



Environmental Studies, B.S. *major*

Geohydrology Emphasis

A total of 120 semester credits are needed for the **Environmental Studies, Geohydrology emphasis B.S.** degree and include the following:

- 40 upper division credits (level 3000/4000)
- 63 required major core credits
- Completion of Core Curriculum credits (Minnesota Transfer Curriculum [MnTC] Goal Areas 1-10) - required for all baccalaureate degrees
- Completion of BSU Focus and Nisidotaading Course Requirements

Dual Degrees

Students wishing to complete two degrees concurrently, (example: Bachelor of Science and Bachelor of Arts) must complete a minimum of an additional 30 credits above the required 120 credits.

Multiple Credentials

Any additional major, minor or certificate in a degree must have at least 6 credits of course work not used to meet the requirements of another major, minor or certificate in the degree.

Required Credits: 63

Required GPA: 2.25

I REQUIRED CORE COURSES

Complete the following courses:

- ENVR 2000 Introduction to Environmental Science (3 credits)
- ENVR 3880 Environmental Controversies (2 credits)
- ENVR 4880 Senior Seminar I (1 credit)

Select 1 of the following courses for 3 credits:

- ENVR 4970 Internship (3 credits)
- ENVR 4990 Thesis (3 credits)

Select 1 of the following courses:

- ENVR 3800 Sustainability Analytics & Modeling (3 credits)
- PSY 3401 Basic Statistics for Research (4 credits)
- SOC 3001 Quantitative Research Methods in the Social Sciences (3 credits)
- STAT 2610 Applied Statistics (4 credits)

Select 1 of the following courses:

- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)
- ENVR 4610 Sustainability: Theory and Practice (4 credits)

Select 1 of the following courses:

- GEOL 3120 Soils (4 credits)
or BIOL 3120 Soils (4 credits)
- GEOL 3400 Glacial and Pleistocene Geology (3 credits)

GEOHYDROLOGY EMPHASIS

Complete the following courses:

- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOL 1110 Physical Geology (4 credits)

- GEOL 2110 Crystals, Minerals and Rocks (4 credits)
- GEOL 3211 Environmental Hydrology (3 credits)
- GEOL 3212 Hydrogeology (3 credits)
- GEOL 3600 Stratigraphy and Sedimentation (3 credits)
- GEOL 3700 Environmental Geophysics (3 credits)

Select 1 of the following courses:

- MATH 1470 Precalculus (3 credits)
- MATH 2471 Calculus I (5 credits)

Select 1 of the following courses:

- PHYS 1101 General Physics I (4 credits)
- PHYS 2101 University Physics I (4 credits)

Select 15 semester credits from the following courses that have not been completed in the core above, or any other related courses (3000/4000) approved in advance by a Center for Sustainability Studies advisor:

- ENVR 3040 Environmental Economics (3 credits)
or ECON 3040 Environmental Economics (3 credits)
- ENVR 3300 Environmental Management and Safety (3 credits)
- ENVR 3600 Environmental Justice and Sustainability (3 credits)
- ENVR 3840 Wetlands Ecology (3 credits)
or BIOL 3840 Wetlands Ecology (3 credits)
- ENVR 4050 Geochemistry (3 credits)
- ENVR 4210 Environmental Law and Policy (3 credits)
- ENVR 4220 Sampling and Analysis (4 credits)
- ENVR 4400 Environmental Microbiology (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- GEOG 4130 Biogeography (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)
- GEOG 4265 Spatial Analysis (3 credits)
- GEOG 4275 Advanced Geographic Information Systems (3 credits)
- GEOL 3120 Soils (4 credits)
or BIOL 3120 Soils (4 credits)
- GEOL 4300 Global Environmental Change (3 credits)

Suggested Semester Schedule | Environmental Studies, B.S. Geohydrology Emphasis

The following is a list of Environmental Studies Major Courses arranged by year. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions and this schedule is flexible.

Freshman

- ENVR 2000 Introduction to Environmental Science (3 credits)
- MATH 1470 Precalculus (3 credits)
or MATH 2471 Calculus I (5 credits)
- PHYS 1101 General Physics I (4 credits)
or PHYS 2101 University Physics I (4 credits)
- Core Curriculum requirements
- Emphasis electives

Sophomore (with the emphasis already selected)

- ENVR 3600 Environmental Justice and Sustainability (3 credits)
or ENVR 4210 Environmental Law and Policy (3 credits)

- *or* ENVR 4610 Sustainability: Theory and Practice (4 credits)
- ENVR 3880 Environmental Controversies (2 credits)
- GEOL 1110 Physical Geology (4 credits)
- GEOL 2110 Crystals, Minerals and Rocks (4 credits)
- ENVR 3800 Sustainability Analytics & Modeling (3 credits)
- *or* SOC 3001 Quantitative Research Methods in the Social Sciences (3 credits)
- *or* STAT 2610 Applied Statistics (4 credits)
- *or* PSY 3401 Basic Statistics for Research (4 credits)
- Core Curriculum requirements
- Emphasis electives

Junior

- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOL 3211 Environmental Hydrology (3 credits)
- GEOL 3700 Environmental Geophysics (3 credits)
- Core Curriculum requirements
- Emphasis electives

Senior

- ENVR 4880 Senior Seminar I (1 credit)
- ENVR 4970 Internship (3 credits)
- *or* ENVR 4990 Thesis (3 credits)
- GEOL 3212 Hydrogeology (3 credits)
- GEOL 3400 Glacial and Pleistocene Geology (3 credits)
- *or* GEOL 3120 Soils (4 credits)
- *or* BIOL 3120 Soils (4 credits)
- GEOL 3600 Stratigraphy and Sedimentation (3 credits)
- Core Curriculum requirements
- Emphasis electives