At North Dakota State University geoscientists bring the sciences together to uncover the mysteries of our Earth. We study in places as close as Glacial Lake Agassiz to learn its history but also of locations as far away as Antarctica, South America, and Mars! Involving our undergraduates in this research offers an excellent experience for them as they enter the work force or continue on to advanced degrees.

For more information, visit us on the web at

www.ndsu.edu/geosci

You may wish to continue your studies. In that case, you will apply to a **Graduate School** at a university to work towards a Master of Science (M.S.) degree or the Doctorate of Philosophy degree (Ph.D.). The **Master's degree** takes 2 to 3 years of additional study. You will take graduate-level courses and work on a research topic with one or more professors. The **Ph. D. degree** takes another 3 to 5 years of research and study.

Contact the college you're interested in for an ***Undergraduate bulletin***. This has everything you need to know about getting your degree in the Earth Sciences.

Earth Sciences on the Web

Careers in Geoscience
http://www.awg.org/eas/profiles.html

and also at
http://www.agiweb.org/career/

Volcanoes!
http://volcano.und.edu/vw.html

Earthquakes!
http://quake.wr.usgs.gov/

'Ask-A-Scientist': oceanography:
http://oceanlink.island.net/

The United States Geological Survey Includes 'Ask-A-Geologist'
http://geology.usgs.gov/index.shtml

Paleontology
http://geology.er.usgs.gov/paleo/

Water Geology
http://water.usgs.gov/public/education.html

Frequently asked questions about marine science:
http://www.vims.edu/adv/ed/stu.html#ask

Global Climate Change
http://www.ncdc.noaa.gov/ol/climate/climateextremes.html

What IS an Earth Scientist?

Earth Scientists investigate

- Climate changes
- Volcanoes
- Earthquakes
- Glaciers
- Rivers and water underground
- Mineral and energy resources
- Pollution
- Landscapes
- Planets and our solar system
- Soil
- The Oceans
- Fossils

How Do I Become An Earth Scientist?

It all starts in **High School**!!

What courses do I need to take?

Turn the page to find out...

Prepare for your career by taking in high school…

- **Math every year!** You'll need 4 years of Mathematics, including Algebra I, Geometry, Algebra II, and Trigonometry/Precalculus
- A year of **chemistry**
- **Physics**, if your school offers it
- **Biology**
- A **Foreign Language** is very useful since Earth Scientists work all over the world

You should also take

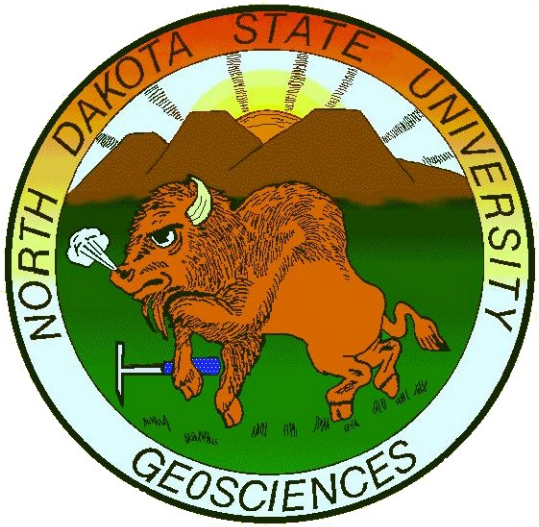
- **Earth Science**, if your school offers it

Now you're ready for **college**!!

Courses to take your first two years in college:

- At least one year of **calculus**
- One year of **English composition**
- One year of **Chemistry**
- One year of **Physics**
- One semester of **Biology**

You'll either transfer and finish your last two years at a **4-year college** or **University**, or you'll be there already and fulfill the requirements to complete your degree.



Bachelor of Science Degree (B.S.) in Geoscience

To complete the B.S. degree at NDSU, you'll take these courses:

- **Physical (Introductory) Geology**: the first class in Geology, you'll learn about volcanoes, earthquakes, glaciers, rivers, and oceans
- **The Earth Through Time**: the History of the Earth, from its formation through the appearance of Life, and all the plate motions, mountain building, and changes in plants and animals along the way.
- **Mineralogy**: learn about minerals, where they form, how to identify them, what they're used for.
- **Petrology**: a course on rocks, how they form, what they tell us about the history of the Earth.
- **Geochemistry:** the chemistry of rocks and minerals and what this tells us about past climate, the age of the Earth, and deep Earth conditions.
- **Field Geology**: a course set in the North Dakota badlands where you'll learn to map a landscape using a traditional techniques combined with state of the art equipment (GPS/GIS) to recognize any geologic hazards (landslides? earthquakes? flooding? volcanoes?), land deformation features resulting from shifts in the geologic strata and Earth materials deposited as a result of this movement.
- And **other courses**, in subjects such as Environmental Geology, Sedimentology, Stratigraphy, Paleontology, Geomorphology, and others.

With this B.S. degree, you might

- Work for an environmental firm
- Work for the local, state or federal government on environmental issues
- With a teaching certificate, teach Earth Science in junior high or high school
- Explore for energy or mineral resources.
- Work in a laboratory
- Work on a research ship
- *Check out the web sites listed on the reverse of this brochure for* ***more careers in Geoscience***