

## About Geological Engineers

Geological Engineers are distinctly different from other, run-of-the-mill engineers. They engineer with natural materials (rock, soil, water, even snow), unlike other engineers who use man-made materials like steel, concrete, asphalt and composites. Hence, if you would like to be an engineer that works in harmony with nature, there is only one engineering track for you: geological engineering.

## Geological Engineers...

- assess and alleviate geologic hazards like landslides, earthquakes, floods and volcanic eruptions.
- design and build highways, foundations, tunnels and mines.
- save the environment from polluted groundwater and by safe siting of landfills.
- design urban sites for new development and landfills.

## Are You Someone Who...

- ... loves the outdoors?
- ... likes to solve problems?
- ... is self-reliant?
- ... is a good communicator?
- ... does well in math?
- ... enjoys science?
- ... is independent?
- ... likes challenges?

**We have just the major for you... be a geological engineer!**



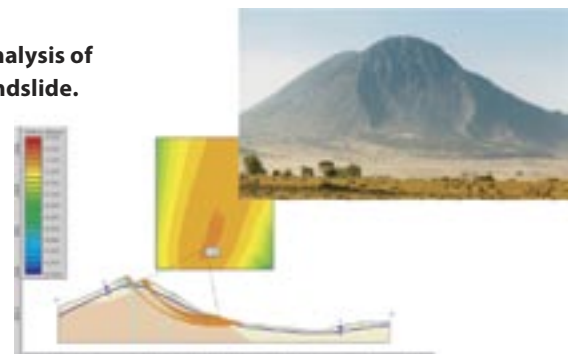
The Geological Engineering program is in the Department of Geological Sciences and part of the Mackay School of Earth Sciences and Engineering and College of Science at the University of Nevada.

- Small class sizes and a low student-to-faculty ratio make learning more personal with easy access to professors and peers.
- Student lounge with year-round advisement services available to Mackay students.

## Internships, Research and Employment Opportunities

Our students have many paid year-round and summer internship options. They work in local geotechnical consulting companies, as well as federal, state and local agencies. Undergraduate students can also become involved in paid university research projects. Most students have job offers or graduate school acceptance prior to graduation.

**Computer analysis of a volcano landslide.**



## High School Preparation

In high school, complete at least:

- one year each of chemistry and physics
- highest mathematics available, i.e. calculus

Some students start with AP credit in some of these or in other areas. Students who complete the program in four years usually have ACT scores of at least 28 (Math) and 21 (English), or comparable SAT scores.

## About Scholarships and Financial Aid

Scholarships are available exclusively for students enrolled in the geological engineering major. Filing the combined scholarship and financial aid applications at [www.finaid.unr.edu](http://www.finaid.unr.edu) will make you eligible for both university-wide and geological engineering scholarships. The early deadline for applications is **November 15**, and you must be admitted by **February 1** for priority consideration.

### ZACK BLACK

#### Geological Engineering major

Hi, I'm Zack Black, a junior in the geological engineering program. I'm in this major because of a field trip to Mackay in seventh grade.

I graduated from Churchill County High School, in Fallon, Nevada, and then attended college, as a wildlife biology major, for two years. I took a year off to work as a draftsman, before moving to Belgium to play soccer. When I came back, I met with Dr. James Carr at Mackay, about a major in geological engineering. It was a way to combine my engineering and earth science interests.

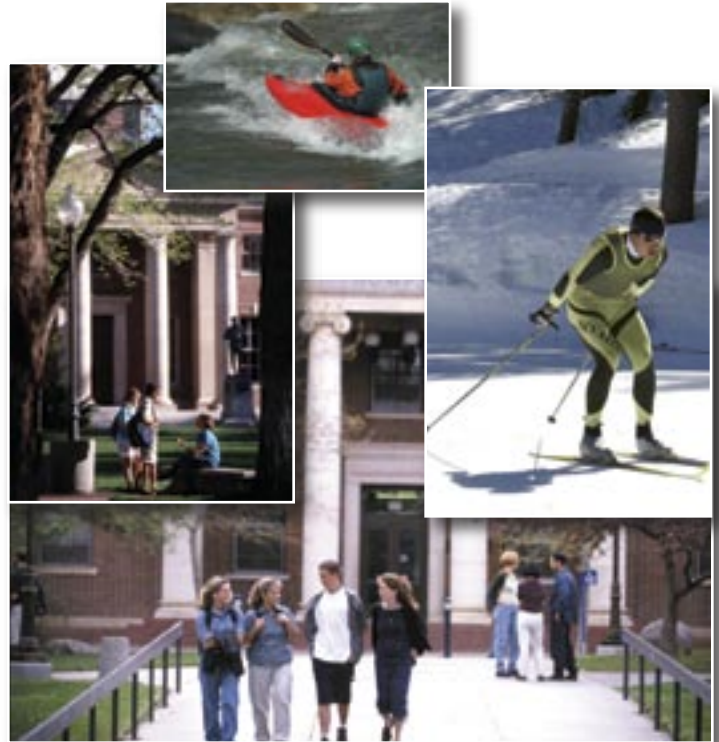
My hobbies are largely based in the outdoors. I play soccer and have learned to love rugby. I also rock climb whenever I can.

Since I've been at Mackay, I've been a part of the Mackay Student Representatives program, so I can tell others about geological engineering. I've spoken to high school science classes and have led students on tours of our buildings and labs, and introduced them to other geological engineering students.

I work part-time for Terracon, a geo-tech firm in Reno, applying what I've learned. I get to do a wide variety of things, from bidding for jobs (sales) to lab testing and design concrete and asphalt mixtures for street paving and site preparation for new buildings. Getting to work in the field while I'm still a student will lead me into a permanent job when I graduate.



*U.S. News and World Report* consistently ranks the University of Nevada among "America's Best" small universities.



## University of Nevada

Situated in the foothills on the north side of the Truckee Meadows, the University of Nevada is a land-grant institution and the oldest of the eight institutions in the University and Community College System of Nevada. Approximately 15,000 students are enrolled. The 255-acre main campus features both historic and contemporary architecture.

### Mackay School of Earth Sciences and Engineering College of Science

[www.unr.edu/mackay/student-services](http://www.unr.edu/mackay/student-services)



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