

## Goals, Objectives, and Outcomes of the B.S. in Geology Program

The **goals** of the 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 professional 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 are 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. Students finishing the program will have:

1. An ability to identify, formulate, and solve broadly defined technical or scientific problems by applying knowledge of mathematics and science and/or technical topics to areas relevant to the discipline.
2. An ability to formulate or design a system, process, procedure or program to meet desired needs.
3. An ability to develop and conduct experiments or test hypotheses, analyze and interpret data and use scientific judgment to draw conclusions.
4. An ability to communicate effectively with a range of audiences.
5. An ability to understand ethical and professional responsibilities and the impact of technical and/or scientific solutions in global, economic, environmental, and societal contexts.
6. An ability to function effectively on teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty.