

ENVIRONMENTAL, GEOGRAPHICAL & GEOLOGICAL SCIENCES: ENVIRONMENTAL GEOSCIENCE

Bachelor of Science (BS)

This degree map is based on the current Academic Catalog and is subject to change. Please note that the degree map is designed to give you a sense of roughly how courses might be distributed over a 4-year degree. Your exact schedule will differ depending on a range of factors though we recommend taking a minimum of 15 credits each fall and spring semester. Regular consultation with your academic advisor is the best way to make sure that you are taking the courses you need in the right order to ensure efficient progress through your degree program.

Sample 4-Year Plan

First Year			
Fall Courses	Credits	Spring Courses	Credits
EGGS 102 - World Cultural Geography (D)	3	EGGS 105 - Environmental Issues and Choices	3
EGGS 100 - Introduction to Environmental Science	3	EGGS 242 - Mapping and GIS Fundamentals	3
EGGS 120 - Physical Geology (N)	4	EGGS 130 - Historical Geology	4
Quantitative Requirements: Choose 2	3	Gen Ed Foundations - Writing (W)	3
Gen Ed Foundations - FYS 100 (U)	3	Quantitative Requirement: Choose 2	3
Semester Total	16	Semester Total	16

Second Year			
Fall Courses	Credits	Spring Courses	Credits
EGGS 271 - Fundamentals of Hydrology	3	EGGS 213 - Fundamentals of Soil Science	3
EGGS 360 - Principles of GIS 1	3	EGGS 361 - Principles of GIS 2	3
CHEM 121 - General Chemistry 1 (N)	4	PHYS 208 - Introduction Physics 1	4
Gen Ed Creativity and Expression - Literature (L)	3	Gen Ed Interconnections (2)	3
Gen Ed Foundations - Oral Communication (O)	3	Gen Ed Citizenship - Ethical Reasoning (E)	3
Semester Total	16	Semester Total	16

Third Year			
Fall Courses	Credits	Spring Courses	Credits
EGGS 265 - Geomorphology	3	EGGS 263 - Mineralogy/Petrology	4
EGGS 259 - Oceanography	3	EGGS 380 - Dams, Reservoirs, and Rivers	3
EGGS 301 - Water Resources Management	3	EGGS 470 - Hydrogeology	3
Gen Ed Citizenship - Critical Reasoning (R)	3	Gen Ed Natural World & Tech - Technologies (T)	3
		Free Elective	3
Semester Total	12	Semester Total	16

Fourth Year			
Fall Courses	Credits	Spring Courses	Credits
Free Elective	3	EGGS 491 - Research in EGGS	3
Gen Ed Interconnections (3)	3	EGGS 471 - Applied Surface Hydrology	3
EGGS 460 - Aqueous Environmental Geochemistry	4	Gen Ed Creativity and Expression - Arts (A)	3
Gen Ed Foundations - History (H)	3	Free Elective	3
Free Elective	3		
Semester Total	16	Semester Total	12

Winter/Summer College - Optional

While not required, Winter and Summer sessions are offered each year and may help you stay on track or get ahead. You may take up to seven (7) credits during Winter College and up to 14 credits during Summer College.

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Curriculum Checklist

Total of 59+ credits excluding Directed General Ed

Core Requirements – A (Choose 1, 3 credits)

- ___ EGGS 100 Environmental Sciences (N)(3)
- ___ EGGS 105 Environmental Issues & Choices (G)(3)
- ___ EGGS 140 Sustainability Science (G)(3)

Core Requirements – B (Choose 1, 0 credits)

- ___ EGGS 102 World Cultural Geography (D)(3)
- ___ EGGS 104 World Regional Geography (G)(3)

Core Requirements – C (Choose 1, 3 credits)**

- ___ EGGS 100 Environmental Science (N)(3)
- ___ EGGS 101 Physical Geography (N)(3)
- ___ EGGS 105 Environmental Issues & Choices (G)(3)
- ___ EGGS 140 Sustainability Science (G)(3)
- ___ EGGS 220 Environmental Geology (N)(3)

Cognate Requirements (1 credits)

- ___ CHEM 121 General Chemistry 1 (N)(4)

Cognate Electives (Choose 1, 1 credits)

- ___ BIOL 110 Principles of Biology 1 (N)(4)
- ___ PHYS 208 Introductory Physics 1 (N)(4)

Cognate Math (Choose 2, 3 credits)

- ___ EGGS 150 Quantitative Methods (3)
- ___ MATH 118/118A College Algebra (Q)(3)
- ___ MATH 150 Essentials of Calculus (Q)(3)
- ___ MATH 160 Calculus 1 (Q)(4)
- ___ STAT 141 Introduction to Statistics (Q)(3)

Major Requirements (24 credits)

- ___ EGGS 120 Physical Geology (N)(4)
- ___ EGGS 130 Historical Geology (4)
- ___ EGGS 213 Fundamentals of Soil Science (3)
- ___ EGGS 242 Mapping and GIS Fundamentals (3)
- ___ EGGS 263 Mineralogy & Petrology (4)*
- ___ EGGS 265 Geomorphology (3)*
- ___ EGGS 271 Fundamentals of Hydrology (3)
- ___ EGGS 360 Principles of GIS 1 (3)*

Major Electives: Choose 7 (21+ Credits)

- ___ BIOL 301 Ecology (3)*
- ___ BIOL 340 Microbiology (3)*
- ___ BIOL 411 Freshwater Ecology (3)*
- ___ BIOL 419 Ecosystems (3)*
- ___ BIOL 438 Env Policy and Regulations (3)*
- ___ BIOL 456 Ecology of Streams and Rivers (3)*
- ___ EGGS 230 Special Topics in Field Geology (3)
- ___ EGGS 275 Introduction to Surveying (3)
- ___ EGGS 301 Water Resources Management (3)*
- ___ EGGS 302 Land Resources Management (3)*
- ___ EGGS 305 Environmental Risks and Hazards (3)*
- ___ EGGS 320 Remote Sensing (3)*
- ___ EGGS 325 UAV Applications (3)*
- ___ EGGS 353 Geological Mapping & Analysis (3)*
- ___ EGGS 358 Environmental Conservation & Preservation (3)*
- ___ EGGS 361 Principles of GIS 2 (3)*
- ___ EGGS 364 Digital Cartography (3)*
- ___ EGGS 368 Sedimentology & Stratigraphy (3)*
- ___ EGGS 369 Structural Geology (4)*
- ___ EGGS 415 Hydric Soils & Wetlands Delineation (4)*
- ___ EGGS 416 Applied Soil Science & Land Use (4)*
- ___ EGGS 420 Watershed Restoration (3)*
- ___ EGGS 421 Environmental Permitting (3)*
- ___ EGGS 451 Coastal Environmental Oceanography (3)*
- ___ EGGS 455 Environmental Impact Assessment (3)*
- ___ EGGS 460 Aqueous Environmental Geochemistry (4)*
- ___ EGGS 461 Energy and Mineral Resources (4)*
- ___ EGGS 380 Dams, Reservoirs, and Rivers (3)*
- ___ EGGS 465 Paleontology (4)*

Curriculum Checklist Continued

Major Electives (Continued.)

- ___ EGGS 470 Hydrogeology (3)*
- ___ EGGS 471 Applied Surface Hydrology (3)*
- ___ EGGS 480 Geophysical Methods (4)*
- ___ EGGS 491 Research in EGGS** (3)*
- ___ EGGS 493 Independent Study in EGGS (3)*
- ___ EGGS 498 Internship in EGGS** (3)*
- ___ LAWL 350 Environmental Law and Policy (3)*
- ___ MARSCI ### Any approved Marine Science course (3)*

Major Capstone (Choose 1, 3+ credits)

- ___ EGGS 450 Field Experience in Environmental Geoscience (3+)*
- ___ EGGS 491 Research in EGGS** (3+)*
- ___ EGGS 498 Internship in EGGS** (3+)*

Cannot count courses twice for different categories, e.g. EGGS 100 cannot be counted in both Core A and Core C; EGGS 496 and 498 cannot be counted in Major Electives and Major Capstone unless they are **separate research projects or Internships.

()*Denotes advanced coursework

Students must take a minimum of 42 credits of advanced coursework. Advanced coursework can be met in major courses, minor courses, free elective courses, and general education courses. Courses that meet this requirement are designated in Banner.

General Education Requirements

(45 credits)

Note: Some requirements may be fulfilled by coursework in your major program including examples of directed Gen Ed courses noted below

- Foundations (15 credits)
 - FYS (U):
 - Writing (W):
 - Oral Comm. (O):
 - Quantitative (Q): STAT 141
 - History (H):
- Interconnections (9 credits)
 - Diversity (D): EGGS 102
 - Global Perspectives. (G): EGGS 105
 - D or G or Foreign Lang. (F):
- Citizenship & Responsibility (6 credits from at least two goals)
 - Goal 1: Citizenship (S):
 - Goal 2 Ethical Reasoning (E):
 - Goal 3: Crit. Reasoning (R):
- Natural World & Technologies (9 credits)
 - Natural World (N): CHEM 121
 - Natural World (N):
 - Technology (T):
- Creativity & Expression (6 credits)
 - Literature (L):
 - Arts (A) or Creativity (C):

Degree Requirements

All students must obtain a minimum of 120 credits, complete all General Education requirements, and all requirements for the selected major. Meet with your advisor and consult Degree Works to monitor your progress and for all graduation requirements.

A minimum GPA of 2.0 in the major and overall are required.