

**BACHELOR OF SCIENCE IN EARTH AND ENVIRONMENTAL SCIENCE
GEOLOGY EMPHASIS, 2024-25**

For more information about policies and requirements, please see the UMKC 2024-25 Catalog.

FIRST YEAR

FALL SEMESTER	HOURS	SPRING SEMESTER	HOURS
GEOLOGY 220 & 220L General Geology	4	MATH 210 Calculus I	4
MATH 120 Precalculus	5	CHEM 211/211L General Chemistry I/Lab	5
GEFSE 101 First Semester Experience	3	ENGLISH 110 English I: Intro to Academic Prose	3
GECRT-SC Critical Thinking in Natural & Physical Sci	3	GECRT-SS Critical Thinking in Social & Behavioral Sciences	3
TOTAL	15	TOTAL	15

SECOND YEAR

FALL SEMESTER	HOURS	SPRING SEMESTER	HOURS
GEOG 203 Introduction to Geographic Information Systems	4	PHYSICS 210 General Physics I	4
GEOLOGY 250L Field Methods in Earth and Environmental Science	3	ENGLISH 225 English II: Intermed Academic Prose	3
CHEM 212R/CHEM 212LR General Chemistry II/Lab	5	GECRT-AH Critical Thinking in Arts & Humanities	3
Communication Requirement (COMM-ST 110, 140, 212 or 277)	3	GECDV Culture and Diversity	3
TOTAL	15	TOTAL	13

THIRD YEAR

FALL SEMESTER	HOURS	SPRING SEMESTER	HOURS
GEOLOGY 325 Sedimentology/Stratigraphy	4	GEOLOGY 322 Earth Materials	4
ENV-STDY 325 Cultural Perspectives on the Environment	3	GEOG 215 Weather and Climate	4
PHYSICS 220 General Physics II	4	GEOLOGY Major Elective 300/400 level	3
GECUE Civic and Urban Engagement	3	Constitution Requirement (HISTORY 101, 102, POL-SCI 210, CJC 364 or HON 230)	3
TOTAL	14	TOTAL	14

SUMMER

	HOURS
GEOLOGY 490 Geology Field Camp	6

FOURTH YEAR

FALL SEMESTER	HOURS	SPRING SEMESTER	HOURS
GEOG 444 Spatial Data Analysis	4	GEOLOGY 350 Earth Structures and Tectonics	4
General Elective 300/400 level	3	ENV-STDY 499WI OR GEOG 403WI Envir Studies Practicum OR History & Philosophy of Geosci	3
General Elective	3	General Elective 300/400 level	3
General Elective	4	General Elective	4
TOTAL	14	TOTAL	13

Additional Graduation Requirements: Civics Exam and Heighten Exit Exam

Total Credits to Graduate: 120

School of Science and Engineering

Why Major in Earth & Environmental Science



Beyond The Classroom

Students build experience by participating in any of our **student-led teams or organizations**:

- Association of Environmental & Engineering Geologists
- Baja Racing Team
- Concrete Canoe
- Geology Club
- Student Environmental Coalition
- UMKC Robotics
- Women in Science

Students can **travel worldwide** for research and field experience to places including:

- Cameroon, Guatemala, Iceland, Jordan, Mexico, New Zealand, and Bahamas

Connect with local engineering firms, environmental organizations, and government agencies to complete **year-round environmental internships**.



Personalize Your Degree

Students can earn a **BA in Environmental Studies** or **BS in Earth & Environmental Science (BSEES)**.

The BSEES degree has the **emphasis options** of:

- Environmental Science
- Geology
- Physical Geography

Develop specialized skills by completing our undergraduate certificate in **Geographic Information Systems (GIS)**.

Easily add minors in areas like: Environmental Communications, Environmental Studies, Environmental Sustainability, Geography, and Geology

Students can participate in **innovative and ground-breaking research** alongside a faculty mentors like Dr. Graettinger, a volcanologist who studies the behavior of lava in Iceland to help forecast future volcanic activity.



After Graduation

Easily earn a **master's degree** through our BS to MS program which allows students to complete a graduate degree at undergraduate tuition rates.

Our program allows students the **flexibility to pursue a variety of career interests** including:

- aquatic scientist, environmental scientist or consultant, geoscientist, GIS analyst, GIS engineering specialist, sustainability scientist, science educator and more!

The Kansas City region is home to **many environmental consulting branches and government agencies** including:

- Blackstone Environmental
- CBRE Sustainability Solutions
- EPA (Midwest Region 7)
- FDA (KC field office)
- Genesis Environmental Solutions
- Terracon
- Tetra Tech
- Many engineering firms that employ people with environmental backgrounds