

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 150b 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