The Department of Earth and Environmental Science is the administrative center for the undergraduate environmental science degree. This page contains some general information provided by the admissions office. More detailed information is available in the New Mexico Tech Catalog.

**What is an environmental science degree, and how does it differ from environmental engineering?**

Tech's environmental engineering degree involves rigorous and specialized courses which prepare graduates for a career in environmentally related engineering problem-solving. Environmental science is designed to give you the flexibility of a science background in a specific environmental area outside of engineering. The program will prepare you for jobs applying environmental knowledge to industrial applications. You could also enter the burgeoning field of environmental regulation, working for a health or environmental department on the local, state, or federal level.

Unlike many other programs, ours does not consist of survey courses to prepare you for public administration. This is a science degree: you will study physics, chemistry, biology, geology, and hydrology to gain an overall understanding of the many factors which affect environmental problems. Your degree will be a bachelor of science.

**Why should I choose New Mexico Tech?**

New Mexico Tech has a long history of excellence in research in many areas affecting the environment. We have professors who conduct research on acid rain, indoor radioactivity, and formation of ozone during thunderstorms. Our hydrology program is considered one of the best in the world. One of their prime areas of research is understanding contaminated groundwater, in quest of better cleanup techniques. Our geology department is large and diverse, offering great variety in both the courses you can take and the ideas you'll be exposed to. You'll not only take your classes from the experts, but you'll also find some campus job opportunities with the many research projects our faculty conduct.

**What options do I have within environmental science?**

The program offers a choice of five options: biology, chemistry, geology, hydrology, or instrumentation and measurements. You will have a broad range of courses which give an overview of environmental problems, many of which are overlapping and interconnected. But you will concentrate on courses in your option, to be able to address specific problems within
What classes will I take for an environmental science degree?

Like all Tech students, you'll take basic chemistry, physics, calculus, and computer science. You'll also take some English, social studies, and humanities courses to round out your education. As an environmental science major, you'll also take courses to give you a rigorous background in the subject: cell biology, organic chemistry, biochemistry, geology, groundwater hydrology, and environmental engineering. Then, you'll take specialized courses within the option you've chosen:

- Biology--botany, zoology, molecular biology, genetics, with recommended courses in microbiology, ecology, environmental toxicology, limnology, and bacterial physiology
- Chemistry--environmental chemistry, physical chemistry, organic chemistry, instrumental methods, with recommended courses in biochemistry, industrial chemistry, and more physical chemistry
- Hydrology--surface water hydrology, quantitative hydrology, geophysical methods, geomorphology, stratigraphy and sedimentation, structural geology, vector analysis
- Geology--environmental geology, mineralogy, geomorphology, optical mineralogy, petrology, sedimentary petrology, metamorphic petrology, stratigraphy and sedimentation, structural geology, field methods
- Instrumentation and Measurements--electrical engineering, circuits and signals, digital electronics, microprocessors, analog electronics, chemistry, geology, geophysics, physics, and computer science

What sorts of jobs will this degree qualify me for?

More and more, industry needs environmental scientists to help comply with increasingly strict regulations. Furthermore, federal, state, and local regulatory agencies need experts to develop regulations, conduct tests, and assure compliance. Environmental scientists may also work in basic research, determining how certain contaminants affect the environment and what changes need to be made.

What should I study in high school to prepare for an environmental science degree?

Besides getting a solid background in English and social studies, you should plan to take as many math and science courses as you can. At the very least, you should take algebra, geometry, and trigonometry, and if your school offers calculus or other advanced math, take that, too. Take at least two laboratory sciences, and preferably take biology, chemistry, and physics. Earth science is also important, if your school offers it. Round out your schedule with a
foreign language.