4201 Piano Literature through Beethoven (only offered		Major Large Instrumental or Vocal Ensemble	1
Fall semesters of even numbered years)	2	General Education	3
General Education	3	Semester Total	14
Semester Total	17		
Senior Year - Fall Semester	Hrs	Senior Year - Spring Semester	Hrs
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		MUS 4060 Senior Recital	2
odd numbered years)	3	MUS 4101 Counterpoint I or MUS 4115 Instrumentation	3
MUS 4511 Piano Pedagogy I - Beginner (only offered Fall		General Education (O hours of General Education are	
semesters of odd numbered years)	3	needed here if 3 hours were taken in the first	
MUS Electives**	3	semester instead of MUS 1100)	0-3
Major Large Instrumental or Vocal Ensemble	1	Free Choice Electives (only 1 hr needed if MUS 1100 was taken)	1-4
General Education	3	Semester Total	12
Semester Total	16		

Music Major (Area 4 Piano - even year start), B.M. Degree - 122

- +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. Students who don't take MUS 1100 will need an additional 3 hours of free choice elective to reach 120 hours for graduation.
- *This course is only offered during the semester listed.
- **For the four required hours of MUS Electives in the Area seek advice from your departmental advisor..
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Music Major (Area 5 Piano Pedagogy - odd year start), B.M. Degree (44-05472)

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Freshman Year - Fall Semester ENGL 1020 Composition I (GE) MUS 1000 Recital Attendance MUS 1100 Fundamentals of Music+* or General Education MUS 1510 Piano I PSY 1100 General Psychology (GE) Major Large Instrument or Vocal Ensemble General Education	Hrs 3 0 3 2 3 1	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) MUS 1000 Recital Attendance MUS 1111 Theory I* MUS 1121 Aural Training I* MUS 1225 Music of the World's Cultures (GE) MUS 1510 Piano I MUS 2222 Introduction to Music Literature II*	Hrs 3 0 3 1 3 2 2
Semester Total	15	Major Large Instrument or Vocal Ensemble Semester Total	1 15
Sophomore Year - Fall Semester MUS 1000 Recital Attendance MUS 1112 Theory II* MUS 1122 Aural Training II* MUS 1510 Piano I MUS 4201 Piano Literature through Beethoven (only offered Fall semesters of even numbered years) Major Large Instrument or Vocal Ensemble General Education Semester Total	Hrs 0 3 1 2 2 1 6 1 5	Sophomore Year - Spring Semester MUS 1000 Recital Attendance MUS 1510 Piano I MUS 2111 Theory III* MUS 2121 Aural Training III* MUS 4202 Piano Literature Romantic Era - Present* Major Large Instrument or Vocal Ensemble General Education Semester Total	Hrs 0 2 3 1 2 1 6 15
Junior Year - Fall Semester MUS 1000 Recital Attendance MUS 2112 Theory IV* MUS 2122 Aural Training IV* MUS 2515 Piano Accompanying MUS 3510 Piano II MUS 4125 Form & Analysis (only offered Fall semesters of odd numbered years) MUS 4511 Piano Pedagogy I - The Beginner (only offered Fall semesters of odd numbered years) General Education Semester Total	Hrs 0 3 1 2 1.5 3 3 3 16.5	Junior Year - Spring Semester MUS 1000 Recital Attendance MUS 1095 Keyboard Ensemble or MUS 3095 Piano Accompanying Practicum MUS 3212 Music History 1800-Present (GE)* MUS 3510 Piano II MUS 4512 Piano Pedagogy II - The Intermediate Student (only offered Spring semesters of even numbered years) MUS 4515 Practice Teaching in Piano* General Education Semester Total	Hrs 0 1 3 3 3 3 3 16
Senior Year - Fall Semester MUS 1000 Recital Attendance MUS 2300 Fundamentals of Conducting* MUS 3211 Music History to 1800* MUS 3510 Piano II MUS 4101 Counterpoint I (only offered Fall semesters of even numbered years) MUS 4513 Piano Pedagogy III - The Advanced Student (only offered Fall semesters of even numbered years) General Education (0 hours of General Education are needed here if 3 hours were taken in the first semester instead of MUS 1100) Semester Total	Hrs 0 3 3 3 3 3 3 3 3 3 3 4 5 - 18	Senior Year - Spring Semester MUS 1000 Recital Attendance MUS 1095 Keyboard Ensemble or MUS 3095 Piano Accompanying Practicum MUS 3510 Piano II MUS 4060 Senior Recital MUS 4514 Piano Pedagogy IV - Seminar* MUS 4515 Practice Teaching in Piano* General Education Semester Total	Hrs 0 1 3 2 3 3 3 1 5

Music Major (Area 5 Piano Pedagogy - odd year start), B.M. Degree - 122.5

- +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 odd numbered years (2013, 2015, etc.). The suggested order of courses will vary for students beginning in even numbered years.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Music Major (Area 5 Piano Pedagogy - even year start), B.M. Degree (44-05472)

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Freshman Year - Fall Semester ENGL 1020 Composition I (GE) MUS 1000 Recital Attendance MUS 1100 Fundamentals of Music+* or General Education MUS 1510 Piano I PSY 1100 General Psychology (GE) Major Large Instrument or Vocal Ensemble General Education Semester Total	Hrs 3 0 3 2 3 1 3	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) MUS 1000 Recital Attendance MUS 1111 Theory I* MUS 1121 Aural Training I* MUS 1225 Music of the World's Cultures (GE) MUS 1510 Piano I MUS 2222 Introduction to Music Literature II* Major Large Instrument or Vocal Ensemble Semester Total	Hrs 3 0 3 1 3 2 2 1 15
Sophomore Year - Fall Semester MUS 1000 Recital Attendance MUS 1112 Theory II* MUS 1122 Aural Training II* MUS 1510 Piano I MUS 4511 Piano Pedagogy I - The Beginner (only offered Fall semesters of odd numbered years) Major Large Instrument or Vocal Ensemble General Education Semester Total	Hrs 0 3 1 2 3 1 6 16	Sophomore Year - Spring Semester MUS 1000 Recital Attendance MUS 1510 Piano I MUS 2111 Theory III* MUS 2121 Aural Training III* MUS 4512 Piano Pedagogy II - The Intermediate Student (only offered Spring semesters of even numbered years) Major Large Instrument or Vocal Ensemble General Education Semester Total	Hrs 0 2 3 1 1 3 1 6 16
Junior Year - Fall Semester MUS 1000 Recital Attendance MUS 2112 Theory IV* MUS 2122 Aural Training IV* MUS 2515 Piano Accompanying MUS 3510 Piano II MUS 4101 Counterpoint I (only offered Fall semesters of even numbered years) MUS 4201 Piano Literature through Beethoven (only offered Fall semesters of even numbered years) MUS 4513 Piano Pedagogy III - The Advanced Student (only offered Fall semesters of even numbered years) Semester Total	Hrs 0 3 1 2 1.5 3 2 2 3 15.5	Junior Year - Spring Semester MUS 1000 Recital Attendance MUS 1095 Keyboard Ensemble or MUS 3095 Piano Accompanying Practicum MUS 3510 Piano II MUS 4202 Piano Literature Romantic Era - Present* MUS 4514 Piano Pedagogy IV - Seminar* MUS 4515 Practice Teaching in Piano* General Education Semester Total	Hrs 0 1 3 2 3 3 6 18
Senior Year - Fall Semester MUS 1000 Recital Attendance MUS 1095 Keyboard Ensemble or MUS 3095 Piano Accompanying Practicum MUS 2300 Fundamentals of Conducting* MUS 3211 Music History to 1800* MUS 3510 Piano II MUS 4125 Form & Analysis (only offered Fall semesters of odd numbered years) General Education (0 hours of General Education are needed here if 3 hours were taken in the first semester instead of MUS 1100) Semester Total	Hrs 0 1 3 3 3 3 3 3 3 3 3 3 13-16	Senior Year - Spring Semester MUS 1000 Recital Attendance MUS 3212 Music History 1800-Present (GE)* MUS 3510 Piano II MUS 4060 Senior Recital MUS 4515 Practice Teaching in Piano* General Education Semester Total	Hrs 0 3 3 2 3 14

Music Major (Area 5 Piano Pedagogy - even year start), B.M. Degree - 122.5

- +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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Music Major (Area 6 Vocal - odd year start), B.M. Degree (44-06472)

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Freshman Year - Fall Semester	Hrs	Freshman Year - Spring Semester	Hrs
	пг э 3	ENGL 1030 Composition II or CTE 3060 Technical Writing (GE)	3
ENGL 1020 Composition I (GE)	3	1 0, 7	-
FREN 1201 Elem. French I or GER 1301 Elem. German I (GE)*	-	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
Semester Total	14-15	(Piano Class II)***	(1)
		Semester Total	15-16
Sophomore Year - Fall Semester	Hrs	Sanhamana Vagu Cariar Carretor	Hrs
•		Sophomore Year - Spring Semester	
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**	3	Major Large Vocal Ensemble	1
Major Large Vocal Ensemble	1	(Piano Class IV)***	(1)
(Piano Class III)***	(1)	General Education	6
General Education	6	Semester Total	13-14
Semester Total	16-1 <i>7</i>		
Junior Year - Fall Semester MUS 1000 Recital Attendance MUS 2112 Theory IV** MUS 2122 Aural Training IV** MUS 2631 Diction for Singers I MUS 3211 Music History to 1800** MUS 3610 Voice II MUS 4125 Form & Analysis (only offered Fall semesters of odd numbered years) MUS 4235 Vocal Literature (only offered Fall semesters of odd numbered years)	Hrs 0 3 1 1 1 3 3 3 3 3 3 3 3	Junior Year - Spring Semester MUS 1000 Recital Attendance MUS 1225 Music of the World's Cultures (GE) MUS 1615 Opera Theatre** MUS 2632 Diction for Singers II (only offered Spring semesters of even numbered years) MUS 3060 Junior Recital MUS 3212 Music History 1800 - Present (GE)** MUS 3610 Voice II	Hrs 0 3 2 2 1 3 3 3
Major Large Vocal Ensemble	1	General Education	3
Semester Total	18	Semester Total	17
Senior Year - Fall Semester	Hrs	Senior Year - Spring Semester	Hrs
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	6	MUS Electives	3
Free Choice Electives (will not be needed if MUS 1100 is taken	J	General Education (only 3 hours of General Education are	J
or if validated credit is earned for FREN 1201 or GER 1301 or		needed here if the other 3 hours were taken in the first	
	0.1		3-6
if these classes are taken)	0-1	semester instead of MUS 1100)	
Semester Total	13-14	Semester Total	13-16

Music Major (Area 6 Vocal - odd year start), B.M. Degree - 120

- *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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Music Major (Area 6 Vocal - even year start), B.M. Degree (44-06472)

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Freshman Year - Fall Semester ENGL 1020 Composition I (GE) FREN 1201 Elem. French I or GER 1301 Elem. German I (GE)* MUS 1000 Recital Attendance MUS 1100 Fundamentals of Music + ** or General Education MUS 1610 Voice I MUS 2221 Introduction to Music Literature I ** Major Large Vocal Ensemble (Piano Class I)*** Semester Total	Hrs 3 0 3 2 1 (1) 14-15	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) FREN 1202 Elem. French II or GER 1302 Elem. German II* MUS 1000 Recital Attendance MUS 1111 Theory I** MUS 1121 Aural Training I** MUS 1610 Voice I MUS 2222 Introduction to Music Literature II** Major Large Vocal Ensemble (Piano Class II)*** Semester Total	Hrs 3 0 3 1 2 1 (1) 15-16
Sophomore Year - Fall Semester MUS 1000 Recital Attendance MUS 1112 Theory II** MUS 1122 Aural Training II** MUS 1610 Voice I MUS 2300 Fundamentals of Conducting** MUS 2631 Diction for Singers I Major Large Vocal Ensemble (Piano Class III)*** General Education Semester Total	Hrs 0 3 1 2 3 1 1 (1) 6 17-18	Sophomore Year - Spring Semester MUS 1000 Recital Attendance MUS 1610 Voice I MUS 2111 Theory III** MUS 2121 Aural Training III** MUS 2632 Diction for Singers II (only offered Spring semesters of even numbered years) Major Large Vocal Ensemble (Piano Class IV)*** General Education Semester Total	Hrs 0 2 3 1 1 2 1 (1) 6 15-16
Junior Year - Fall Semester MUS 1000 Recital Attendance MUS 2112 The ory IV** MUS 2122 Aural Training IV** MUS 3211 Music History to 1800** MUS 3610 Voice II Major Large Vocal Ensemble General Education Semester Total	Hrs 0 3 1 3 3 1 3 1 4	Junior Year - Spring Semester MUS 1000 Recital Attendance MUS 1225 Music of the World's Cultures (GE) MUS 1615 Opera Theatre** MUS 3060 Junior Recital MUS 3212 Music History 1800 - Present (GE)** MUS 3610 Voice II MUS 4600 Vocal Pedagogy (only offered Spring semesters of odd numbered years) Free Choice Electives (will not be needed if MUS 1100 is taken or if validated credit is earned for FREN 1201 or GER 1301 or if these classes are taken) Semester Total	Hrs 0 3 2 1 3 3 2 2 1 1 4-15
Senior Year - Fall Semester MUS 1000 Recital Attendance MUS 3610 Voice II MUS 4125 Form & Analysis (only offered Fall semesters of odd numbered years) MUS 4235 Vocal Literature (only offered Fall semesters of odd numbered years) MUS Required Elective# Major Large Vocal Ensemble General Education Semester Total	Hrs 0 3 3 3 3 1 3 1 5	Senior Year - Spring Semester MUS 1000 Recital Attendance MUS 3610 Voice II MUS 4060 Senior Recital MUS Electives 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) Semester Total	Hrs 0 3 2 3 6-9 14-17

Music Major (Area 6 Vocal - even year start), B.M. Degree - 120

- *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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Music Education Major (Instrumental Option - even start year), B.M.E. Degree (45-440)

This guide is valid for the 2014 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 (www.ucmo.edu/ academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) HIST 1350 or HIST 1351 History of the United States (GE) MUS 1000 Recital Attendance MUS 1100 Fundamentals of Music+* or General Education Major Instrument, 1000 Level Major Large Instrumental Ensemble (Piano) General Education MATH Semester Total	Hrs 3 3 0 3 1 1 (1) 3 14-15	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) MUS 1000 Recital Attendance MUS 1111 Theory I* MUS 1390 Introduction to Music Education* Instrument Techniques Class** Major Instrument, 1000 Level Major Large Instrumental Ensemble (Piano) General Education Science with Laboratory Semester Total	Hrs 3 0 3 1 2 1 1 (1) 4 16-17
Sophomore Year - Fall Semester EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience MUS 1000 Recital Attendance MUS 1112 Theory II* MUS 1122 Aural Training II* MUS 1400 Computer Music Notation MUS 1450 Audio and Acoustics (GE) MUS 2300 Fundamentals of Conducting* Instrument Techniques Class** Major Instrument, 1000 Level Major Large Instrumental Ensemble (Piano) Semester Total	Hrs 2 1 0 3 1 .5 3 1 1 1 1 1 1 1 1 7.5	Sophomore Year - Spring Semester EDFL 2240 Educational Psychology EDSP 2100 Education of the Exceptional Child MUS 1000 Recital Attendance MUS 2111 Theory III* MUS 2121 Aural Training III* POLS 1510 American Government (GE) Major Large Instrumental Ensemble Major Instrument, 1000 Level (Piano) General Education Communication Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 3 2 0 3 1 3 1 (1) 3 17-18
Junior Year - Fall Semester MUS 1000 Recital Attendance MUS 2112 Theory IV* MUS 2122 Aural Training IV* MUS 3211 Music History to 1800* MUS 3305 Methods of Teaching Elementary School Music*** MUS 3308 Marching Band Techniques* Instrument Techniques Class** Major Instrument, 3000 Level Major Large Instrumental Ensemble General Education (not needed if taken in first semester instead of MUS 1100, if needed choose an online course) Semester Total	Hrs 0 3 1 3 3 1 1 1.5 1 0-3 14.5- 17.5	Junior Year - Spring Semester MUS 1000 Recital Attendance MUS 1410, 1420, 1430, or 1440 (choose one) MUS 1225 Music of the World's Cultures (GE) MUS 3212 Music History 1800-Present (GE)* MUS 3306 Methods of Teaching Instrumental Music* MUS 3320 Instrumental Conducting & Rehearsal Tech.* MUS 4115 Instrumentation* Instrument Techniques Class** Instrument Techniques Class** Major Instrument, 3000 Level Major Large Instrumental Ensemble Semester Total	Hrs 0 .5 3 3 3 1 1 1.5 1 20
Senior Year - Fall Semester EDFL 3500 Secondary Teaching & Behavioral Management FLDX 3550 Practicum in Secondary Instruction MUS 1000 Recital Attendance MUS 4381 Jazz Pedagogy* (Fall only) PSY 4230 Psychology of Adolescence (GE) Instrument Techniques Class** Major Instrument, 3000 Level Major Large Instrumental Ensemble General Education Semester Total	Hrs 3 1 0 2 3 1 1.5 1 5 17.5	Senior Year - Spring Semester FLDX 4595 Student Teaching Secondary I FLDX 4468 Student Teaching Secondary II MUS 4310 Methods of Teaching Music MUS 4350 Secondary Field Experience II Semester Total	Hrs 5 4 2 1 1 2

Music Education Major (Instrumental Option - even start year), B.M.E. Degree - 127.5 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.
- **The six hours of Instrument Techniques Classes include the following (all courses are worth one credit hour): MUS 1701, 2801, 2802, 2901, 2902, and 2950.
- ***This course is offered only in even-numbered years. Students who enter UCM in an odd-numbered year may take this course during their senior year, taking
- PSY 4230 in its place in the junior year.

 The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.

 See www.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.

Music Education Major (Instrumental Option - odd start year), B.M.E. Degree (45-440)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) HIST 1350 or HIST 1351 History of the United States (GE) MUS 1000 Recital Attendance MUS 1100 Fundamentals of Music +* or General Education Major Instrument, 1000 Level Major Large Instrumental Ensemble (Piano) General Education MATH Semester Total	Hrs 3 3 0 3 1 1 (1) 3 14-15	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) MUS 1000 Recital Attendance MUS 1111 Theory I* MUS 1320 Introduction to Music Education* Instrument Techniques Class** Major Instrument, 1000 Level Major Large Instrumental Ensemble (Piano) General Education Science with Laboratory Semester Total	Hrs 3 0 3 1 2 1 1 (1) 4 16-17
Sophomore Year - Fall Semester EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience MUS 1000 Recital Attendance MUS 1112 Theory II* MUS 1122 Aural Training II* MUS 1400 Computer Music Notation MUS 1450 Audio and Acoustics (GE) MUS 2300 Fundamentals of Conducting* Instrument Techniques Class** Major Instrument, 1000 Level Major Large Instrumental Ensemble (Piano) Semester Total	Hrs 2 1 0 3 1 .5 3 3 1 1 1 1 (1) 16.5- 17.5	Sophomore Year - Spring Semester EDFL 2240 Educational Psychology EDSP 2100 Education of the Exceptional Child MUS 1000 Recital Attendance MUS 2111 Theory III* MUS 2121 Aural Training III* POLS 1510 American Government (GE) Major Large Instrumental Ensemble Major Instrument, 1000 Level (Piano) General Education Communication Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 3 2 0 3 1 1 3 1 (1) 3 17-18
Junior Year - Fall Semester MUS 1000 Recital Attendance MUS 2112 Theory IV* MUS 2122 Aural Training IV* MUS 2121 Music History to 1800* MUS 3308 Marching Band Techniques* PSY 4230 Psychology of Adolescence (GE) Instrument Techniques Class** Major Instrument, 3000 Level Major Large Instrumental Ensemble General Education (not needed if taken in first semester instead of MUS 1100, if needed choose an online course) Semester Total	Hrs 0 3 1 3 1 1 3 1 1.5 1 0-3 14.5- 17.5	Junior Year - Spring Semester MUS 1000 Recital Attendance MUS 1410, 1420, 1430, or 1440 (choose one) MUS 1225 Music of the World's Cultures (GE) MUS 3212 Music History 1800-Present (GE)* MUS 3306 Methods of Teaching Instrumental Music* MUS 3320 Instrumental Conducting & Rehearsal Tech.* MUS 4115 Instrumentation* Instrument Techniques Class** Instrument Techniques Class** Major Instrument, 3000 Level Major Large Instrumental Ensemble Semester Total	Hrs 0 .5 .3 .3 .3 .3 .1 .1 .5 .1 .20
Senior Year - Fall Semester EDFL 3500 Secondary Teaching & Behavioral Management FLDX 3550 Practicum in Secondary Instruction MUS 1000 Recital Attendance MUS 3305 Methods of Teaching Elementary School Music*** MUS 4381 Jazz Pedagogy* (Fall only) Instrument Techniques Class** Major Instrument, 3000 Level Major Large Instrumental Ensemble General Education Semester Total	Hrs 3 1 0 3 2 1 1.5 1 5 17.5	Senior Year - Spring Semester FLDX 4595 Student Teaching Secondary I FLDX 4468 Student Teaching Secondary II MUS 4310 Methods of Teaching Music MUS 4350 Secondary Field Experience II Semester Total	Hrs 5 4 2 2 1 12

Music Education Major (Instrumental Option - odd start year), B.M.E. Degree - 127.5 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.
- **The six hours of Instrument Techniques Classes include the following (all courses are worth one credit hour): MUS 1701, 2801, 2802, 2901, 2902, and 2950.
- ***This course is offered only in even-numbered years. Students who enter UCM in an odd-numbered year may take this course during their senior year, taking PSY 4230 in its place in the junior year.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

Music Education Major (Vocal Option - odd year start plan), B.M.E Degree (45-441)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) MUS 1000 Recital Attendance MUS 1100 Fundamentals of Music+* or General Education MUS 1610 Voice 1 POLS 1510 American Government (GE) Major Large Vocal Ensemble (Piano) General Education Science w/lab Semester Total	Hrs 3 0 3 1 3 1 (1) 4 15-16	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) HIST 1350 or 1351 History of the United States (GE) MUS 1000 Recital Attendance MUS 1111 Theory I* MUS 1121 Aural Training I* MUS 1390 Introduction to Music Education* MUS 1610 Voice 1 Major Large Vocal Ensemble (Piano) General Education MATH Semester Total	Hrs 3 3 0 3 1 2 1 (1) 3 17-18
Sophomore Year - Fall Semester EDFL 2100 Foundations of Education	Hrs	Sophomore Year - Spring Semester EDFL 2240 Educational Psychology	Hrs
FLDX 2150 Introductory Field Experience	1	EDSP 2100 Education of the Exceptional Child	2
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 1112 Theory II*	3	MUS 1410, 1420, 1430, or 1440 (choose one)	.5
MUS 1122 Aural Training II*	1	MUS 1610 Voice 1	1
MUS 1400 Computer Music Notation	.5	MUS 1615 Opera Theatre (spring only) or	
MUS 1450 Audio and Acoustics (GE)	3	MUS 1620 Music Theatre Practicum I* (fall only)	1
MUS 1610 Voice 1	1	MUS 2111 Theory III*	3
MUS 2300 Fundamentals of Conducting*	3	MUS 2121 Aural Training III*	1
MUS 2631 Diction for Singer I	1	Major Large Vocal Ensemble	1
Major Large Vocal Ensemble	1	(Piano)	(1)
(Piano) Semester Total	(1) 17.5 -	General Education (Communication) Semester Total	3 15.5 -
Semester tordi	18.5	(Successfully complete MoGEA exam by end of this semester)	16.5
	10.5	(Succession) complete modern exam by end of this semester)	10.5
Junior Year - Fall Semester	Hrs	Junior Year - Spring Semester	Hrs
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 2112 Theory IV*	3	MUS 1225 Music of the World's Cultures (GE)	3
MUS 2122 Aural Training IV*	1	MUS 3212 Music History 1800-Present (GE)*	3
MUS 3211 Music History to 1800*	3	MUS 3610 Voice II	1.5
MUS 3310 Choral Conducting*	3	MUS 4230 Choral Literature*	3
MUS 3610 Voice II	1.5	PSY 4230 Psychology of Adolescence (GE)	3
MUS 4320 Methods of Teaching Middle School Music*#		Major Large Vocal Ensemble	1
(offered fall semester of odd numbered years only)	3	General Education	3
Major Large Vocal Ensemble	1	Semester Total	1 <i>7</i> .5
General Education	3		
Semester Total	18.5		
Senior Year - Fall Semester	Hrs	Senior Year - Spring Semester	Hrs
EDFL 3500 Sec. Teaching & Behavioral Management	3	FLDX 4595 Student Teaching Secondary I	5
FLDX 3550 Practicum in Secondary Instruction	1	FLDX 4468 Student Teaching Secondary II	4
MUS 1000 Recital Attendance	0	MUS 4310 Methods of Teaching Music	2
MUS 3305 Methods of Teaching Elementary School Music		MUS 4350 Secondary Field Experience II	1
(offered fall semester of even numbered years only)	3	Semester Total	12
MUS 3315 Choral Techniques*	3		
MUS 3610 Voice II	1.5		
MUS 4130 Choral Arranging* (offered fall semester of even numbered years only			
Major Large Vocal Ensemble	1		
General Education (not needed if taken in first semester instead of MUS 1100,	0.0		
if needed choose an online course)	0-3		
Semester Total	14.5- 17.5		
	17.5		

Music Education Major (Vocal Option), B.M.E. Degree - 126.5 hours min.

- +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).
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

Music Education Major (Vocal Option - even year start plan), B.M.E Degree (45-441)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

complete listing of academic policies, curriculum, prerequi			
Freshman Year - Fall Semester	Hrs	Freshman Year - Spring Semester	Hrs
ENGL 1020 Composition I (GE)	3	ENGL 1030 Composition II or CTE 3060 Technical Writing (GE)	3
MUS 1000 Recital Attendance	0	HIST 1350 or 1351 History of the United States (GE)	3
MUS 1100 Fundamentals of Music+* or General Education	3	MUS 1000 Recital Attendance	0
MUS 1610 Voice 1	1	MUS 1111 Theory I*	3
POLS 1510 American Government (GE)	3	MUS 1121 Aural Training I*	1
Major Large Vocal Ensemble	1	MUS 1390 Introduction to Music Education*	2
(Piano)	(1)	MUS 1610 Voice 1	1
General Education Science w/lab	4	Major Large Vocal Ensemble	1
Semester Total	15-16	(Piano)	(1)
		General Education MATH	3
		Semester Total	17-18
Sophomore Year - Fall Semester	Hrs	Sophomore Year - Spring Semester	Hrs
EDFL 2100 Foundations of Education	2	EDFL 2240 Educational Psychology	3
FLDX 2150 Introductory Field Experience	1	EDSP 2100 Education of the Exceptional Child	2
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 1112 Theory II*	3	MUS 1410, 1420, 1430, or 1440 (choose one)	.5
MUS 1122 Aural Training II*	1	MUS 1610 Voice 1	1
MUS 1400 Computer Music Notation	.5	MUS 1615 Opera Theatre (spring only) or	·
MUS 1450 Audio and Acoustics (GE)	3	MUS 1620 Music Theatre Practicum I* (fall only)	1
MUS 1610 Voice 1	1	MUS 2111 Theory III*	3
MUS 2300 Fundamentals of Conducting*	3	MUS 2121 Aural Training III*	ì
MUS 2631 Diction for Singer I	1	Major Large Vocal Ensemble	i
Major Large Vocal Ensemble	i	(Piano)	(1)
(Piano)	(1)	General Education (Communication)	3
Semester Total	17.5-	Semester Total	15.5-
Jemesier loldi	18.5	(Successfully complete MoGEA exam by end of this semester)	16.5
	10.5	(Successionly complete modes exam by end of fins semester)	10.5
Junior Year - Fall Semester	Hrs	Junior Year - Spring Semester	Hrs
MUS 1000 Recital Attendance	0	MUS 1000 Recital Attendance	0
MUS 2112 Theory IV*	3	MUS 1225 Music of the World's Cultures (GE)	3
MUS 2122 Aural Training IV*	1	MUS 3212 Music History 1800-Present (GE)*	3
MUS 3211 Music History to 1800*	3	MUS 3610 Voice II	1.5
MUS 3305 Methods of Teaching Elementary School Music	•	MUS 4230 Choral Literature*	3
(offered fall semester of even numbered years only)	3	PSY 4230 Psychology of Adolescence (GE)	3
MUS 3310 Choral Conducting*	3	Major Large Vocal Ensemble	ì
MUS 3610 Voice II	1.5	General Education	3
MUS 4130 Choral Arranging* (offered fall semester of even numbered years only)	2	Semester Total	1 <i>7</i> .5
Major Large Vocal Ensemble	1	Semesier Iolai	17.5
Semester Total	17.5		
Senior Year - Fall Semester	Hrs	Senior Year - Spring Semester	Hrs
EDFL 3500 Sec. Teaching & Behavioral Management	3	FLDX 4595 Student Teaching Secondary I	5
FLDX 3550 Practicum in Secondary Instruction	1	FLDX 4468 Student Teaching Secondary II	4
MUS 1000 Recital Attendance	0	MUS 4310 Methods of Teaching Music	2
MUS 3315 Choral Techniques*	3	MUS 4350 Secondary Field Experience II	ī
MUS 3610 Voice II	1.5	Semester Total	12
MUS 4320 Methods of Teaching Middle School Music*#	1.5		. 4
(offered fall semester of odd numbered years only)			
Major Large Vocal Ensemble	3		
General Education (only 3 hours of General Education are	J		
• •			
needed here if the other 3 hours were taken in the first	2.4		
semester instead of MUS 1100)	3-6		
Semester Total	15.5-		
	18.5		

Music Education Major (Vocal Option), B.M.E. Degree - 126.5 hours min.

- +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).
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

Musical Theatre Major, B.F.A. Degree (47-586)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester DANC 1140 Jazz Dance I ENGL 1020 Composition I (GE) MUS 1055 (GE), 3070 (GE), 3077, or 4050 (GE)* MUS 1100 Fundamentals of Music (GE) MUS 1610 Voice I THEA 1400 Script Analysis THEA 1500 Acting Semester Total AE 1400 Freshman Seminar**	Hrs 1 3 1 3 1 3 1 3 1 1 3 1 1 3 1 1 1 1 1	Freshman Year - Spring Semester DANC 1130 Tap Dance I ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) MUS 1055 (GE), 3070 (GE), 3077, or 4050 (GE)* MUS 1111 Theory I MUS 1121 Aural Training I MUS 1610 Voice I THEA 1100 Oral Interpretation THEA 1600 Stagecraft Semester Total	Hrs 1 3 1 3 1 1 3 1 1 1 1 3 1 1 6
Sophomore Year - Fall Semester DANC 1110, 1120, 3110, or 3120*** DANC 3140 Jazz Dance II MUS 1055 (GE), 3070 (GE), 3077, or 4050 (GE)* MUS 1610 Voice I THEA 1510 Stage Movement THEA 2610 Design Fundamentals General Education Semester Total	Hrs 1 1 1 1 3 3 6 16	Sophomore Year - Spring Semester DANC 3210 Musical Theatre Dance MUS 1610 Voice I THEA 1520 Stage Voice THEA 1610 Stage Makeup General Education Semester Total	Hrs 3 1 3 3 6 16
Junior Year - Fall Semester DANC 1110, 1120, 3110, or 3120** DANC 4310 Choreography I MUS 1501 Piano Class I THEA 3700 Directing General Education Semester Total	Hrs 1 3 1 3 9 17	Junior Year - Spring Semester MUS 1502 Piano Class II MUS 1615 Opera Theatre THE 4430 American Musical Theatre THEA 4500 Advanced Acting General Education Semester Total	Hrs 1 1 3 3 6 14
Senior Year - Fall Semester IGEN 3116, 3224, 3232, 4234, or 4244 MUS 3610 Voice II THEA 4400 Literature & History of the Theatre I THEA 4510 Period Acting Styles General Education Semester Total	Hrs 3 1.5 3 3 1 13.5	Senior Year - Spring Semester DANC 3120 Tap Dance II MUS 3610 Voice II THEA 4420 Literature & History of the Theatre II THEA 4910 Senior Showcase General Education Semester Total	Hrs 1 1.5 3 1 6 12.5

Musical Theatre Major, B.F.A. Degree - 124 hours

- *Select three hours from the following list: MUS 1055 Collegiate Choir, 3070 Chamber Singers, 3077 Vocal Jazz Ensemble, or 4050 University Concert Choir. All three hours may be from the same course or a combination of different courses. If three hours of 1055, 3070, and/or 4050 are chosen, these hours will also fulfill 3 hours of general education requirements.
- **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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Nursing Major, B.S. Degree (43-133)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester	Hrs	Freshman Year - Spring Semester	Hrs	
CHEM 1104 Introduction to the Sciences: Chemistry (GE)*	4	BIOL 3401 Human Anatomy*	3	
ENGL 1020 Composition I (GE)	3	ENGL 1030 Composition II (GE) or CTE 3060 Tech. Writing (GE)	3	
NUR 1700 Introduction to Professional Nursing**	1	PSY 1100 General Psychology (GE)*	3	
SOC 1800 General Sociology (GE)*	3	General Education	6	
General Education	3	Semester Total	15	
Semester Total	14			
Sophomore Year - Fall Semester	Hrs	Sophomore Year - Spring Semester	Hrs	
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	
Semester Total	16-17	General Education	9	
		Semester Total	15	

-- ENTER NURSING PROGRAM --

Junior Year - Fall Semester	Hrs	Junior Year - Spring Semester	Hrs
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 Nrsg. I Practicum	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	Semester Total	15
Semester Total	16		

-- TO KANSAS CITY LAST TWO SEMESTERS --

Senior Year - Fall Semester	Hrs	Senior Year - Spring Semester	Hrs
NUR 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	
NUR 4411 Concepts of Maternal-Child Nursing Practicum	2	& Community Health/Mental Health Practicum	6
NUR 4510 Concepts of Adult & Older Adult Nursing II	3	NUR 4602 Synthesis of Nursing Concepts	1
NUR 4511 Concepts of Adult & Older Adult Nrsg. II Practicum	3	Semester Total	13
NUR 4512 Advanced Tech. & Pharmacological Nursing Apps.	2		
Semester Total	16		

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 2020 Health: Women's Perspectives, NUR 4020 Grief and Loss; NUR 4030 Human Sexuality; NUR 4040 Nursing Informatics; NUR 4210 Wellness for U.S. Veteran and Military Families; and 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Occupational Education Major, B.S. Degree (43-249)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester CTE 2000 Technology & Society (GE) ENGL 1020 Composition I (GE) Teaching Specialty Area General Education Semester Total	Hrs 3 3 3 1 15	Freshman Year - Spring Semester CTE 3060 Technical Writing (GE) Teaching Specialty Area General Education Semester Total	Hrs 3 6 6 15
Sophomore Year - Fall Semester EDFL 2240 Educational Psychology (GE) Teaching Specialty Area General Education Semester Total	Hrs 3 3 10 16	Sophomore Year - Spring Semester EDSP 2100 Education of the Exceptional Child SOT 4570 Computer Graphics Teaching Specialty Area General Education Semester Total	Hrs 2 3 6 3 14
Junior Year - Fall Semester CTE 4145 Curriculum Construction in Career & Technical Edu. Teaching Specialty Area General Education Semester Total	Hrs 3 6 6 15	Junior Year - Spring Semester IGEN 3116 Creative Problem Solving Teaching Specialty Area Free Choice Elective Semester Total	Hrs 3 7 5 15
Senior Year - Fall Semester CTE 4110 Foundations of Career & Technology Education (fall only) or CTE 4140 New Teacher Institute (fall only) CTE 4160 Methods of Teaching Career & Technical Education CTE 4180 Adult Education and Training (fall, even years only) or EDFL 3500 Secondary Teaching & Behavioral Management Teaching Specialty Area Free Choice Elective Semester Total	Hrs 3 3 3 15	Senior Year - Spring Semester CTE 4022 Teaching/Administration Intern CTE 4150 Vocational Guidance or BTE 4241 Coordination of Cooperative Education Programs CTE 4165 Performance Assessment in Career & Technical Edu. Teaching Specialty Area Free Choice Elective (depends on course chosen above) Semester Total	Hrs 3 2-3 3 6 0-1 15

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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Occupational Safety and Health Major, B.S. Degree (43-276)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) MATH 1111 College Algebra (GE)* SAFE 1000 Exploring Safety Sciences SAFE 3000 Principles of Accident Causation & Prevention General Education Semester Total	Hrs 3 3 1 3 5-6 15-16	Freshman Year - Spring Semester CHEM 1104 Introduction to the Sciences: Chemistry (GE) CTE 3060 Technical Writing (GE) PSY 1100 General Psychology (GE) General Education Semester Total	Hrs 4 3 6 16
Sophomore Year - Fall Semester BIOL 2010 Human Biology PHYS 1104 Introduction to the Sciences: Physics (GE)* SAFE 2900 Applied Sciences for Professional Studies General Education Semester Total	Hrs 3 4 3 6 16	Sophomore Year - Spring Semester CHEM 1604 Elementary Organic & Biochemistry* SAFE 3430 Industrial Hazard Control SAFE 4000 Ergonomics in Safety & Health General Education Semester Total	Hrs 4 3 3 13
Junior Year - Fall Semester SAFE 3120 Introduction to Industrial Hygiene SAFE 4425 Safety & Health Legislation & Standards General Education Departmentally Approved Elective** Free Choice Elective Semester Total	Hrs 3 3 3 3 1 5	Junior Year - Spring Semester SAFE 4020 Legal Aspects of Safety & Health SAFE 4140 Safety & Health Lab SAFE 4430 Workers Compensation Legislation SAFE 4560 Systems Safety Free Choice Elective Semester Total	Hrs 3 3 3 3 15
Summer – Between Junior & Senior Year SAFE 4990 Internship in Safety Sciences*** Semester Total	Hrs 3 3		
Senior Year - Fall Semester SAFE 4010 Accident Investigation SAFE 4035 Safety Program Management SAFE 4850 Industrial Fire Protection SAFE 4940 Statistical Analysis for Risk Management Free Choice Elective Semester Total	Hrs 3 3 3 3 1 5	Senior Year - Spring Semester SAFE 4055 Safety Capstone Experience SAFE 4160 Industrial Ventilation for Envir. Safety & Health SAFE 4435 Environmental Compliance Free Choice Elective Semester Total	Hrs 3 3 3 12

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 3 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 Central Degree audit.
- \bullet ***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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Philosophy Major, B.A. Degree (42-325)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) PHIL 1000 Introduction to Philosophy (GE) Modern Language Requirement* General Education Semester Total AE 1400 Freshman Seminar**	Hrs 3 3 3 6 15	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) PHIL 2300 Ethics (GE) Modern Language Requirement* General Education Semester Total	Hrs 3 3 6 15
Sophomore Year - Fall Semester PHIL 1400 Deductive Logic or PHIL 1410 Critical Thinking PHIL 3130 History of Philosophy II: Enlightenment Thought General Education Free Choice Electives Semester Total	Hrs 3 3 6 3 15	Sophomore Year - Spring Semester ENGL 2220 World Masterpieces (GE)* PHIL 3120 History of Philosophy I: Ancient Thought General Education Free Choice Electives Semester Total	Hrs 3 6 3 15
Junior Year - Fall Semester PHIL 3600 Special Topics in Philosophy PHIL Major Elective*** General Education Free Choice Electives Semester Total	Hrs 3 3 6 15	Junior Year - Spring Semester PHIL 3660 Studies in Literature & Philosophy PHIL Major Elective*** Free Choice Electives Semester Total	Hrs 3 3 9 15
Senior Year - Fall Semester PHIL 4710 Philosophy of Religion Free Choice Electives Semester Total	Hrs 3 12 15	Senior Year - Spring Semester PHIL 4250 Special Projects in Philosophy Free Choice Electives Semester Total	Hrs 3 12 15

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 2014 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Physical Education Major - Option 1 Elementary-Secondary Certification K-12, B.S. Degree (43-01817)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE)# HIST 1350 or 1351 History of the United States (GE)# MATH 1111 College Algebra (GE)# PE 1100 Physical Education Orientation, History, & Philosophy# PE 1206 Fitness for a Global Community (GE)# Semester Total	Hrs 3 3 3 2 1 4	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) PE 1450 Growth & Development in Elementary Physical Educ.# PE 1800 Functional Anatomy# PE 2472 Communicating Ideas on Sport (GE)# General Education Science w/lab Semester Total	Hrs 3 3 3 4 16
Sophomore Year - Fall Semester EDFL 2100 Foundations of Education# FLDX 2150 Introductory Field Experience# EDFL 2240 Educational Psychology (GE)# EDSP 2100 Education of the Exceptional Child# PE 2100 Foundations of Teaching Physical Education# POLS 1510 American Government (GE)# General Education Semester Total	Hrs 2 1 3 2 3 3 17	Sophomore Year - Spring Semester PE 2450 Motor Learning and Control# PE 2850 Foundations of Exercise Physiology# General Education Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 3 3 11 17
Junior Year - Fall Semester AT 3610 Care & Prevention of Injuries# PE 2800 Biomechanics# PE 3310 Analysis & Teaching of Physical Training# PE 4340 Adapted Physical Education# PSY 4230 Psychology of Adolescence# Semester Total	Hrs 3 3 3 3 15	Junior Year - Spring Semester EDFL 4210 The Teaching of Reading in the Secondary School# PE 3320 Analysis & Teaching of Elementary Skills# PE 3330 Analysis & Teaching of Secondary Skills# PE 3340 Analysis & Teaching of Lifetime Activities# PE 4740 Legal Liability in F/W, PE, Rec. & Sport Settings# PE 4830 Psychological Aspects of Physical Education# PE 4840 Social Aspects of Physical Activity# Semester Total	Hrs 2 3 3 3 2 2 2 2 17
Senior Year - Fall Semester PE 3500 Teaching and Management in PreK-12 Physical Educ.#* PE 3550 Practicum in PreK-12 Physical Education#* PE 4450 Tech. of Teaching PE Activities in the Elem. Schools#* PE 4460 Tech. of Teaching PE Act. in Middle Schools & HS#* PE 4760 Curriculum & Assessment in Physical Education# Semester Total	Hrs 3 1 3 3 4	Senior Year - Spring Semester** FLDX 4495 Student Teaching Elementary I# FLDX 4468 Student Teaching Secondary II# PE 4880 Methods of Teaching Physical Education# PE 4885 Secondary Field Experience# Semester Total	Hrs 5 4 2 1 12

Physical Education Major - Option 1 Elementary-Secondary Certification K-12, B.S. Degree 122 hours

- Option 1 students must maintain a 3.00 GPA in all PE prefix courses, a 2.75 cumulative GPA, a 3.00 in all Professional Education classes, and no grade lower than a C in classes marked with a #.
- *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.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

Physical Education Major - Option 2 Fitness/Wellness I (Corporate Fitness), B.S. Degree (43-02817)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) PE 1101 Introduction to Exercise Science* PE 1206 Fitness for a Global Community (GE)* General Education	Hrs 3 3 3 6	Freshman Year - Spring Semester MATH 1111 College Algebra (GE)* PE 1800 Functional Anatomy* PSY 1100 General Psychology (GE)* General Education Managing Information	Hrs 3 3 3 2-3
Semester Total AE 1400 Freshman Seminar**	15 1	General Education Semester Total	3 14-15
Sophomore Year - Fall Semester CTE 3060 Technical Writing (GE)* HED 1350 Responding to Emergencies* PE 2472 Communicating Ideas on Sport (GE)* PE 2850 Foundations Exercise Physiology* General Education Science with Laboratory Semester Total	Hrs 3 3 3 4 16	Sophomore Year - Spring Semester ACCT 2101 Principles of Financial Accounting* AT 3610 Care & Prevention of Injuries* HED 4300 Nutrition & Human Performance* PE 2900 Essentials of Personal Training* General Education Semester Total	Hrs 3 3 3 3 1 5
Junior Year - Fall Semester BLAW 2720 Legal Environment of Business* MKT 3405 Marketing Policy* PE 2800 Biomechanics* PE 4340 Adapted Physical Education* PE 4850 Assessment & Evaluation of Fitness/Wellness* Semester Total	Hrs 3 3 3 3 1 5	Junior Year - Spring Semester MKT 3420 Principles Advertising* PE 4341 Physical Activity & Special Populations* PE 4740 Legal Liability in F/W, PE, Rec., & Sport Settings* PE 4870 Clinical Exercise Physiology* General Education Semester Total	Hrs 3 3 2 3 6 17
Senior Year - Fall Semester MKT 3430 Professional Sales* PE 4860 Fitness Programming & Implementation* Free Choice Electives Semester Total	Hrs 3 3 9-10 15-16	Senior Year - Spring Semester PE 4765 Internship*# Free Choice Electives Semester Total	Hrs 6 6 12

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.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Physical Education Major - Option 3 Fitness/Wellness II (Exercise Science), B.S. Degree (43-03817)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE)* MATH 1111 College Algebra (GE)* PE 1101 Introduction to Exercise Science* PE 1206 Fitness for a Global Community (GE)* PSY 1100 General Psychology (GE)* Semester Total AE 1400 Freshman Seminar**	Hrs 3 3 3 3 7 15	Freshman Year - Spring Semester CHEM 1104 Intro. to the Sciences: Chemistry (w/lab) (GE)* PE 1800 Functional Anatomy* PE 2472 Communicating Ideas on Sport (GE)* General Education Managing Information General Education Semester Total	Hrs 4 3 3 2-3 3 15-16
Sophomore Year - Fall Semester BIOL 3401 Human Anatomy* CTE 3060 Technical Writing (GE)* HED 1350 Responding to Emergencies* PE 2900 Essentials of Personal Training* General Education Semester Total	Hrs 3 3 3 3 15	Sophomore Year - Spring Semester AT 3610 Care & Prevention of Injuries* BIOL 3402 Human Physiology* PE 2850 Foundations Exercise Physiology* General Education Semester Total	Hrs 3 5 3 6 17
Junior Year - Fall Semester D&N 3340 Nutrition* PE 2800 Biomechanics* PE 4340 Adapted Physical Education* PE 4850 Assessment & Evaluation Fitness/Wellness* General Education Semester Total	Hrs 3 3 3 3 15	Junior Year - Spring Semester CHEM 1604 Elementary Organic & Biochemistry* or PHYS 1104 Introduction to the Sciences: Physics (GE)* PE 4341 Physical Activity & Special Populations* PE 4740 Legal Liability in F/W, PE, Rec., & Sport Settings* PE 4870 Clinical Exercise Physiology* General Education (or Free Choice Elective if PHYS 1104 is chosen)## Semester Total	Hrs 4 3 2 3 15
Senior Year - Fall Semester HED 4300 Nutrition & Human Performance* PE 4860 Fitness Program & Implementation* Free Choice Electives Semester Total	Hrs 3 3 9 15	Senior Year - Spring Semester PE 4765 Internship*# PSY 4520 Statistics for the Behavioral Sciences* Free Choice Electives## Semester Total	Hrs 6 3 3-4 12-13

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 and will depend on the choices made for the General Education Managing
 Information requirement and the physical science course chosen in the major. If PHYS 1104 is chosen in the major it will also count
 in the general education. This plan assumes PHYS 1104 is not selected and includes the minimum number of free choice electives.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Physics Major, B.S. in Ed. Degree (41-486)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) MATH 1151 Calculus & Analytical Geometry I (GE)* PHYS 3020 Special Topics in Physics (Astronomy) General Education Semester Total AE 1400 Freshman Seminar**	Hrs 3 5 3 1 1 1	Freshman Year - Spring Semester CS 1100 Computer Programming I ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) MATH 1152 Calculus & Analytical Geometry II PHYS 1101 College Physics I or PHYS 2121 University Physics I Semester Total	Hrs 3 3 5 4-5 15-16
Sophomore Year - Fall Semester CHEM 1131 General Chemistry I (GE)* EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDFL 2240 Educational Psychology (GE EDSP 2100 Education of the Exceptional Child) PHYS 1102 College Physics II or PHYS 2122 Univer. Physics II Semester Total	Hrs 5 2 1 3 2 4-5 17-18	Sophomore Year - Spring Semester BIOL 1005 Introduction to Environmental Science (GE) CHEM 1132 General Chemistry II HIST 1350 or 1351 History of the United States (GE) POLS 1510 American Government (GE) General Education Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 3 5 3 3 3 17
Junior Year - Fall Semester BIOL 1110 Principles of Biology or BIOL 1111 Plant Biology PHYS 4411 Thermodynamics or CHEM 4531 Physical Chemistry: Thermodynamics & Kinetics EDFL 4300 Educational Measurement & Evaluation General Education Semester Total	Hrs 3-4 3-4 2 5-6 13-16	Junior Year - Spring Semester EASC 1004 Introduction to Geology or EASC 1114 or GEOG 1114 Weather & Climate EDFL 4210 The Teaching of Reading in the Secondary School PHYS 3080 Advanced Physics Lab and PHYS 3511 Modern Physics I or CHEM 4532 Physical Chemistry: Quantum Mechanics & Spectroscopy PSY 4230 Psychology of Adolescence General Education Semester Total	Hrs 4 2 4 3 3 16
Senior Year - Fall Semester EDFL 3500 Secondary Teaching & Behavioral Management FLDX 3550 Practicum in Secondary Instruction PHIL 3800 Philosophy of Science and Technology PHYS 3020 Special Topics in Physics or PHYS 4911 Special Problems in Physics STCH 4050 Science Teaching Methods General Education Free Choice Elective** Semester Total	Hrs 3 1 3 1-3 3 0-2 14-18	Senior Year - Spring Semester*** FLDX 4595 Student Teaching Secondary I FLDX 4468 Student Teaching Secondary II STCH 4080 Teaching Secondary Science Semester Total	Hrs 5 4 3 12

Physics Major, B.S. in Ed. Degree - 120-124 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. Depending on choices made in the major, free choice electives may not be needed 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.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

Political Science Major, B.A. Degree (42-425)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) POLS 1500 Introduction to Politics (GE) Modern Language Requirement (GE)* General Education Semester Total AE 1400 Freshman Seminar**	Hrs 3 3 6 15	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) POLS 1510 American Government (GE) Modern Language Requirement* General Education Semester Total	Hrs 3 3 6 15
Sophomore Year - Fall Semester POLS 2520 Comp. Gov't. & Politics or 2530 World Politics Modern Language Requirement* General Education Semester Total	Hrs 3 3 9 15	Sophomore Year - Spring Semester POLS 2540 Survey of Political Theory POLS Elective*** General Education Semester Total	Hrs 3 6 6 15
Junior Year - Fall Semester POLS Elective*** Free Choice Electives Semester Total	Hrs 3 12 15	Junior Year - Spring Semester POLS 3560 Research Methods in Political Science POLS Concentration Area Elective Free Choice Electives Semester Total	Hrs 3 3 9 15
Senior Year - Fall Semester POLS 4601 Senior Seminar in Political Science POLS Concentration Area Elective Free Choice Electives Semester Total	Hrs 3 3 9 15	Senior Year - Spring Semester POLS Concentration Area Elective Free Choice Electives Semester Total	Hrs 3 12 15

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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Political Science Major, B.S. Degree (43-426)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) POLS 1500 Introduction to Politics (GE) General Education Semester Total AE 1400 Freshman Seminar*	Hrs 3 3 9 15	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) POLS 1510 American Government (GE) General Education Semester Total	Hrs 3 3 9 15
Sophomore Year - Fall Semester POLS 2520 Comp. Gov't. & Politics or 2530 World Politics POLS Elective** General Education Semester Total	Hrs 3 3 9 15	Sophomore Year - Spring Semester POLS 2540 Survey of Political Theory POLS Elective** General Education Free Choice Elective Semester Total	Hrs 3 3 3 6 15
Junior Year - Fall Semester POLS Elective** Free Choice Electives Semester Total	Hrs 3 12 15	Junior Year - Spring Semester POLS 3560 Research Methods POLS Concentration Area Elective Free Choice Electives Semester Total	Hrs 3 3 9 15
Senior Year - Fall Semester POLS 4601 Senior Seminar in Political Science POLS Concentration Area Electives Free Choice Electives Semester Total	Hrs 3 3 9 15	Senior Year - Spring Semester POLS Concentration Area Elective Free Choice Electives Semester Total	Hrs 3 12 14-15

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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Professional Photography Major, B.S. Degree (43-587)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) PHOT 1210 Foundations of Professional Photography PHOT 1211 Image Critique PHOT 1216 Photographer's Forum 1 PHOT 1230 Digital Imaging General Education Semester Total AE 1400 Freshman Seminar*	Hrs 3 3 1 1 3 3 1 1 1 3 1 1 1	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) PHOT 2200 Editorial Photography PHOT 2210 Studio Photography General Education Semester Total	Hrs 3 3 3 6 15
Sophomore Year - Fall Semester PHOT 2216 Photographer's Forum 2 PHOT 2220 Digital Workflow PHOT 2250 Portrait Photography General Education Semester Total	Hrs 1 3 9 16	Sophomore Year - Spring Semester PHOT 2215 History of Photography General Education Semester Total	Hrs 3 12 15
Junior Year - Fall Semester PHOT 2230 Color Imaging PHOT 3216 Photographer's Forum 3** PHOT Major Elective General Education Free Choice Elective Semester Total	Hrs 3 1 3 6 3 16	Junior Year - Spring Semester PHOT 3260 Digital Media PHOT Major Electives Free Choice Electives (must be upper level 3000/4000)# Semester Total	Hrs 3 6 7 16
Senior Year - Fall Semester PHOT 4216 Photographer's Forum 4 PHOT 4230 Business Management for Photographers PHOT Major Elective Free Choice Electives Semester Total	Hrs 1 3 9 16	Senior Year - Spring Semester PHOT 4270 Portfolio Free Choice Electives (take upper level 3000/4000 if needed)# Semester Total	Hrs 3 9 12

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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before
 earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second
 semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for
 the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more
 information.

Professional Pilot Major, Area 1 Airplane, B.S. Degree (43-554)

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Freshman Year - Fall Semester AVIA 1020 Aeronautics AVIA 1310 FAA Private Requirements ENGL 1020 Composition I (GE) FLYA 1320 Private Flight A MATH 1131 Applied Calculus (GE) General Education Semester Total AE 1400 Freshman Seminar*	Hrs 2 3 1 1 3 1 1 5	Freshman Year - Spring Semester ECON 1010 Principles of Macroeconomics (GE) ENGL 1030 Composition II (GE) FLYA 1321 Private Flight B FLYA 3310 Commercial Flight A PHYS 1104 Introduction to the Sciences: Physics (GE) General Education Semester Total	Hrs 3 3 1 1 4 3 15
Sophomore Year - Fall Semester AVIA 2310 Propulsion Systems AVIA 3325 FAA Instrument Requirements FLYA 3313 Instrument Flight A FLYA 3314 Instrument Flight B General Education Semester Total	Hrs 3 3 1 1 6 14	Sophomore Year - Spring Semester AVIA 2340 Aircraft Systems & Computers AVIA 3305 FAA Commercial Requirements AVIA 4350 Aviation Weather (spring only) FLYA 3311 Commercial Flight B FLYA 3312 Commercial Flight C General Education Semester Total	Hrs 3 3 1 1 5 16
Junior Year - Fall Semester ATM 4032 Hydraulics/Pneumatics AVIA 4010 Aerodynamics AVIA 4220 Transport Aircraft Systems FLYA 3315 Commercial Flight D or FLYA 3415 Commercial Flight D Multiengine FLYA 3316 Commercial Flight E or FLYA 3416 Commercial Flight E Multiengine MGT 3325 Business Communications General Education Semester Total	Hrs 3 3 2 1 1 3 3 16	Junior Year - Spring Semester AVIA 3610 Human Factors AVIA 4250 Flight Management Systems AVIA 4310 Air Traffic Control FLYA 3317 Commercial Flight F or FLYA 3417 Commercial Flight F Multiengine MGT 3315 Management of Organizations or INDM 4210 Industrial Management General Education Semester Total	Hrs 3 3 2 1 3 3 15
Senior Year - Fall Semester AVIA 4040 Aviation Management AVIA 4370 Advanced Flight Crew Management AVIA 4420 Air Transportation FLYA 3330 Multi Engine Certificate or FLYA 3430 Single-Engine Add-On Major Area 1 Electives General Education Semester Total	Hrs 3 3 1 1 1 3	Senior Year - Spring Semester AVIA 4090 Aviation Law AVIA 4500 Aviation Safety AVIA 4999 Integrative Studies Capstone Major Area 1 Electives Free Choice Electives* Semester Total	Hrs 3 3 3 3 15

Professional Pilot Major, Area 1 Airplane, 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Professional Pilot Major, Area 2 Helicopter, B.S. Degree (43-554)

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Freshman Year - Fall Semester AVIA 1020 Aeronautics AVIA 1310 FAA Private Requirements ENGL 1020 Composition I (GE) FLYA 1320 Private Flight A MATH 1131 Applied Calculus (GE) General Education Semester Total AE 1400 Freshman Seminar*	Hrs 2 3 3 1 1 3 3 1 5 1	Freshman Year - Spring Semester ECON 1010 Principles of Macroeconomics (GE) ENGL 1030 Composition II (GE) FLYA 1321 Private Flight B FLYH 1320 Private Helicopter Flight A Add-on PHYS 1104 Introduction to the Sciences: Physics (GE) General Education Semester Total	Hrs 3 3 1 1 4 2 14
Sophomore Year - Fall Semester AVIA 1330 Principles of Helicopter Flight AVIA 2310 Propulsion Systems AVIA 3325 FAA Instrument Requirements FLYH 1321 Private Helicopter Flight B Add-on FLYH 3310 Commercial Flight A Helicopter General Education Semester Total	Hrs 2 3 3 1 1 6 16	Sophomore Year - Spring Semester AVIA 2340 Aircraft Systems & Computers AVIA 3305 FAA Commercial Requirements AVIA 4350 Aviation Weather (spring only) FLYH 3311 Commercial Flight B Helicopter FLYH 3312 Commercial Flight C Helicopter General Education Semester Total	Hrs 3 3 3 1 1 1 3
Junior Year - Fall Semester ATM 4032 Hydraulics/Pneumatics AVIA 4010 Aerodynamics AVIA 4220 Transport Aircraft Systems FLYH 3315 Commercial Flight D Helicopter FLYH 3316 Commercial Flight E Helicopter MGT 3325 Business Communications General Education Semester Total	Hrs 3 3 2 1 1 3 3 16	Junior Year - Spring Semester AVIA 3610 Human Factors AVIA 4250 Flight Management Systems AVIA 4310 Air Traffic Control FLYH 3317 Commercial Flight F Helicopter MGT 3315 Management of Organizations or INDM 4210 Industrial Management General Education Semester Total	Hrs 3 3 2 1 3 3 15
Senior Year - Fall Semester AVIA 4040 Aviation Management AVIA 4370 Advanced Flight Crew Management AVIA 4420 Air Transportation General Education Semester Total	Hrs 3 3 6 15	Senior Year - Spring Semester AVIA 4090 Aviation Law AVIA 4500 Aviation Safety AVIA 4999 Integrative Studies Capstone Major Area 2 Electives Free Choice Electives* Semester Total	Hrs 3 3 3 3 15

Professional Pilot Major, Area 2 Helicopter, 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Psychology Major, B.A. Degree (42-746)

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Freshman Year - Fall Semester ENGL 1020 Composition I (GE) PSY 1000 Orientation to Psychology PSY 1100 General Psychology (GE) Modern Language Requirement (GE)* General Education Semester Total	Hrs 3 1 3 3 6 16	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) Modern Language Requirement* General Education Semester Total	Hrs 3 3 9 15
Sophomore Year - Fall Semester PSY 2100 Research Methods (Choices 1 & 2) (3 hrs) or PSY 2110 Research Design & Analysis I (Choices 3 & 4) (4 hrs)**# Modern Language Requirement* General Education Semester Total	Hrs 3-4 3 9 15-16	Sophomore Year - Spring Semester PSY 4520 Stats for the Behavioral Sci. (Choices 1 & 2) (3 hrs) or PSY 2120 Res. Des. & Analysis II (Choices 3 & 4) (4 hrs)**# PSY 2130 Learning General Education Free Choice Electives Semester Total	Hrs 3-4 3 6 3 15-16
Junior Year - Fall Semester PSY 3120 Brain & Behavior (Choices 1 & 3) or PSY 3130 Physiological Psychology (Choices 2 & 4)# PSY 3220 Lifespan Development Free Choice Electives Semester Total	Hrs 3.4 3 8 14-15	Junior Year - Spring Semester PSY 3340 Social Psychology PSY 4440 Abnormal Psychology Free Choice Electives Semester Total	Hrs 3 3 9 15
Senior Year - Fall Semester PSY 4310 Theories of Personality Free Choice Electives (Upper Level 3000/4000)## Semester Total	Hrs 3 12 15	Senior Year - Spring Semester PSY 4110 Systems of Psychology Free Choice Electives Semester Total	Hrs 3 9-12 12-15

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.
- #Students will choose among four choices of classes of 9-12 credit hours. See the 2014 Undergraduate Catalog for grouping 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 general education and/or free choice electives. The number of upper level free choice electives will depend on choices made in the general education and major.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Psychology Major, B.S. Degree (43-747)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) PSY 1000 Orientation to Psychology PSY 1100 General Psychology (GE) General Education Semester Total	Hrs 3 1 3 9	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 3 12 15
Sophomore Year - Fall Semester PSY 2110 Research Design & Analysis I (fall only)** General Education Free Choice Electives Semester Total	Hrs 4 9 2 15	Sophomore Year - Spring Semester PSY 2120 Research Design & Analysis II (spring only)** PSY 2130 Learning General Education Free Choice Electives Semester Total	Hrs 4 3 5 15
Junior Year - Fall Semester PSY 3130 Physiological Psychology PSY 3220 Lifespan Development Free Choice Electives Semester Total	Hrs 4 3 8 15	Junior Year - Spring Semester PSY 3340 Social Psychology PSY 4440 Abnormal Psychology PSY Major Electives* Free Choice Electives (Upper Level 3000/4000)# Semester Total	Hrs 3 3 3 9 15
Senior Year - Fall Semester PSY 4310 Theories of Personality PSY Major Electives* Free Choice Electives (at least 3 hrs Upper Level 3000/4000)# Semester Total	Hrs 3 3 9 15	Senior Year - Spring Semester PSY 4110 Systems of Psychology PSY Major Electives* Free Choice Electives Semester Total	Hrs 3 3 8 14

Psychology Major, B.S. Degree - 120 hours

- *See the 2014 Undergraduate Catalog for a list of courses that fulfill major electives for the degree. If PSY 4230 is chosen it will count in both the major and general education. If chosen, 3 additional hours of free choice electives will be needed to reach 120 hours.
- **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. The number of upper level free choice electives will depend on choices made in the general education and major.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Public Relations Major, B.S. Degree (43-351)

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Freshman Year - Fall Semester COMM 1000 Public Speaking or COMM 1050 Fundamentals of Oral Communication Competency (GE)* COMM 1100 Introduction to Communication COMM 2620 Introduction to Public Relations* ENGL 1020 Composition I (GE)* General Education Semester Total	Hrs 3 1 3 3 1 1 3	Freshman Year - Spring Semester COMM 2625 Writing & Editing for Public Relations* ENGL 1030 Composition II or CTE 3060 Technical Writing (GE)* General Education Semester Total	Hrs 3 9 15
Sophomore Year - Fall Semester COMM 2100 Introduction to Communication Theory COMM 3620 Strategic Planning & Research for PR* General Education Semester Total	Hrs 3 3 9 15	Sophomore Year - Spring Semester COMM 3100 Communication Research Methods COMM 3625 Design & Layout for Publications General Education Semester Total (**Apply for admission to the major during this semester.)	Hrs 3 9 15
Junior Year - Fall Semester COMM 3640 Integrated Strategic Communication COMM 4250 The Law & Digital Media COMM 4680 Advanced PR Writing General Education Free Choice Elective Semester Total	Hrs 3 3 3 3 1 5	Junior Year - Spring Semester COMM 4630 Electronic & Social Media for PR COMM 4685 Strategic Planning through PR Case Analysis COMM Major Elective*** Free Choice Electives# Semester Total	Hrs 3 3 6 15
Junior/Senior Year - Summer Semester COMM 4605 PR Internship## Semester Total	Hrs 3 3		
Senior Year - Fall Semester COMM 4610 PR Management & Industry Practices COMM Major Elective*** Free Choice Electives# Semester Total	Hrs 3 9 15	Senior Year - Spring Semester COMM 4690 Campaigns COMM Major Elective*** Free Choice Electives# Semester Total	Hrs 3 3 8 14

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 COMM 1000 or 1050, 2620, 2625, and 3620 with a grade of C or higher; completion of ENGL 1020 and ENGL 1030 or CTE 3060 (a C or higher in ENGL 1080 may substitute for 1020/1030) with a grade of C or higher; and a 2.33 or higher cumulative GPA.
- ***This major requires 9 hours of COMM major electives from the following list: COMM 3650, 4200, 4510, 4600, 4605, 4625, 4670, 4675.
- #This program requires 26 credit hours of Free Choice Electives to reach the 120 hours required for graduation. It is recommended, but not required, that students consider adding the Industry Practices concentration (18 hours) or a minor to their degree program.
- ##Internship may also be completed during the fall or spring semesters.
- To graduate with this major, students must have a 2.25 cumulative and UCM GPA and a 2.50 major GPA.
- 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Radiologic Technology, B.S. Degree (43-609)

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Freshman Year - Fall Semester BIOL 1000 The Discipline of Biology and Earth Science BIOL 1110 Principles of Biology CHEM 1131 General Chemistry I (GE) ENGL 1020 Composition I (GE) MATH 1111 College Algebra (GE) SOC 1800 General Sociology (GE) Semester Total	Hrs 1 3 5 3 1 8	Freshman Year - Spring Semester BIOL 3215 Medical Terminology BIOL 3401 Human Anatomy ENGL 1030 Composition II (GE) PSY 1100 General Psychology (GE) General Education Semester Total	Hrs 2 3 3 6 17
Sophomore Year - Fall Semester BIOL 3402 Human Physiology PHYS 1101 College Physics I (GE) General Education Semester Total	Hrs 5 4 8 17	Sophomore Year - Spring Semester BIOL 3211 Comparative Anatomy BIOL 3611 Microbiology BIOL 4002 Life Science Senior Seminar COMM 1000 Public Speaking (GE) PHIL 2300 Ethics (GE) Semester Total	Hrs 4 4 1 3 3 15
Junior Year - Fall Semester - Special Credit Radiologic Technology Special Credits Semester Total	Hrs 12 12	Junior Year - Spring Semester - Special Credit Radiologic Technology Special Credits Semester Total	Hrs 12 12
Junior Year - Summer Semester - Special Credit Radiologic Technology Special Credit Semester Total	Hrs 6 6		
Senior Year - Fall Semester - Clinical Clinical Credits Semester Total	Hrs 12 12	Senior Year - Spring Semester - Clinical Clinical Credits Semester Total	Hrs 12 12
Senior Year - Summer Semester - Clinical Clinical Credits Semester Total	Hrs 6 6		

Radiologic Technology, B.S. Degree - 127 hours

- Candidates for this degree must maintain a minimum cumulative grade-point average (each affiliate establishes their own minimum GPA) and have a minimum grade of C or better in listed program courses.
- Candidates for this degree must successfully complete a minimum number of hours of shadowing in a diagnostic area of Radiologic Technology (each affiliate establishes their own minimum number of hours).
- 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 in the Undergraduate Catalog.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Safety Management Major, B.S. Degree (43-243)

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Freshman Year - Fall Semester ENGL 1020 Composition I (GE) MATH 1111 College Algebra (GE) SAFE 1000 Exploring Safety Sciences SAFE 3000 Principles of Accident Causation & Prevention General Education Semester Total	Hrs 3 3 1 3 6 16	Freshman Year - Spring Semester CHEM 1104 Introduction to the Sciences: Chemistry (GE)* CTE 3060 Technical Writing (GE) PSY 1100 General Psychology (GE) General Education Semester Total	Hrs 4 3 3 5-6 15-16
Sophomore Year - Fall Semester PHYS 1103 Introduction to the Sciences: Physics (GE)* SAFE 3070 Safety Leadership SAFE 4020 Legal Aspects of Safety & Health General Education Semester Total	Hrs 3 3 6 15	Sophomore Year - Spring Semester SAFE 3430 Industrial Hazard Control SAFE 4510 Loss Control SAFE 4520 Safety & Risk Analysis General Education Semester Total	Hrs 3 3 3 6 15
Junior Year - Fall Semester SAFE 3120 Introduction to Industrial Hygiene SAFE 4000 Ergonomics in Safety & Health SAFE 4010 Accident Investigation SAFE 4425 Safety & Health Legislation & Standards Free Choice Elective or Optional Minor Coursework Semester Total	Hrs 3 3 3 3 15	Junior Year - Spring Semester SAFE 4430 Workers Compensation Legislation SAFE 4560 Systems Safety SAFE 4850 Industrial Fire Protection Free Choice Elective or Optional Minor Coursework Semester Total	Hrs 3 3 3 6 15
Summer - Between Junior & Senior Year SAFE 4990 Internship in Safety Sciences** or Departmentally Approved Elective Semester Total	Hrs 3 3		
Senior Year - Fall Semester SAFE 4035 Safety Program Management SAFE 4140 Safety & Health Laboratory SAFE 4940 Statistical Analysis for Risk Management Free Choice Elective or Optional Minor Coursework Semester Total	Hrs 3 3 3 1 14	Senior Year - Spring Semester SAFE 4055 Safety Capstone Experience SAFE 4435 Environmental Compliance Free Choice Elective or Optional Minor Coursework Semester Total	Hrs 3 3 6 12

Safety Management Major, B.S. Degree - 120 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.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Social Studies Major, B.S. in Ed. Degree (41-264)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) HIST 1350 History of the United States to 1877 (GE) SOC 1800 General Sociology (GE) General Education Science w/lab General Education Semester Total	Hrs 3 3 4 3 16	Freshman Year - Spring Semester ECON 1010 Principles of Macroeconomics or ECON 1011 Principles of Microeconomics* ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) HIST 1351 History of the United States from 1877 POLS 1510 American Government General Education Math Semester Total	Hrs 3 3 3 3 1 15
Sophomore Year - Fall Semester CTE 2000 Technology and Society (GE) EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDFL 2240 Educational Psychology EDSP 2100 Education of the Exceptional Child HIST 2401 History of the Early Modern World Semester Total	Hrs 3 2 1 3 2 3 14	Sophomore Year - Spring Semester GEOG 2212 World Geography HIST 2400 History of the Early World or HIST 2402 History of the Modern World POLS 2511 State Government General Education Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 3 3 6 15
Junior Year - Fall Semester EDFL 4300 Educational Measurement & Evaluation HIST Upper-Level Electives** SOSC 3010 Writing in the Social Sciences Upper-Level Elective in SOC or ANTH General Education Semester Total	Hrs 2 6 3 3 3 17	Junior Year - Spring Semester EDFL 4210 The Teaching of Reading in the Secondary School HIST Upper-Level Electives** PSY 4230 Psychology of Adolescence (GE) SOSC 4050 The Social Studies General Education Semester Total	Hrs 2 6 3 3 3 17
Senior Year - Fall Semester EDFL 3500 Secondary Teaching & Behavioral Management FLDX 3550 Practicum in Secondary Instruction SOSC 4074 Methods of Teaching Social Studies Upper-Level Electives in Major from ANTH, ECON, GEOG, HIST, POLS or SOC + Upper-Level Elective in GEOG + Free Choice Elective (only needed if GEOG class above overlaps with general education Engagement area) Semester Total	Hrs 3 1 3 6 3	Senior Year - Spring Semester++ FLDX 4595 Student Teaching Secondary I FLDX 4468 Student Teaching Secondary II Semester Total	Hrs 5 4 9

Social Studies Major, B.S. in Ed. Degree - 120-122 hours

- *Native UCM students should take ECON 1010, as ECON 1011 has a prerequisite of 1010. For transfer students who have already
 completed ECON 1011, this will be accepted.
- **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: ANTH, ECON, GEOG, HIST, POLS, or SOC. If GEOG 3101 or 3201 is chosen, this course will overlap with general education and students will need one hour of free choice elective to reach 120 hours. This plan assumes that either GEOG 3101 or 3201 is chosen in the major.
- ++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.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all
 five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA
 before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare
 for the exam.
- See www.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.

Social Work Major, B.S.W. Degree (48-847)

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Freshman Year - Fall Semester ENGL 1020 Composition I (GE) SOC 1800 General Sociology (GE)** General Education Semester Total AE 1400 Freshman Seminar*	Hrs 3 3 9 15	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE)# General Education Semester Total	Hrs 3 12 15
Sophomore Year - Fall Semester PSY 1100 General Psychology (GE)** General Education*** Free Choice Electives Semester Total	Hrs 3 6 7 16	Sophomore Year - Spring Semester BIOL 2010 Human Biology (GE)** SOWK 2600 Introduction to Social Welfare & Social Work Free Choice Electives Semester Total	Hrs 3 3 9 15
Junior Year - Fall Semester SOC 2805 Introduction to Social Research SOWK 3601 Social Work Practice & the Agency Experience SOWK 3612 Human Behavior Across the Lifespan SOWK 4612 Human Behavior Social Systems Free Choice Electives Semester Total	Hrs 3 3 3 4 16	Junior Year - Spring Semester SOC 3825 Race & Ethnic Relations SOWK 3605 Methods of Inquiry & Evaluation for Social Workers SOWK 3610 Social Work Practice: Basic Skills SOWK 4640 SW Practice: Intervention w/Communities & Orgs. Free Choice Electives# Semester Total Apply for Admission to Social Work Program	Hrs 3 3 3 4 16
Senior Year - Fall Semester PSY 4440 Abnormal Psychology SOWK 4610 Special Topics in Social Work or SOWK 4620 Social Services and Policy with Older Adults SOWK 4630 SW Practice: Intervention with Families & Groups SOWK 4650 Social Policy & Economic Justice Free Choice Electives Semester Total	Hrs 3 3 3 3 3 15	Senior Year - Spring Semester SOWK 4660 Field Practicum SOWK 4661 Field Practicum Seminar Semester Total	Hrs 9 3 12

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, and BIOL 2010 Human Biology.
- ***COMM 1000 Public Speaking is strongly recommended by the department. This course will fulfill the general education requirement for Communication.
- #CTE 3060 Technical Writing or MGT 3325 Business Communication is strongly recommended by the department. CTE 3060 will
 fulfill the Writing II requirement in general education or three hours of free choice electives if ENGL 1030 is chosen for Writing II in
 general education. MGT 3325 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Sociology Major, B.A. Degree (42-755)

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Freshman Year - Fall Semester ENGL 1020 Composition I (GE) SOC 1800 General Sociology (GE) Modern Language Requirement (GE)* General Education Semester Total AE 1400 Freshman Seminar**	Hrs 3 3 3 6 15	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) MATH 1300 Basic Statistics (GE) SOC Major Elective Modern Language Requirement* General Education Semester Total	Hrs 3 3 3 3 3 1 5
Sophomore Year - Fall Semester SOC 2805 Introduction to Social Research# SOC 2845 Social Inequality or SOC Major Elective*** Modern Language Requirement* General Education Semester Total	Hrs 3 3 3 6 15	Sophomore Year - Spring Semester SOC 2850 Institutions & Social Action or SOC Major Elective*** General Education Free Choice Electives or Minor Coursework+ Semester Total	Hrs 3 9 3 15
Junior Year - Fall Semester SOC Major Elective (3000/4000 level)++ General Education Free Choice Electives or Minor Coursework+ Semester Total	Hrs 3 3 9 15	Junior Year - Spring Semester SOC Major Elective (3000/4000 level)++ Free Choice Electives or Minor Coursework+ Semester Total	Hrs 3 12 15
Senior Year - Fall Semester SOC 4860 Sociological Thought (Fall only) SOC 4890 Social Survey Research (Fall only) Free Choice Electives***(3000/4000 level) + + Semester Total	Hrs 3 3 9 15	Senior Year - Spring Semester SOC 4895 Sociology Capstone Seminar (Fall only) Free Choice Electives***(3000/4000 level)++ Semester Total	Hrs 3 12 15

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, 45 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 12 hours of SOC major electives.
- #Students pursuing a double major or minor who have already completed a upper-level research course may substitute that course for SOC 2805 with permission of the program coordinator.
- +This degree program includes 45-48 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before
 earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second
 semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for
 the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more
 information.

Sociology Major, B.S. Degree (43-756)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) SOC 1800 General Sociology (GE) General Education Semester Total AE 1400 Freshman Seminar*	Hrs 3 9 15	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) MATH 1300 Basic Statistics (GE) SOC Major Elective General Education Semester Total	Hrs 3 3 6 15
Sophomore Year - Fall Semester SOC 2805 Introduction to Social Research# SOC 2845 Social Inequality or SOC Major Elective** General Education Semester Total	Hrs 3 9 15	Sophomore Year - Spring Semester SOC 2850 Institutions & Social Action or SOC Major Elective** General Education Free Choice Electives or Minor Coursework*** Semester Total	Hrs 3 6 6 15
Junior Year - Fall Semester SOC Major Electives Free Choice Electives or Minor Coursework*** Semester Total	Hrs 6 9 15	Junior Year - Spring Semester SOC Major Elective (3000/4000 level) + Free Choice Electives or Minor Coursework*** Semester Total	Hrs 3 12 15
Senior Year - Fall Semester SOC 4860 Socialogical Thought (Fall only) SOC 4890 Social Survey Research (Fall only) Free Choice Electives***(3000/4000 level) + Semester Total	Hrs 3 3 9 15	Senior Year - Spring Semester SOC 4895 Senior Seminar in Public Sociology (Spring only) SOC Major Elective Free Choice Electives***(3000/4000 level) + Semester Total	Hrs 3 3 9 15

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 45 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 a 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Special Education: Cross-Categorical Disabilities, B.S. in Ed. Degree (41-01784)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) MATH 1620 Contemporary Mathematics (GE) POLS 1510 American Government (GE) General Education Science with lab General Education Managing Information Semester Total AE 1400 Freshman Seminar*	Hrs 3 3 4 2-3 15-16	Freshman Year - Spring Semester EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDFL 2240 Educational Psychology EDSP 2100 Education of the Exceptional Child ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) HIST 1350 or 1351 History of the United States (GE) Semester Total	Hrs 2 1 3 3 3 3 1 5
Sophomore Year - Fall Semester ART 3910 Art for Elementary School ECEL 1310 Physics for Teachers or ECEL 1320 Biology for Teachers ECEL 2310 Computer/Technology in Education EDSP 4140 Collaborating with Families General Education Semester Total	Hrs 2 3 2 2 3 6 16	Sophomore Year - Spring Semester CD 4402 Language Acq. for Children w/Devel. Disabilities EDFL 3210 Methods of Reading Instruction EDSP 4385 Introduction to Cross Categorical Special Education GEGG 2212 World Geography (GE) HED 3310 Methods in Elementary School Health General Education Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 2 3 3 3 2 2 3 16
Junior Year - Fall Semester EDSP 4620 Evaluation of Ability & Achievement EDSP 4150 Career Development for Student w/Disabilities EDFL 3215 Teaching Reading Content MATH 3890 Concepts & Methods for Teaching Special Educ. PSY 2220 Child Psychology** Semester Total	Hrs 3 2 3 3 14	Junior Year - Spring Semester EDFL 4220 Analysis/Correction Reading Disabilities EDFL 4250 Practicum in Reading EDSP 4360 Behavior Management Techniques EDSP 4361 Practice in Behavior Management Techniques MATH 4890 Math for Special Education PSY 4230 Adolescent Psychology** General Education Semester Total	Hrs 2 1 2 1 2 3 6 17
Senior Year - Fall Semester EDSP 4421 Methods of Cross-Cat I: ID/OHI (fall only) EDSP 4422 Methods of Cross-Cat Dis. II: LD (fall only) EDSP 4423 Methods of Cross-Cat Dis. III E/BD (fall only) EDSP 4700 IEP and the Law HED 4330 First Aid & CPR General Education Semester Total	Hrs 3 3 3 1 3 16	Senior Year - Spring Semester*** FLDX 4395 Student Teaching in Special Education I FLDX 4468 Student Teaching Second II Semester Total	Hrs 8 4 12

Special Education: Cross-Categorical Disabilities 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.
- **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.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

Special Education: Severely Developmentally Disabled Major, B.S. in Ed. Degree (41-02784)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition 1 (GE) MATH 1620 Contemporary Mathematics (GE) POLS 1510 American Government (GE) General Education Science with lab General Education Managing Information Semester Total AE 1400 Freshman Seminar*	Hrs 3 3 4 2-3 15-16	Freshman Year - Spring Semester EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDFL 2240 Educational Psychology EDSP 2100 Education of the Exceptional Child ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 2 1 3 2 3 1 4
Sophomore Year - Fall Semester CD 4402 Language Acquisition for Children w/Dev. Disabilities ECEL 1310 Physics for Teachers or ECEL 1320 Biology for Teachers ECEL 2310 Computer/Technology in Education EDSP 4370 Screening, Diagnosing, & Prescribing Instruction GEOG 2212 World Geography (GE) NUR 4060 Physical & Health of Medically Fragile Child Semester Total	Hrs 2 3 2 3 3 3 16	Sophomore Year - Spring Semester ART 3910 Art for Elementary School EDSP 4140 Collaborating with Families EDSP 4350 Augmentative & Alternative Comm. (spring only) HIST 1350 or 1351 History of the United States (GE) PE 4340 Adaptive Physical Education General Education Semester Total	Hrs 2 3 3 3 3 3 17
Junior Year - Fall Semester EDSP 4310 Introduction to Students with Autism and SDD# EDSP 4330 Curr. & Methods for Teaching Students w/ A&SDD I# PSY 2220 Child Psychology** MATH 3890 Concepts & Methods of Teaching for Special Educ. General Education Semester Total	Hrs 2 3 3 6 17	Junior Year - Spring Semester EDSP 4360 Behavior Management Techniques EDSP 4361 Practice in Behavior Management Techniques EDSP 4450 Curr. & Methods for Teaching Students w/ Aⅅ II# EDSP 4470 Percep. Motor Training Students w/Dis. (spr. only) EDSP 4620 Evaluation of Ability & Achievement MATH 4890 Math for Special Education General Education Semester Total	Hrs 2 1 3 2 3 2 3 16
Senior Year - Fall Semester EDFL 3210 Methods of Reading Instruction EDSP 4700 IEP and the Law HED 3310 Methods in Elementary School Health HED 4330 First Aid and CPR PSY 4230 Psychology of Adolescence** General Education Semester Total	Hrs 3 3 2 1 3 3 15	Senior Year - Spring Semester+ FLDX 4395 Student Teaching in Special Education I FLDX 4468 Student Teaching II Semester Total	Hrs 8 4 12

Special Education: Severely Developmentally Disabled Major, B.S. in Ed. - 122 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.
- **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.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

Special Education: Early Childhood Major, B.S. in Ed. Degree (41-03784)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) HIST 1350 or 1351 History of the United States (GE) MATH 1620 Contemporary Mathematics (GE) General Education Science with lab General Education Semester Total	Hrs 3 3 3 4 2-3 15-16	Freshman Year - Spring Semester ECEL 1310 Physics for Teachers or ECEL 1320 Biology for Teachers EDFL 2240 Educational Psychology EDFL 2100 Foundation of Education FLDX 2150 Introductory Field Experience EDSP 2100 Education of the Exceptional Child ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) GEOG 2212 World Geography (GE) Semester Total	Hrs 3 3 2 1 2 3 3 17
Sophomore Year - Fall Semester CFD 1220 Child Development CFD 1230 Observation of Children ECEL 2310 Computer/Technology in Education EDSP 4320 Intro. to Early Childhood Special Educ. (fall only) General Education Semester Total	Hrs 3 2 2 3 6 16	Sophomore Year - Spring Semester D&N 2310 Early Childhood Nutrition & Health EDSP 3150 Community & Family Resources EDSP 3151 Community & Family Resources Practicum EDSP 4140 Collaborating with Families POLS 1510 American Government (GE) General Education Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 2 2 1 3 3 6 17
Junior Year - Fall Semester CD 2000 The Bases of Speech & Language EDSP 4370 Screening, Diagnosing, & Prescribing Instruction EDSP 4620 Evaluation of Ability & Achievement HED 4330 First Aid & CPR MATH 3890 Concepts & Methods for Teaching Special Ed. General Education Semester Total	Hrs 2 3 3 1 1 3 3 3 1 5	Junior Year - Spring Semester EDFL 3210 Methods of Reading Instruction EDSP 4350 Augmentative & Altern. Comm. (spring only) EDSP 4360 Behavior Management Techniques EDSP 4361 Practicum in Behavior Management Techniques EDSP 4440 Curriculum & Methods ECSE (spring only) EDSP 4470 Perceptual Motor Training for Students w/Dis. (spring only) Semester Total	Hrs 3 3 2 1 3 2 14
Senior Year - Fall Semester ART 3910 Art for Elementary School ECEL 3220 The Teaching of Language Arts ECEL 3468 Community, School & Family Connections EDFL 3410 Children's Literature EDSP 4700 IEP and the Law General Education Semester Total	Hrs 2 3 3 2 2 3 3 3 1 1 6	Senior Year - Spring Semester* FLDX 4395 Student Teaching in Special Education I FLDX 4396 Student Teaching in Special Education II Semester Total	Hrs 6 6 12

Special Education: Early Childhood Major, B.S. in Ed. Degree – 122 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.
- 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.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

Speech Communication and Theatre Major, B.S. in Ed. Degree (41-362)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ENGL 1020 Composition I (GE) THEA 1100 Oral Interpretation (GE) THEA 1500 Acting THEA 1600 Stagecraft General Education MATH Semester Total	Hrs 3 3 3 3 15	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) HIST 1350 or 1351 History of the United States (GE) THEA 2400 Discovering Theatre (GE) THEA 2610 Design Fundamentals General Education Science w/lab Semester Total	Hrs 3 3 3 4 16
Sophomore Year - Fall Semester COMM 2330 Communication in Small Groups/Teams COMM 2340 Argumentation & Debate (fall only) EDFL 2100 Foundations of Education FLDX 2150 Introductory Field Experience EDFL 2240 Educational Psychology EDSP 2100 Education of the Exceptional Child POLS 1510 American Government (GE) Semester Total	Hrs 3 2 1 3 2 1 7	Sophomore Year - Spring Semester COMM 1000 Public Speaking COMM 2100 Introduction to Communication Theory THEA 3700 Directing Minor Coursework General Education Managing Information Semester Total (Successfully complete MoGEA exam by end of this semester)	Hrs 3 3 3 6 2-3 17-18
Junior Year - Fall Semester COMM 3000 Film Appreciation (GE) COMM 3325 Nonverbal Communication (fall only) THEA 4400 Literature & 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 & Evaluation PSY 4230 Psychology of Adolescence THEA 3630 Studio Theatre I WGS 2000 Race, Class, and Gender (GE) Minor Coursework General Education Semester Total	Hrs 3 2 3 1 3 3 1 8
Senior Year - Fall Semester EDFL 3500 Secondary Teaching & Behavior Management FLDX 3550 Practicum in Secondary Instruction EDFL 4210 The Teaching of Reading in the Secondary School THEA 4730 Studio Theatre II THEA 4984 Methods of Teaching Speech & Theatre Minor Coursework Semester Total	Hrs 3 1 2 1 2 6 15	Senior Year - Spring Semester* FLDX 4595 Student Teaching Secondary I FLDX 4468 Student Teaching Secondary II THEA 4920 Secondary Field Experience II THEA 4930 Co-Curricular Practicum Semester Total	Hrs 5 6 1 2 14

Speech Communication and Theatre Major, B.S. in Ed. Degree - 129 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.
- The above degree plan is based on an 18-hour minor.
- The Missouri General Education Assessment (MoGEA) is an exam required of all Teacher Education students. Students must pass all five areas of the MoGEA for admission to the Teacher Education Program. Students should take and successfully complete the MoGEA before completion of their sophomore year (60 earned hours). See your academic advisor to discuss the classes needed to prepare for the exam.
- See www.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.

Speech-Language Pathology Major, B.S. Degree (43-273)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester BIOL 1003 or 1004 Introduction to the Sciences: Ecology CD 1000 Introduction to Communication Disorders CD 1800 Observation of Clinical Practicum in CD ENGL 1020 Composition I (GE) General Education Semester Total AE 1400 Freshman Seminar (CD Section)*	Hrs 3-4 3 1 3 5 15-16	Freshman Year - Spring Semester CD 2301 American Phonetics ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 3 3 9 15
Sophomore Year - Fall Semester CD 3301 Anatomy & Physiology of Speech & Swallowing COMM 1000 Public Speaking (GE) PSY 1100 General Psychology (GE) General Education Semester Total	Hrs 2 3 3 6-7 14-15	Sophomore Year - Spring Semester CD 3304 Speech Science General Education Free Choice Elective** Semester Total	Hrs 3 6 6 15
Junior Year - Fall Semester CD 1401 American Sign Language I (GE) CD 4401 Language Development CD 4501 Basic Neuroscience for Speech-Language Path. CD 4504 Introduction to Articulation & Phonological Disorders CD 4701 Introduction to Audiology PSY 3220 Lifespan Development Semester Total	Hrs 3 2 2 3 3 3 16	Junior Year - Spring Semester AT 1625 CPR/AED for Health Care Professionals CD 3503 Principles of Clinical Management CD 4505 School-age Issues in Language & Literacy CD 4706 Hearing Measurement Free Choice Electives** Semester Total	Hrs 1 3 3 6 16
Senior Year - Fall Semester CD 4102 Couns. Persons w/Comm. Disorders & Their Families CD 4103 Intro. to Evidence Based Practice in Comm. Disorders CD 4510 Multicultural Issues in Communication Disorders CD 4708 Aural Rehabilitation CD 4802 Undergraduate Clinical Practicum I EDSP 4700 IEP and the Law Semester Total	Hrs 2 2 2 2 2 3 1 3 1 3	Senior Year - Spring Semester CD 4512 Best Practices in Early Childhood Intervention CD 4803 Undergraduate Clinical Practicum II PSY 4520 Statistics for the Behavioral Sciences Free Choice Electives** Semester Total	Hrs 3 1 3 8 15

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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Sport Management Major, B.S. Degree (43-612)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester (IS 1600 Business Information Management (GE) General Education Semester Total AE 1400 Freshman Seminar*	Hrs 3 12 15 1	Freshman Year - Spring Semester (apply to major) PE 1206 Fitness for a Global Community (GE) General Education Semester Total	Hrs 3 12 15
Sophomore Year - Fall Semester PE 2472 Communicating Ideas on Sport (GE) SM 3100 Introduction to Sport Management General Education Free Choice Elective Semester Total	Hrs 3 3 7 2 15	Sophomore Year - Spring Semester ECON 1010 Principles of Macroeconomics (GE) PE 4740 Legal Liability in Fitness/Wellness, PE, Rec., & Sprt. Set. Free Choice Electives Semester Total	Hrs 3 2 10 15
Junior Year - Fall Semester MGT 3315 Management of Organizations MKT 3405 Marketing Policy SM 3300 Leisure, Sport, and Tourism SM 4700 Sport Facility Management Free Choice Elective Semester Total	Hrs 3 3 3 3 15	Junior Year - Spring Semester ECON 1011 Principles of Microeconomics SM 4200 Applied Sport Marketing SM 4300 Recreational Sports Management Free Choice Elective Semester Total	Hrs 3 3 3 1 12
Senior Year - Fall Semester ECON 4054 Sport Economics SM 4210 Sport and Media SM 4400 Sport Communication SM 4900 Senior Seminar in Sport Management Free Choice Elective Semester Total	Hrs 3 3 3 3 3 1 5	Senior Year - Spring Semester SM 4220 Sport Sponsorship and Retention SM 4500 Sport Leadership SM 4720 Managing Sporting Events Free Choice Elective Semester Total	Hrs 3 3 3 3 12
Senior Year - Summer Semester SM 4980 Internship Semester Total	Hrs 6 6		

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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Studio Art Major (Ceramics Area), B.F.A. Degree (47-263)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ART 1110 Drawing I	Hrs 3	Freshman Year - Spring Semester ART 1120 Drawing II	Hrs 3	
ART 1110 Drawing 1 ART 1315 2-D Design	3	ART 1325 Color and Design	3	
ART 1800 Ideas & the Visual Arts (GE)	3	ART 2412 Ceramics I	3	
ENGL 1020 Composition I (GE)	3	ENGL 1030 Composition II or CTE 3060 Technical Writing (GE)	3	
General Education	3	General Education	3	
Semester Total	15	Semester Total	15	
Sophomore Year - Fall Semester	Hrs	Sophomore Year - Spring Semester	Hrs	
ART 1815 Art History Survey I (fall)	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	3	
Semester Total	15	Semester Total	15	
Junior Year - Fall Semester	Hrs	Junior Year - Spring Semester	Hrs	
ART 2511 Painting I	3	ART 4412 Ceramics III	3	
ART 3110 Drawing III ART 3412 Ceramics II	3 3	ART 4850 20th Century Art & Architecture (fall) or ART 4860 Contemporary Art & Design (spring)	3	
ART S412 Cerdinics II ART Elective*	3	ART Electives*	5 6	
General Education	6	General Education	3	
Semester Total	18	Semester Total	15	
Senior Year - Fall Semester	Hrs	Senior Year - Spring Semester	Hrs	
ART 4412 Ceramics III	3	ART 4412 Ceramics III	3	
ART Electives*	6	ART 4020 Studio Seminar	3	
General Education	6	ART 4221 Art Theory and Criticism	3	
Semester Total	15	General Education	6	
		Semester Total	15	

Studio Art Major (Ceramics Area), B.F.A. Degree - 123 hours

- *Students must choose 15 hours of ART major electives.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Studio Art Major (Illustration Area), B.F.A. Degree (47-263)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ART 1110 Drawing I ART 1315 2-D Design ART 1800 Ideas & the Visual Arts (GE) ENGL 1020 Composition I (GE) General Education Semester Total	Hrs 3 3 3 3 1 5	Freshman Year - Spring Semester ART 1120 Drawing II ART 1325 Color and Design ART Elective* ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 3 3 3 3 3 1 5
Sophomore Year - Fall Semester ART 1815 Art History Survey I (fall only) ART 2335 3-D Design ART 2610 Introduction to Graphic Design & Illustration ART 2620 Typography General Education Semester Total	Hrs 3 3 3 3 1 5	Sophomore Year - Spring Semester ART 1825 Art History Survey II ART 2511 Painting I ART 2710 Printmaking I ART 3209 Figure Construction General Education Semester Total	Hrs 3 3 3 6 18
Junior Year - Fall Semester ART 2420 Sculpture I ART 3110 Drawing III ART 3625 Illustration Techniques ART 4850 20th Century Art & Arch. (fall only) or ART 4860 Contemporary Art & Design (spring only) General Education Semester Total	Hrs 3 3 3 3 15	Junior Year - Spring Semester ART 2412 Ceramics I ART 3635 Illustration Concepts ART Elective* General Education Semester Total	Hrs 3 3 6 15
Senior Year - Fall Semester ART 4625 Advanced Illustration I Art Electives* General Education Semester Total	Hrs 3 6 6 15	Senior Year - Spring Semester ART 4020 Studio Seminar ART 4635 Advanced Illustration II ART Elective* ART 4221 Art Theory and Criticism General Education Semester Total	Hrs 3 3 3 3 3 15

Studio Art Major (Illustration Area), B.F.A. Degree - 123 hours

- *Students must choose 15 hours of ART electives.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Studio Art Major (Painting Area), B.F.A. Degree (47-263)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Freshman Year - Fall Semester ART 1110 Drawing I ART 1315 2-D Design ART 1800 Ideas & the Visual Arts (GE) ENGL 1020 Composition I (GE) General Education Semester Total	Hrs 3 3 3 3 1 15	Freshman Year - Spring Semester ART 1120 Drawing II ART 1325 Color and Design ART 2511 Painting I ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 3 3 3 3 1 5
Sophomore Year - Fall Semester ART 1815 Art History Survey I (fall) ART 2335 3-D Design ART 3209 Figure Construction ART 3511 or 3513 (Painting II or Painting II Plein Air) General Education Semester Total	Hrs 3 3 3 3 3 15	Sophomore Year - Spring Semester ART 1825 Art History Survey II (spring) ART 2412 Ceramics I ART 2710 Printmaking I ART 3511 or 3515 (Painting II or Painting II Figure) General Education Semester Total	Hrs 3 3 3 3 1 5
Junior Year - Fall Semester ART 2420 Sculpture I ART 3110 Drawing III ART 3511 or 3513 (Painting II or Painting II Plein Air) ART Elective** General Education Semester Total	Hrs 3 3 3 3 6 18	Junior Year - Spring Semester ART 3510 Watercolor ART 4511 or 4515 (Painting III or Painting III Figure) ART 4850 20th Century Art & Architecture (fall) or ART 4860 Contemporary Art & Design (spring) ART Elective** General Education Semester Total	Hrs 3 3 3 3 3 15
Senior Year - Fall Semester ART 4511 or 4513 (Painting III, Painting III Plein Air) ART Electives** General Education Semester Total	Hrs 3 6 6 15	Senior Year - Spring Semester ART 4511 or 4515 (Painting III or Painting III Figure) ART Elective** ART 4221 Art Theory and Criticism General Education Semester Total	Hrs 3 3 3 6 15

Studio Art Major (Painting Area), B.F.A. Degree - 123 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Studio Art Major (Printmaking Area), B.F.A. Degree (47-263)

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Freshman Year - Fall Semester ART 1110 Drawing I	Hrs 3	Freshman Year - Spring Semester ART 1120 Drawing II	Hrs 3	
ART 1315 2-D Design	3	ART 1325 Color and Design	3	
ART 1800 Ideas & the Visual Arts (GE)	3	ART 2710 Printmaking I	3	
ENGL 1020 Composition I (GE)	3	ENGL 1030 Composition II or CTE 3060 Technical Writing (GE)	3	
General Education	3	General Education	3	
Semester Total	15	Semester Total	15	
Sophomore Year - Fall Semester	Hrs	Sophomore Year - Spring Semester	Hrs	
ART 1815 Art History Survey I (fall)	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	3	
Semester Total	15	Semester Total	15	
Junior Year - Fall Semester	Hrs	Junior Year - Spring Semester	Hrs	
ART 2420 Sculpture I	3	ART 3720 Printmaking III	3	
ART 3110 Drawing III ART 3710 Printmaking II	3 3	ART 4850 20th Century Art & Architecture (fall) or ART 4860 Contemporary Art & Design (spring)	3	
ART Elective*	3	ART Electives*	6	
General Education	6	General Education	3	
Semester Total	18	Semester Total	15	
Senior Year - Fall Semester	Hrs	Senior Year - Spring Semester	Hrs	
ART 3720 Printmaking III	3	ART 3720 Printmaking III	3	
ART Electives*	6	ART 4020 Studio Seminar	3	
General Education	6	ART 4221 Art Theory and Criticism	3	
Semester Total	15	General Education	6	
		Semester Total	15	

Studio Art Major (Printmaking Area), B.F.A. Degree - 123 hours

- *Students must choose 15 hours of ART major electives.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Studio Art Major (Sculpture Area), B.F.A. Degree (47-263)

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Freshman Year - Fall Semester ART 1110 Drawing I ART 1315 2-D Design ART 1800 Ideas & the Visual Arts (GE) ENGL 1020 Composition I (GE) General Education Semester Total	Hrs 3 3 3 3 15	Freshman Year - Spring Semester ART 1120 Drawing II ART 1325 Color and Design ART 2420 Sculpture I ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 3 3 3 3 1 5
Sophomore Year - Fall Semester ART 1815 Art History Survey I (fall) ART 2335 3-D Design ART 3209 Figure Construction ART 3420 Sculpture II General Education Semester Total	Hrs 3 3 3 3 3 15	Sophomore Year - Spring Semester ART 1825 Art History Survey II (spring) ART 2412 Ceramics I ART 2511 Painting I ART 3440 Sculpture III General Education Semester Total	Hrs 3 3 3 3 15
Junior Year - Fall Semester ART 2710 Printmaking I ART 3110 Drawing III ART 4420 Sculpture IV ART Elective* General Education Semester Total	Hrs 3 3 3 3 6 18	Junior Year - Spring Semester ART 4420 Sculpture IV ART 4850 20th Century Art & Architecture (fall) or ART 4860 Contemporary Art & Design (spring) ART Electives* General Education Semester Total	Hrs 3 3 6 3 15
Senior Year - Fall Semester ART 4420 Sculpture IV ART Electives* General Education Semester Total	Hrs 3 6 6 15	Senior Year - Spring Semester ART 4020 Studio Seminar ART 4420 Sculpture IV ART 4221 Art Theory and Criticism General Education Semester Total	Hrs 3 3 3 6 15

Studio Art Major (Sculpture Area), B.F.A. Degree - 123 hours

- *Students must choose 15 hours of ART electives.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Systems Engineering Technology Major, B.S. Degree (43-879)

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Freshman Year - Fall Semester BTE 1210 Essentials of Managing Information (GE) ENGL 1020 Composition I (GE) MATH 1111 College Algebra (GE) General Education Semester Total AE 1400 Freshman Seminar*	Hrs 2 3 3 6 14	Freshman Year - Spring Semester CIS 1600 Business Information Management CTE 3060 Technical Writing (GE) General Education Semester Total	Hrs 3 9 15
Sophomore Year - Fall Semester CIS 2605 Programming with Visual C# COMM 1000 Public Speaking (GE) NET 1060 Introduction to Networking Basics** NET 1061 Routers & Routing Basics** General Education Science with Laboratory Semester Total	Hrs 3 3 3 4 16	Sophomore Year - Spring Semester CIS 2665 Prin. of Data Communications & Local Area Network NET 2060 Switching Basics and Intermediate Routing** NET 2061 WAN Technologies** General Education Semester Total	Hrs 3 3 6 15
Junior Year - Fall Semester CIS 3665 Data Communication Technologies** NET 4060 Advanced Network Routing** General Education Free Choice Electives Semester Total	Hrs 3 3 6 15	Junior Year - Spring Semester CIS 3650 Database Management Systems CIS 4685 Network Planning, Design and Security** NET 3068 Network Security I Free Choice Electives Semester Total	Hrs 3 3 4 5
Junior Year - Summer Semester SOT 3022 Internship in Technology Semester Total	Hrs 3 3		
Senior Year - Fall Semester CIS 4665 Data Communication & Distributed Data Processing CIS 4680 Data Resource Management NET 4062 Advanced Switching** Free Choice Electives Semester Total	Hrs 3 3 6 15	Senior Year - Spring Semester CIS 4610 Special Projects NET 4063 Network Support** Free Choice Electives Semester Total	Hrs 3 3 6 12

Systems Engineering Technology 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.
- \bullet **This class is only offered during the semester indicated.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

FOUR-YEAR ACADEMIC GUIDE

Systems Engineering Technology Major, Missouri Innovation Campus (MIC), B.S. Degree (43-879)

This guide is valid for the 2014 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 (www.ucmo.edu/academics/catalogs) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

Courses listed in the first seven semesters include the course prefix, number, and titles used by the Metropolitan Community Colleges (MCC). The UCM equivalents are listed in parenthesis after the MCC course title. If there is no UCM equivalency, (N/A) is listed. Transfer course articulations may be found on the UCM website at www.ucmo.edu/corequiv/transferSearch.cfm.

High School Junior Year/MCC - Summer Semester CHAOS I (STA Course) (CSIS 111 at MCC/NET 1058 at UCM) COLL 100 First Year Seminar (N/A) CSIS 110 Technology and Information Mgmt. (BTE 1210) (GE) CSIS 115 Computer Concepts and Applications (CIS 1600) MATH 110 Intermediate Algebra (MATH 1101) or 120 College Algebra (MATH 1111) (GE - MATH 120 only) Semester Total	Hrs 3 1 3 3 1 1 3 1	High School Junior Year/MCC - Fall Semester CHAOS II (STA Course) (CSIS 151 at MCC) IT Essentials (STA Course) (CSIS 161 & 174 at MCC)+ MATH 120 College Algebra (MATH 1111) or higher++ Semester Total	Hrs 3 6 3 12
High School Junior Year/MCC - Spring Semester Networking Essentials (STA Course) (CSIS 161 & 174 at MCC/ NET 2060 & 2061 at UCM) ^ Semester Total	Hrs 6 6	High School Senior Year/MCC - Summer Semester BSAD 120 Organizational Behavior (N/A) CSIS 170 Principles of Information Assurance (N/A) (Non-credit Internship) Semester Total	Hrs 3 3 0 6
High School Senior Year/MCC - Fall Semester CSIS 152 Linux Operating System (CS 2500) CSIS 172 LAN Windows Server (N/A) ENGL 101 Composition and Reading I (ENGL 1020) (GE) General Education Science with Laboratory (Non-credit Internship) Semester Total	Hrs 3 3 4 0 13	High School Senior Year/MCC - Spring Semester CSIS 143 Database Design and Management (CIS 3650) ENGL 215 Technical Writing (CTE 3060) (GE) SPDR 102 Fundamentals of Speech (COMM 1000) (GE)+++ (Non-credit Internship) Semester Total (graduate from high school this semester)	Hrs 3 3 0 9
MCC/UCM Junior Year - Summer Semester BSAD 127 Management Internship I (N/A) General Education History* (Non-credit Internship) Semester Total	Hrs 3 3 0 6	MCC/UCM Junior Year - Fall Semester (IS 3665 Data Communication Technologies** CSIS 123 Programming Fundamentals (CS 1100)*** CSIS 290A Field Competencies and Employment Strat. (N/A) General Education (Non-credit Internship) Semester Total (graduate from MCC with A.A.S. degree this semester)	Hrs 3 3 3 0 12
UCM Junior Year - Spring Semester CIS 4680 Data Resource Management CIS 4685 Network Planning, Design and Security** NET 3068 Network Security I General Education (Non-credit Internship) Semester Total	Hrs 3 4 6 0 16	UCM Senior Year - Summer Semester CIS 4610 Special Projects SOT 3022 Internship in Technology Semester Total	Hrs 3 3 6
UCM Senior Year - Fall Semester CIS 4665 Data Communication & Distributed Data Processing NET 4060 Advanced Network Routing** General Education (Non-credit Internship) Semester Total	Hrs 3 3 6 0 12	UCM Senior Year - Spring Semester NET 4062 Advanced Switching** NET 4063 Network Support** General Education (only 3 hours will be needed if 6 hours of gen ed MATH is completed in the first year) (Non-credit Internship) Semester Total	Hrs 3 3 6 0 9-12

Systems Engineering Technology Major, Missouri Innovation Campus (MIC), B.S. Degree (43-879)

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General Information

- This program is offered in cooperation with the Lee's Summit R-7 School District and the Metropolitan Community College (MCC). Students begin the program during their junior year in high school and will earn an AAS degree from MCC-BTC with a major in Engineering Technology: Architecture Emphasis.
- Students must be accepted into this program. Go to www.ucmo.edu/mic or call 660-543-8256 for more information.
- Please note that the credit hours from any course taken at a community college that articulates or substitutes for an upper-level (3000/4000) UCM course will not count towards the upper-level hours needed for graduation. The same rule applies to any 1000/2000 level courses at four-year institutions, even if the course(s) articulates or substitutes for an upper-level (3000/4000) UCM course. Learn more at www.ucmo.edu/registrar/standards/upper.cfm.
- To satisfy the General Education Assessment (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Key to Curriculum Notes on Four Year Guide

- +The hours for IT Essentials will substitute for NET 1060 and 1061 and CIS 2665 which are required in the UCM major.
- ++Consult the UCM Undergraduate Catalog (www.ucmo.edu/academics/catalogs) for a complete listing of appropriate general
 education math classes.
- +++SPDR 100 and 101, if taken prior to Fall 2014 will also articulate to COMM 1000 at UCM.
- ^The hours for Network Essentials will substitute for NET 2060 and 2061 which are required in the UCM major.
- *Consult both the MCC and UCM catalogs for appropriate general education history choices.
- **This class is only offered the semester indicated.
- *** This course will substitute for CIS 2605 which is required in the UCM major.

Theatre Major, B.A. Degree (42-364)

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Freshman Year - Fall Semester ENGL 1020 Composition I (GE) THEA 1400 Script Analysis THEA 1500 Acting Modern Language Requirement (GE)* General Education	Hrs 3 3 3 3 3	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) THEA 1100 Oral Interpretation (GE) THEA 1600 Stagecraft Modern Language Requirement* General Education	Hrs 3 3 3 3 3
Semester Total	15	Semester Total	15
AE 1400 Freshman Seminar**	1		
Sophomore Year - Fall Semester	Hrs	Sophomore Year - Spring Semester	Hrs
THEA 1510 Stage Movement THEA 2610 Design Fundamentals	3 3	THEA 1520 Stage Voice General Education	3 12
Modern Language Requirement*	3	Semester Total	15
General Education	6		
Semester Total	15		
Junior Year - Fall Semester	Hrs	Junior Year - Spring Semester	Hrs
THEA 3600 Scene Design, THEA 3610 Costume Design,	0	Minor Coursework	6
or THEA 3620 Lighting Design THEA 3700 Directing	3 3	General Education Free Choice Electives	6 3
Minor Coursework	6	Semester Total	15
Free Choice Elective	3		
Semester Total	15		
Senior Year - Fall Semester	Hrs	Senior Year - Spring Semester	Hrs
THEA 3630 Studio Theatre I	1	THEA 4420 Literature & History of the Theatre II	3
THEA 4400 Literature & History of the Theatre I Theatre Elective	3 3	THEA 4730 Studio Theatre II Minor Coursework	1 6
Minor Coursework	5 6	Free Choice Electives	5
Free Choice Electives	2	Semester Total	15
Semester Total	15		

Theatre Major, B.A. Degree - 120 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.

Theatre Major, B.F.A. Degree (47-366)

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Freshman Year - Fall Semester ENGL 1020 Composition I (GE) THEA 1400 Script Analysis THEA 1500 Acting THEA 1600 Stagecraft General Education Semester Total AE 1400 Freshman Seminar*	Hrs 3 3 3 3 15	Freshman Year - Spring Semester ENGL 1030 Composition II or CTE 3060 Technical Writing (GE) THEA 1520 Stage Voice THEA 1610 Stage Makeup General Education Semester Total	Hrs 3 3 3 6 15
Sophomore Year - Fall Semester THEA 1510 Stage Movement THEA 2610 Design Fundamentals Design/Technology Elective General Education Semester Total	Hrs 3 3 3 6 15	Sophomore Year - Spring Semester DANC 1110 Modern Dance I or 1120 Ballet Dance I DANC 1140 Jazz Dance I THEA 3700 Directing General Education Semester Total	Hrs 1 1 3 9 14
Junior Year - Fall Semester THEA 3500 Advanced Scene Study THEA 4310 Principles of Theatre Management THEA 4300 Professional Practices THEA 4400 Literature & History of the Theatre I General Education Semester Total	Hrs 3 3 1 3 6 16	Junior Year - Spring Semester THEA 4300 Professional Practices THEA 4420 Literature & History of the Theatre II THEA 4500 Advanced Acting Design/Technology Elective General Education Free Choice Elective Semester Total	Hrs 1 3 3 3 3 2 15
Senior Year - Fall Semester THEA 4300 Professional Practices THEA 4510 Period Acting Styles Design/Technology Elective General Education Free Choice Electives Semester Total	Hrs 1 3 3 3 1 5	Senior Year - Spring Semester THEA 4710 Advanced Directing THEA 4730 Studio Theatre II THEA 4910 Senior Showcase Free Choice Electives Semester Total	Hrs 3 1 1 10 15

Theatre Major, B.F.A. 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 (GEA) Policy, students must take the GEA after they earn 45 credit hours but before earning 75 credit hours. Transfer students who have more than 45 hours earned should take the exam during their second semester at UCM. Students must achieve a passing score of 425 to meet graduation requirements. Students may register for the GEA through MyCentral. Contact UCM Testing Services (HUM 216, 660-543-4919, testingservices@ucmo.edu) for more information.