

## Goals, Objectives, and Outcomes for the BS Geology Program

The **goals** of the geology program are to:

- Prepare students for successful scientific, technical or management careers in the geosciences or related fields
- Provide employers with a well-educated workforce that is ready and able to perform valuable scientific, technical or managerial services immediately after graduation
- Encourage the growth of knowledge-based industry and stimulate economic growth in Arkansas

**Program educational objectives** are broad statements that describe what graduates are expected to attain within a few years after graduation. Program educational objectives are based on the needs of the program's constituencies. The educational objectives of the geology program are to produce graduates who:

1. Are pursuing productive careers as geologists engaged in continuous professional growth along their chosen career path, or are pursuing graduate or professional education in geology or related fields.
2. Are able to become Geologist in Training (GIT) and are able to become licensed Professional Geologists (PG) after gaining the required professional experience and the requisite knowledge to pass the licensing exams.
3. Engage in lifelong learning, through on-the-job training, participation in professional societies, additional formal education, continuing education and professional development, research, and self-study, in order to use state-of-the-art knowledge to solve geologic problems and/or provide high quality service to the general public, employers, clients, and other professionals.

**Student outcomes** describe what students are expected to know and be able to do by the time of graduation. These relate to the knowledge, skills, and behaviors that students acquire as they progress through the program. The geology program will produce graduates who have:

- a. an ability to apply knowledge of mathematics and applied and natural sciences to areas relevant to geology.
- b. an ability to design and conduct experiments, or test hypotheses, as well as to analyze and interpret data.
- c. an ability to formulate or design a system, process, or program to meet desired needs.
- d. an ability to function on multidisciplinary teams.
- e. an ability to identify and solve geological problems.
- f. an understanding of professional and ethical responsibility.
- g. an ability to communicate effectively.
- h. the broad education necessary to understand the impact of geological solutions in a global economic, environmental and societal context.
- i. a recognition of the need for, and an ability to engage in life-long learning.
- j. a knowledge of contemporary issues.
- k. an ability to use the techniques, skills, and modern scientific and technical tools necessary for professional practice.