



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)
- PSYC 3401 Basic Statistics for Research (4 credits)
- SOCI 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 SOCI 3001 Quantitative Research Methods in the Social Sciences (3 credits)
or STAT 2610 Applied Statistics (4 credits)
or PSYC 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