

# Ph. D. - Geological Sciences

## **Description**

The University of South Carolina Department of Earth & Ocean Sciences in cooperation with the Center for Science Education offers a unique opportunity for prospective college/university faculty whose career goals focus on excellence in teaching. Dissertation research within the Doctoral Program in Geological Sciences includes the option for research which focuses on earth science education in addition to the more traditional dissertation research.

Each candidate's program is individually constructed based on his or her previous academic preparation in the earth sciences and is tailored to his or her individual career goals. All programs include the opportunity for the candidate to develop, implement, and evaluate formal college/university courses and/or informal educational experiences under the supervision of an experienced faculty member. A five-person advisory committee, chaired by the director of the Center for Science Education and including at least two additional faculty members from the Department of Earth & Ocean Sciences and at least one person outside the Department, provides guidance in the development of each candidate's doctoral program.

## **Admission**

Requirements for admission conform with the general regulations of the Graduate School and specific regulations of the Department of Earth & Ocean Sciences (see: <http://www.geol.sc.edu/graduate-program>). Candidates must hold a baccalaureate degree from an accredited institution and a traditional research-based master's degree in earth science, geology, meteorology, oceanography, or astronomy. Candidates must present transcripts of all previous undergraduate and graduate work, satisfactory scores on the Graduate Record Examination (General Only), and at least two letters of recommendation. All successful candidates for admission will be provided financial assistance through graduate teaching or research assistantships or fellowships.

## **Degree Requirements**

All candidates must complete a graduate program of study that includes at least 30 hours beyond a master's degree program. The doctoral program also requires all candidates to complete and defend a research-based dissertation. All candidates must successfully pass a qualifying examination consisting of the presentation and defense of a dissertation proposal and a final oral comprehensive examination.

### **Coursework**

Candidates must successfully complete a graduate program of studies in earth sciences and in professional education. Coursework in the earth sciences will be selected to broaden the candidate's knowledge of the earth sciences. Coursework in professional education will be selected to enhance the candidate's ability to conduct educational research.

### **Dissertation**

Each candidate must identify, conduct, and evaluate a research-based dissertation involving the development and implementation of either formal or informal educational experiences for a specific target audience. Target audiences generally include, but are not limited to, undergraduate students in general education courses, undergraduate majors in one of the earth sciences, and undergraduate prospective precollege teachers or graduate practicing precollege teachers of science.