BA – Earth Sciences Concentration

EES-BA-Earth Sciences Concentration is designed to provide the knowledge, skills, and experience required for graduate study or for entering professional employment. Course work in EES combines lecture, lab, and field experiences with geology and the broader earth sciences, which include subjects such as water, soils, and atmosphere. Students pursuing the BA have wide latitude in their choice of coursework that allows them to supplement required courses with a broad sampling of other courses or to earn an additional credential such as a second major, a minor, or a certificate program.

Wright State Core (40 cr. hours)

Element 1: Communication (2 courses) 6
Element 2: Mathematics:
  MTH 2240 or MTH 2300 4
Element 3: Global Traditions (2 courses) 6
Element 4: Arts and Humanities (1 course) 3
Element 5: Social Sciences (2 courses) 6
Element 6: Natural Sciences:
  EES 2510 Earth Systems 4
  EES 2550 Earth History 4
Additional Core Courses:
  EES 2600 Environmental Science and Society 3
  STT 2640 or MTH 2310 4

Science Sequence (8 cr. hours)

Choose one of the following sequences:
CHM 1210/L General Chemistry & Lab I
CHM 1220/L General Chemistry & Lab II
- or -
PHY 1110/L Principles of Physics & Lab I
PHY 1120/L Principles of Physics & Lab II
- or -
BIO 1120 Cells and Genes
BIO 1150 Organisms and Ecosystems

EES Core Requirements (9 cr. hours)

EES 3120 Earth Materials 4
EES 4340 Mapping Methods 2
EES 4350 Field Mapping 2
EES 4280 EES Colloquium (twice at 0.5 cr hr each) 1

EES Core Electives (24 cr. hours)

Choose 24 hours from the following:

EES 3160 Stratigraphy & Sedimentology 4
EES 3250 Climate Change 3
EES 4190 Paleobiology 4
EES 4210 Earth Structure and Tectonics 4
EES 4220 Introduction to Geophysics 4
EES 4240 Oceanography 3
EES 4270 Process Geomorphology 3
EES 4290 Remote Sensing of Earth 3
EES 4300 Environmental Applications of GIS 4
EES 4330 Global Biogeochemical Cycles 3
EES 4430 Analysis & Prediction of Earth Systems 3
EES 4460 Sequence Stratigraphy 3
EES 4540 Subsurface Fluid Flow 4
EES 4550 Aqueous Environmental Geochemistry 3
EES 4560 Ground Water Contamination 3
EES 4610 Near-surface Geophysics 4
EES 4960 Senior Thesis Research 4

Approved Electives (17 cr. hours)

Choose 17 hours of approved courses from the Colleges of Engineering & Computer Science & Science & Mathematics.

Additional Electives (18 cr. hours)

Choose 18 hours of from outside the Colleges of Engineering & Computer Science & Science & Mathematics.

General Electives (10 cr. hours)

Choose 5 hours of unrestricted courses

Total Degree Semester Hours = 126