Who will I work with?

Carpenter, Philip J., Ph.D., New Mexico Institute of Mining and Technology, professor, geophysics

Dodd, Justin P., Ph.D., University of New Mexico, assistant professor, stable isotope geochemistry

Fischer, Mark P., Ph.D., The Pennsylvania State University, professor and chair, structural geology, rock deformation

Frank, Mark R., Ph.D., University of Maryland, associate professor and director of graduate studies, mineralogy, experimental mineralogy, experimental geochemistry

LaDue, Nicole D., Ph.D., Michigan State University, assistant professor, geoscience education

Lenczewski, Melissa E., Ph.D., University of Tennessee, associate professor, geomicrobiology, organic geochemistry, contaminant hydrogeology

Powell, Ross D., Ph.D., The Ohio State University, professor, sedimentology, glacial processes, climate change

Scherer, Reed P., Ph.D., The Ohio State University, professor, paleontology, biostratigraphy

Stansell, Nathan D., Ph.D., University of Pittsburgh, assistant professor, stratigraphy, climate change, glacial geology

Stoddard, Paul R., Ph.D., Northwestern University, associate professor, tectonophysics, geophysics

Walker, James A., Ph.D., Rutgers University, professor, igneous petrology, volcanology

Can I get a job?

Students who graduate with good grades and solid letters of recommendation will find it relatively easy to find employment. With a B.S. degree you can expect to work as a laboratory or field technician in the environmental consulting, mining, forestry, and petroleum industries. This work may involve sample collection, sample analysis, interacting with clients, and technical report writing. Opportunities also exist in government regulatory agencies like the U.S. or Illinois EPA, as well as with non-profit organizations dedicated to environmental conservation and protection.

Check out the link below to see the NIU Career Services list of career information for geoscience graduates.

http://www.niu.edu/careerservices/weblinks/majors/geology.shtml

We care about your Career Success!

Our Geoscience Career Preparation course will start your professional network of employer connections, and help you develop the professional and technical skills necessary to land the job you want!

Have questions?

Visit our website:
http://www.niu.edu/geology/index.shtml

Get answers to your questions:
askgeology@niu.edu

Call us:
815-753-1943
Why choose the Geology emphasis?

Students should pick an emphasis because of their interests. Taking classes that challenge and excite you will give you a better chance of doing well. Our curriculum is designed so that if you do well in your studies, you will be well prepared for employment, regardless of which emphasis you choose.

The Geology Emphasis is designed for students whose interests are primarily in earth science. Choose this emphasis if you want greater depth of study in earth science topics.

When choosing, consider these things:

1. There is less flexibility to study other sciences in this emphasis. Although you will have choices of geology electives, you have fewer choices in chemistry, biology and math.
2. This emphasis requires a 6-week summer field course that is taught in Wyoming and South Dakota; there is added cost and time away from family.
3. There are greater math, physics and chemistry requirements in this emphasis.
4. Some graduate schools may look more favorably on applicants in this emphasis because many graduate programs will expect students to have taken calculus, physics and chemistry as part of their undergraduate curriculum.

How do I get admitted?

There are no special requirements for admission to the B.S. program in Geology and Environmental Geosciences. Use the link below to see NIU’s admission requirements.

http://www.niu.edu/admissions/index.shtml

Transfer students should work hard to finish their associates degree, and to complete two semesters of calculus, chemistry and physics before applying. You can be admitted without this, but doing it will make it much easier to complete your NIU requirements in only 2 years. Use the link below to make sure the courses you’re taking will transfer and substitute for NIU courses in our curriculum.

http://www.niu.edu/admissions/transfer/plan/credits/index.shtml

Curriculum for this emphasis

Total Requirements: 66-68 Credit Hours

A) Core Geology Courses (20 credit hours)

Each of the following:

- GEOL 120 Introductory Geology (3 hrs)
- GEOL 121 Introductory Geology Lab (1 hr)
- GEOL 322 Paleogeography, Paleoclimatology, Paleoecology (4 hrs)
- GEOL 325 Solid Earth Composition (4 hrs)
- GEOL 330 Global Cycles (4 hrs)
- GEOL 335 Dynamics & Structure of the Earth (4 hrs)

B) Upper Division Geology Courses (24 credit hours)

Each of the following: (9 credit hours)

- GEOL 405 Stratigraphy (3 hrs)
- GEOL 478 Geologic Field Work (3 hrs)
- GEOL 479 Geologic Field Work (3 hrs)

Required Electives: (15 credit hours)

In addition to the required Core Courses and the upper division courses listed above, students are required to take 15 credit hours of upper division courses numbered 300 and above. Credit hours earned from a Senior Thesis research project may be used toward fulfilling this requirement.

Example GEOL electives include:

- GEOL 402 Sedimentology
- GEOL 407 Global Climate Change through Time
- GEOL 412 Petrography
- GEOL 420 Geochemistry of the Earth’s surface
- GEOL 421 Environmental Geochemistry
- GEOL 425 Engineering Geology
- GEOL 442 Geomorphology
- GEOL 444 Economic Geology
- GEOL 468 Geomicrobiology
- GEOL 485 Volcanology
- GEOL 490 Hydrogeology
- GEOL 491 Geophysical Well Logging
- GEOL 493 Groundwater Geophysics
- GEOL 496 Geophysics

C) Allied Science and Math (22-24 credit hours)

*The College of Liberal Arts and Sciences requires that a student must maintain a 2.0 GPA in these courses for graduation.

Students must take the following chemistry sequence:

- CHEM 210T General Chemistry I (3 hrs), and
- CHEM 212 General Chemistry Lab I (1 hr)
- CHEM 211T General Chemistry II (3 hrs), and
- CHEM 213 General Chemistry Lab II (1 hr)

Students must take the following mathematics sequence:

- MATH 229 Calculus I (4 hrs), and
- MATH 230 Calculus II (4 hrs)

Choose one of the following physics sequences:

- PHYS 253 and PHYS 273 Fundamentals of Physics I and II (8 hrs)
- OR
- PHYS 210 and PHYS 211 General Physics I and II (8 hrs)

D) Other Requirements

University graduation requirements:

- a minimum of 120 semester hours that can be applied toward the degree is required for graduation.
- a minimum of 40 of the total number of semester hours must be in courses numbered 300 and/or 400. These must include at least 12 semester hours of major departmental courses taken at NIU.