

Geology - B.S.

College of
Arts and Sciences

The earth and environmental sciences encompass a variety of studies of our planet, including considerations of composition, structure, prehistoric life, internal and surficial processes, and history. These studies have applications in the discovery and use of mineral resources, energy sources, and water; in protection of the environment; and in planning for the impact of natural hazards (earthquakes, landslides, etc.) on societal development. Students undertake the study of earth and environmental sciences in the classroom, laboratory, and field.

Students in earth and environmental sciences earn the Bachelor of Science or Bachelor of Arts degree with a major in Geology. The B.S. program is designed for students who plan a career as a professional geologist or who plan to attend graduate school. The B.A. program is designed for students planning a career in government policy relating to earth science and environmental issues, earth-science education, business (environmental consulting), environmental law, or environmental medicine.

120 hours (minimum)

Any student earning a Bachelor of Science (BS) degree must complete a minimum of 60 hours in natural, physical, mathematical, and computer science. A complete description of College requirements for a Bachelor of Science degree, including a specific listing of courses applicable to the 60-hour requirement, can be found on pages 113-114 of the 2011-2012 *UK Bulletin* at: www.uky.edu/Registrar/bulletinCurrent/a_s.pdf.

UK Core Requirements

See the *UK Core* section of the 2011-2012 *Undergraduate Bulletin* at: www.uky.edu/Registrar/bulletinCurrent/ukc.pdf for the complete UK Core requirements. The courses listed below are (a) recommended by the college, or (b) required courses that also fulfill UK Core areas. Students should work closely with their advisor to complete the UK Core requirements.

I. Intellectual Inquiry in Arts and Creativity

Choose one course from approved list 3

II. Intellectual Inquiry in the Humanities

Choose one course from approved list 3

III. Intellectual Inquiry in the Social Sciences

Choose one course from approved list 3

IV. Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences

Choose one course from approved list 3

V. Composition and Communication I

CIS/WRD 110 Composition and Communication I 3

VI. Composition and Communication II

CIS/WRD 111 Composition and Communication II 3

VII. Quantitative Foundations

Choose one course from approved list 3

VIII. Statistical Inferential Reasoning

Choose one course from approved list 3

IX. Community, Culture and Citizenship in the USA

Choose one course from approved list 3

X. Global Dynamics

Choose one course from approved list 3

UK Core Hours **30**

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. Please see your academic advisor for courses that meet this requirement.

Graduation Writing Requirement Hours: **3**

College Requirements

I. Foreign Language (*placement exam recommended*) 0-14

II. Disciplinary Requirements

a. Natural Science (*completed by Major Requirements*)

b. Social Science 3

c. Humanities 3

III. Laboratory or Field Work (*completed by Premajor Requirement*)

IV. Electives 6

College Requirement hours: **12-26**

Premajor Requirements

*MA 113 Calculus I 4

MA 114 Calculus II 4

*CHE 105 General College Chemistry I 3

*CHE 111 Laboratory to Accompany General Chemistry I 1

CHE 107 General College Chemistry II 3

CHE 113 Laboratory to Accompany General Chemistry II 2

GLY 220 Principles of Physical Geology

or

GLY 223 Introduction to Geology in the Rocky Mountains 4-6

GLY 230 Fundamentals of Geology I 3

GLY 235 Fundamentals of Geology II 3

GLY 295 Geoscience Orientation 1

Premajor hours: **28-30**

Major Requirements

Major Core Requirements

GLY 323 Field Work in Regional Geology 6

GLY 360 Mineralogy 4

GLY 420G Structural Geology 4

GLY 450G Sedimentary Geology 4

GLY 461 Igneous and Metamorphic Petrology 4

GLY 490 Earth Dynamics 3

Major Core hours: **25**

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The University of Kentucky is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award baccalaureate, masters, doctorate, and professional degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of the University of Kentucky.

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Other Course Work Required for the Major

From the Major Department:

Elective I 6
Choose six hours of GLY courses at the 400+ level, not to include GLY 495 or 496

Elective II 6
Choose six additional hours of 300+ GLY or related courses

From the Physics Department

*PHY 211/213 General Physics **or**

*PHY 231/232/241/242 General University Physics 10

NOTE: Fourteen hours at the 200 level or higher must be completed outside Geology. Partial fulfillment of this requirement can be completed by the PHY Sequence and GLY Elective II Requirements 0-4

Other Major hours: **22**

Total Minimum Hours

Required for Degree **123**

**Course used towards completion of a UK Core Requirement.*