Master of Science in Geology

Why study geology at the University of Kansas?

KU Geology is a leader among geoscience programs, where students learn to serve society through the discovery, dissemination, and application of knowledge. Graduates may go on for further academic training or are employed in the energy and water industries, as well as in government agencies, with high levels of job satisfaction.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (http://catalog.ku.edu/graduate-studies) section of the online catalog.

Please consult the Departments & Programs (http://catalog.ku.edu/liberal-arts-sciences) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Graduate Admission

Admission is based on academic records including grade-point average and general preparedness in geology and supporting sciences, letters of recommendation, and the applicant’s stated academic and professional interests and goals. Results of the aptitude tests of the Graduate Record Examination are required. An attempt is made to balance the interests of students with the availability of faculty members to supervise them and laboratory space in which they may work. Consequently, new admissions in areas of geology that are heavily subscribed or in which the department has little expertise may be limited. As a result, some students who meet KU’s minimum standard for admission may be refused. Students who do not hold master’s degrees in geology normally are admitted to pursue the master’s degree. Students with exceptional records may be invited to study for the Ph.D. without first earning the M.S. degree.

Submit your graduate application online (http://www.graduate.ku.edu). Inquiries may be sent to the Department:

The University of Kansas
Department of Geology
Ritchie Hall - Earth, Energy & Environment Center
1414 Naismith Drive, Room 254
Lawrence, KS 66045

yolanda@ku.edu (Yolanda@ku.edu)

M.S. Degree Requirements

Details of the regulations on graduate study are included in the department’s Ground Rules for Graduate Students, that is made available to admitted students online through Blackboard.

Prerequisites normally include credit in one year each of general biology, general chemistry, general physics, and calculus, plus junior- or senior-level courses in mineralogy, petrology, structural geology, paleontology, stratigraphy, geophysics, and a summer course in field geology. Students planning to specialize in geophysics also should have more advanced backgrounds in calculus and physics. Incoming graduate students meet with a departmental advisory review committee before enrollment to identify deficiencies and strengths and to set up curricula aimed at providing a broad background in geology at the intermediate to advanced level during the first year. Some deficiencies may be waived at this time if they are deemed nonessential.

Geology has many subdisciplines, and the department tailors each student’s curriculum to the needs of the individual. There is no departmental core curriculum or list of required courses.

Thesis Option (M.S. Degree)

The master’s degree curriculum requires completion of 30 credit hours, including up to six credit hours for thesis research, and an acceptable master’s thesis. The student sets the curriculum in consultation with a 3-member advisory committee selected from the Graduate Faculty and approved by the Graduate Advisor. Course work counted toward the degree must be distributed to provide a comprehensive general knowledge of geology in addition to specialized knowledge required for the thesis. It may include courses in departments other than Geology.

Although the Department of Geology does not award a master’s degree in geophysics, students can specialize in geophysics at the master’s level. The requirements for the degree are overseen by geophysics faculty within the Department and scientists on the staff of the Kansas Geological Survey. Geophysics research projects are also supervised by Departmental geophysicists and scientists on the staff of the Survey. Similar arrangements with faculty outside the Department can be made for students specializing in geobiology, glaciology, hydrogeology, paleontology, sedimentology, or tectonics.

Students seeking to earn an M.S. in geology must maintain at least a 3.0 grade-point average in geology and supporting science courses and pass a final oral general examination with emphasis on the areas of geology relevant to the thesis project.

Nonthesis Option (M.S. Degree)

A student may complete an M.S. degree program based primarily on course work and specialized skills. For this degree, a minimum of 36 credit hours of graduate-level study must be completed, including two written reports based on small projects (non-thesis with projects) or a single written report on a prescribed topic (non-thesis without projects). The student determines the structure of the curriculum and projects in consultation with an advisory committee of 5 faculty members. A student must declare an intention to follow the nonthesis option during the first semester of graduate study. The nonthesis degree is a terminal degree and normally cannot lead to doctoral study. In addition to maintaining a 3.0 grade-point average in course work, the student must demonstrate proficiency in the areas of geology covered by the program. This is accomplished by satisfactory performance on a series of written examinations assembled and administered by the advisory committee (non-thesis with projects) or an oral examination (non-thesis without projects). These constitute the final examination for the degree and may be repeated once, if necessary.

During or after the period of residence, a student who wishes to change to an M.S. (thesis) program or a Ph.D. program must petition the Geology Graduate Studies Committee.