

# BS Environmental Science, Geography, and Management

## GEP FOUNDATION **11 units**

### *Environmental Systems*

- GEP 201 Global Environmental Systems (3, GE B1)

### *Society, Environment and Development (choose one)*

- GEP 150 Global Societies through Film (3, GE A3/C1)
- GEP 203 Human Geography (3, GE D)
- GEP 206 Society, Environ. & Sustainable Dvlpmnt (3, GE E)
- GEP 305/6 World Regions in Global Context (3, GE UD D)

### *Environmental Inquiry and Analysis (take both)*

- GEP 211 GEP Forum (1)
- GEP 280 Foundations in Environ. Data & Analysis (4)

## NATURAL & DATA SCIENCE FOUND **10 units**

NOTE: Select either the Biological Science Theme or the Physical Science Theme, then select one additional course from an alternative theme

### *Biological Science Theme*

- BIOL 130 Intro Cell Biology and Genetics (4, GE B2, B3)
- BIOL 131 Biological Diversity and Ecology (4, GE B2, B3)

### *Physical Science Theme*

- CHEM 110 or CHEM 115A (3-5, GE B1 or B1, B3)
- CHEM 115B (5, GE B1, B3)
- PHYS 114 or 210A (3-4, GE B1 or B3)
- PHYS 214 or 210B (3-4)

### *Geospatial Data Science Theme*

- CS 115 Programming I (4)

## BREADTH **15 units**

NOTE: Choose one course from each category

### *Society, Environment and Development*

- GEP 324 Climate Change & Society (4)
- GEP 325 Global Food Systems (4)
- GEP 370 Globalization and the City (4)
- GEP 373 Energy, Technology, & Society (4)

### *Environmental Systems*

- GEP 340 Applied Ecology (3)
- GEP 351 Natural Hazards (3, GE UD B)
- GEP 355 Weather and Climate (3, GE UD B)

### *Planning*

- GEP 360 Intro to Urban and Environmental Planning (4)

### *Geospatial Analysis*

- GEP 387 Introduction to GIS (4)

## PROFESSIONAL PREP & EXPERIENCE **5 units**

NOTE: \* 310 & 311 required; 311 is repeatable but only 1 unit counts here

- GEP 310 Professional Development (2) \*
- GEP 311 Research Colloquium (1) \*
- GEP 201b Global Environmental Systems Lab (1, GE B3)
- GEP 312 Professional Conferences (1-2)
- GEP 313 Field Experience (1-2)
- GEP 316 Research Assistant in GEP (1-4)
- GEP 317 Internship (1-3)
- GEP 318 Agroecology in Practice (2)
- GEP 319 Native Plant Propagation in Practice (2)

NOTE: Courses required for the major must be taken for a traditional letter grade, except for courses that are offered CR/NC only. Students must earn a C- or better in any course applied to the major. Breadth courses are not double-counted in GEP electives

## GEP ELECTIVES **21 units**

NOTE: Take 3 courses in one focus area. Take additional electives within any focus area to reach 21 units. Take a 400-level course during junior/senior year (72+ units). Breadth courses do not count as electives. Special topics (GEP 396; 397) may apply to a focus in consultation with an advisor.

### *Focus 1: Environmental Management & Policy*

- GEP 321 Parks & Protected Area Management (3-4)
- GEP 323 Natural Resources & Development (4)
- GEP 324 Climate Change & Society (4)
- GEP 325 Global Food Systems (4)
- GEP 326 Water Law, Policy & Management (3-4)
- GEP 330 Environmental History (4)
- GEP 332 Environmental Literature (3)
- GEP 332WIC Environmental Literature (4)
- GEP 362 Environmental Impact Assessment (3-4)
- GEP 367 Transportation Policy and Technology (3-4)
- GEP 368 Urban Design (3-4)
- GEP 461 Planning Practice and Methodology (4)

### *Focus 2: Environmental Systems*

- GEP 340 Applied Ecology (3)
- GEP 343 Biogeography (4)
- GEP 344 Field Methods (2)
- GEP 345 Lab Methods (2)
- GEP 347 Conservation Biology (4)
- GEP 350 Geomorphology (4)
- GEP 351 Natural Hazards (3, GE UD B)
- GEP 352 Soil Science (3-4)
- GEP 354 Watershed Hydrology and Management 4
- GEP 355 Weather and Climate (3, GE UD B)
- GEP 446 Restoration Ecology (4)
- GEP 456 Global Climate Change(4)

### *Focus 3: Energy Management & Design*

- GEP 373 Energy, Technology, & Society (4)
- GEP 374a Strategies for carbon and energy reductions (3)
- GEP 374b Laboratory Methods for Energy (1)
- GEP 375 Renewable & Resilient Energy Sources (4)
- GEP 476 Energy Services and Efficiency (4)

### *Focus 4: Geospatial Science*

- GEP 380 Environmental Remote Sensing (4)
- GEP 385 Cartographic Visualization (3-4)
- GEP 388 Environmental GIS (3-4)
- GEP 486 Environmental Data Analysis (4)
- GEP 489 Advanced GIS (3-4)

## SUPPORTING (outside GEP) **6 units**

NOTE: Select courses in the appropriate area in consultation with an advisor. Substitutions are possible. Classes may have prerequisites, often met through LD Natural and Data Science Foundation courses above.

### *Biological Science Theme*

BIOL 314; 322; 323; 324; 327; 329; 330; 332; 333; 334; 335; 337; 338; 341; 351

### *Physical Science Theme*

CHEM 300; 335A; 336A  
GEOL 303; 310; 323

### *Data Science Theme*

ANTH 328; BIOL 485; ECON 317; ES 314  
CS 210; 215; 355; 370; 386; MATH 161; PHYS 381