

Major Map: Geology B.S.
First-time College Students
Catalog Year: 2013-2014

Four-Year Graduation Plan - Courses and Critical Benchmarks

The following is a sample course of study. It is the Student's responsibility to ensure that all program requirements are met. This guide is not a substitute for academic advisement. **All incoming freshmen must develop an academic plan (which maps out all courses needed to graduate within your intended major/degree). Your academic advisor is available to meet with you and create your specific plan.**

Your path to graduation may vary slightly based on factors such as college credit you earned while in high school, transfer work from other institutions of higher learning and placement in Mathematics. You are responsible of checking prerequisites to any courses. Critical Courses (and Min. Grades as noted below) provide feedback regarding major fit and help indicate the likelihood of successful completion of chosen academic program and degree.

Mathematics: Math 110 or MATH 116, or 200-level MATH/STAT Foreign Language Requirement: No Free Elective Hours: 3-22

Critical Course or Bench mark ◆	Course Subject, Number, and Title and Academic Plan Benchmarks Bold = UMKC General Education Core Requirement *Prerequisite May Be Required **Co-Requisite Enrollment Required	Hours	Min. Recommended Grade	Notes
Fall Semester Year 1: 14-15 hours				
	**Anchor I: Reasoning and Values – Click for Options	3		Math Entrance Exam required prior to enrollment in several MATH/STAT courses, including Math 120, 210 and 235. MATH 120 or any MATH/STAT at the 200 level fulfills CAS Math Requirement.
	**Discourse I: DISC 100 – Reasoning and Values (Speech and Writing)	3		
◆	** GEOLOGY 220: General Geology (Focus B – Scientific Reasoning & Quantitative Analysis)	3	C	
◆	** GEOLOGY 220L: General Geology Laboratory (CAS Laboratory Requirement)	2	C	
◆	MATH 120: Precalculus (CAS Science & Math Requirement) OR *MATH 210: Calculus I (CAS Science & Math Requirement) OR *STAT 235: Elementary Statistics (CAS Science & Math Requirement)	3-5	C	
◆	Complete 12 term hours minimum toward degree Earn minimum 2.000 term GPA Earn minimum 2.000 cumulative UM GPA			
Spring Semester Year 1: 13-14 hours				
	**Anchor II: Culture and Diversity - Click for Options	3		
	**Discourse II: DISC 200 - Culture and Diversity (Speech and Writing)	3		
	*MATH 210: Calculus I (CAS Science & Math Requirement) OR *STAT 235: Elementary Statistics (CAS Science & Math Requirement) OR Free Elective	3-4		
◆	GEOG 203: Introduction to GIS	4		

◆	Complete Discourse I and Anchor I Complete 28 total hours minimum toward degree Earn minimum 2.000 term GPA Earn minimum 2.000 cumulative UM GPA			
Summer Semester Year 1				
◆	Complete STAT 235: Elementary Statistics OR MATH 210: Calculus I			
Fall Semester Year 2: 15 hours				
	GEOLOGY 250L: Field Methods in Earth and Environmental Science OR CAS Arts & Humanities – Click for Options (if taking GEOLOGY 251 instead later)	3	C	⚙️ BIOLOGY 108: General Biology is required for the Geology B.S., but High School Biology satisfies this requirement. Take the RooWriter Writing Assessment the semester immediately following Discourse II and at least a semester before registering for a Writing Intensive course.
◆	GEOLOGY 325: Sedimentology/Stratigraphy	4	C	
	**CHEM 211: General Chemistry I (Focus Elective)	4		
	**CHEM 211L: General Chemistry I Laboratory (CAS Science & Math Requirement)	1		
	⚙️ BIOLOGY 108: General Biology I or Free Elective (if already fulfilled by high school credit)	3		
◆	Complete 12 term hours minimum toward degree Earn minimum 2.000 term GPA Earn minimum 2.000 cumulative UM GPA			
Spring Semester Year 2: 14-15 hours				
	GEOLOGY 251: Field Methods in Earth and Environmental Science (if GEOLOGY 250L not taken above) OR CAS Arts & Humanities – Click for Options	3		
◆	GEOLOGY 313: Evolution and the Geologic Record OR GEOLOGY 314: Geomorphology OR GEOLOGY 3XX/4XX: Elective for major – Click for Options	3-4	C	
	**CHEM 212R: General Chemistry II (CAS Science & Math Requirement)	4		
	**CHEM 212LR: General Chemistry II Laboratory	1		
	Focus A – Arts & Humanities – Click for Options	3		
◆	Complete Discourse II and Anchor II Complete 60 total hours toward degree Earn minimum 2.000 term GPA Earn minimum 2.000 cumulative UM GPA			
Summer Semester Year 2				
				GEOLOGY 490 may be taken Summer Semester Year 2 by permission.
Fall Semester Year 3: 14-15 hours				
◆	GEOLOGY 312: Mineralogy	4	C	POL-SCI 210, HIST 1100 or 1101 fulfill Focus C as well as the Constitution requirement.
	PHYSICS 210: General Physics I OR PHYSICS 240: Physics for Sci & Eng I	4-5		
	Focus C – Human Values & Ethical Reasoning – Click for Options (May choose Focus C Course to also fulfill MO Constitution Requirement)	3		
	Missouri Constitution course (if not fulfilled by above) – Click for Options OR other CAS Social & Behavioral	3		

	Sciences Requirement – Click for Options			
◆	Complete RooWriter Writing Assessment Complete 12 term hours minimum toward degree Earn minimum 2.000 term GPA Earn minimum 2.000 cumulative UM GPA			
Spring Semester Year 3: 14-15 hours				
	Discourse III: Civic and Community Engagement	3		
	Anchor III: Civic and Community Engagement— Recommended: GEOLOGY 327: Archaeology of Ancient Disasters	3		
	GEOLOGY 350: Earth Structures and Tectonics	4		
	PHYSICS 220: General Physics II OR PHYSICS 250: Physics for Sci & Eng II	4-5		
Summer Semester Year 3: 6 hours				
	Complete GEOLOGY 490: Geology Field Camp (offered even years)			
Fall Semester Year 4: 15-16 hours				
	GEOLOGY 3XX/4XX: Elective for major – Click for Options	3-4		Apply for graduation and complete Final Degree Audits for the following: UMKC General Education Core, CAS Degree Requirements, Major Requirements, and/or Minor Requirements. Take the ETS Proficiency Profile (EPP) exit exam.
	CAS Arts & Humanities – Click for Options	3		
	CAS Social & Behavioral Sciences Requirement - Click for Options	3		
	Elective hours in Math or Science (for BS), if needed OR Free Elective	3		
	Free Elective	3		
Spring Semester Year 4: 9-15 hrs				
	GEOLOGY 499WI: Geology Seminar (CAS Writing Intensive Requirement)	3		In combination with required upper-level courses, take enough Free Elective hours at the 300/400-level to meet the minimum requirement of 36 upper-level credit hours.
	GEOLOGY 313: Evolution and the Geologic Record (if not taken above) OR GEOLOGY 314: Geomorphology OR GEOLOGY 3XX/4XX: Elective for major – Click for Options	3-4		
	Free Elective	3		
	<i>Free Elective (only take these credits if needed to reach 120 minimum hours)</i>	0-5		

Non-course requirements

RooWriter Writing Assessment
ETS Proficiency Profile (EPP) exam

Met

The School reserves the right to make changes in courses, degree requirements and course schedules without notice.

Students are expected to maintain a quality of achievement significantly above minimum UMKC standards for degree work. Individual student progress will be monitored throughout the program. Satisfactory progress is required of all students for retention in the program. Students are expected to maintain academic standards, perform satisfactorily in courses, refrain from academic dishonesty, comply with the established University and teacher education timetables and requirements, and refrain from unethical or unprofessional behavior or behaviors that obstruct the training process or threaten the welfare of the student or others. Other circumstances involving student behavior will be addressed by the faculty on an individual basis.

Graduation Requirements Summary:

Total Hours (120)	Totals Hrs at UMKC (30 hours)	Upper-level Hours	Major GPA (2.0)	UMKC GPA
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minimum)	minimum)	(36 minimum)	Minimum)	

All students completing an undergraduate education degree must meet the following conditions in order to graduate and be recommended for graduation or certification:

- [list of requirements as stated in the catalog pertaining to minimum GPA, capstone coursework, additional licensure exams, etc.]

Program Description

The UMKC Undergraduate Geology degree program educates students on fundamental geologic concepts, provides training in field and laboratory techniques and problem solving, and prepares students for careers as professional geoscientists. Through course work instruction, field experiences, and mentoring, students develop an understanding of Earth materials and the underlying principles and dynamic processes that change the Earth through time. The geology curriculum emphasizes developing the ability to collect and interpret field data as well as familiarity with mapping techniques and laboratory analyses, as these are vital components of training for all geologists.

Admission Requirements

The Admissions requirements for the Geology B.A. are the same as the requirements for admission to UMKC. However, the department prefers students to have a high school degree that includes three to four years of math, three to four years of science including at least one Biology course, and at least two years of a foreign language.

Career Opportunities

The US Department of Labor and Statistics projects excellent job opportunities for geoscientists for the next 15 years. Current rates of retirement of geologists exceed the production of new geologists, suggesting an increasing need for geoscientists in the coming years. Career opportunities for geologists include employment in academics, government, and industry in diverse fields such as oil and gas exploration and production, water resources, mining, and environmental geology and work for the U.S. Army Corps of Engineers, U.S. Geological Survey, petroleum and mining companies, and a large number of geotechnical engineering and environmental firms.

Contact Information

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