

ENVS Earth and Atmospheric Sciences (EAS) BS Track Requirements
Effective Fall 2020

FOUNDATION COURSES: *All required*

ENVS 120*: Living in the Anthropocene
ENVS 131**: Intro to ENVS Field Studies
ENVS 390: Seminar in Environmental Issues

*ENVS 130 or ENVS 140 may be substituted for ENVS 120

**ENVS_OX 131 fulfills the requirement of both ENVS 130 and ENVS 131

INTERMEDIATE BREADTH REQUIREMENTS: *Four courses, one from each area below*

Methods (pre-requisite for all: QTM 100)

ENVS 250: Fundamentals of Cartography & GIS
ENVS 260: Quantitative Methods in ENVS
ENVS 270: Environmental Data Science

Ecology, Conservation, and Health

ENVS 232: Fundamentals of Ecology w/lab
ENVS 240 or ENVS 240 w/lab: Ecosystem Ecology
ENVS/BIOL 247: Ecology

Earth and Atmospheric Sciences

ENVS 222: Evolution of the Earth w/lab
ENVS 229: Atmospheric Science w/lab
ENVS 230: Introductory Geoscience w/lab
ENVS 235: Environmental Geology
ENVS 239: Physical Oceanography

Social Science and Policy

ENVS 224: Economy and the Environment
ENVS 225: Institutions and the Environment
ENVS/POLS 227: Environmental Policy

ADVANCED SPECIALIZATION ELECTIVES: *Must take 4 from list below, with 2 or more at the 300+ level, plus one additional 3+ credit elective course in the department for a total of 5 electives*

Note: 2 courses from Intermediate Breadth and/or Advanced Specialization Categories must be field and/or lab courses.

EAS Track Advanced Specialization Electives

ENVS 215W: Great Books of the Geosciences
ENVS 222: Evolution of the Earth with Lab
ENVS 229: Atmospheric Science with Lab
ENVS 230: Fundamentals of Geology with Lab

ENVS 235: Environmental Geology
ENVS 239: Physical Oceanography
ENVS 241+242: Modern and Ancient Tropical Environments (and field)
ENVS 250: Fundamentals of Cartography & GIS
ENVS 255W: Environmental Communication
ENVS 260: Quantitative Methods in ENVS
ENVS 270: Environmental Data Science
ENVS 321: Geology and Human Health
ENVS 326: Climate Change and Society
ENVS 328: Intro to Atmospheric Chemistry
ENVS 330: Climatology
ENVS 331: Earth Systems Science
ENVS 342: Barrier Island
ENVS 346: Geol.Orig. of Landscapes w/Lab
ENVS 347/347L: Landscapes and Geomorphology (with optional lab)
ENVS 348: Sustainable Water Resources with Lab
ENVS 362 Mineralogy and Petrology
ENVS 365: Urban Geography
ENVS 426: U.N. Climate Change Conference
ENVS 460: Research Design and Practice
ENVS 526: Climate Change and Society
ENVS 560: Research Design & Practice in Environmental Sciences
ENVS 561: Ecosystems Through Time
ENVS 575: Global Change Science and Policy

Pre-approved Special Topics:

Biogeochemistry and Env Health, Fundamentals in Soil Science

Other special topics, study abroad, or 3-credit ENVS 399 courses may count for advanced specialization options with prior approval

INDEPENDENT STUDY REQUIREMENT: *Choose one, must be at least 4 credit hours*

ENVS 491: Service Learning in ENVS
ENVS 494: Individual Research
ENVS 495: Honors Research
ENVS 497: Undergraduate Internship
ENVS 498: Individual Directed Reading
ENVS 499: Advanced Independent Research

CAPSTONE REQUIREMENT: *1 credit course in final semester*

ENVS 490: ENVS Senior Capstone Portfolio

EXTERNAL BS REQUIREMENTS: 4 courses

Must take at least one natural science and one quantitative science, with two additional electives from list. One course must also be a lab or lab pair.

<u>Natural Science</u>	<u>Quantitative Science</u>
<p>Chemistry CHEM 150: Structure and Properties (w/ 150L) CHEM 202: Principles of Reactivity (w/ 202L) CHEM 203: Advanced Reactivity CHEM 204: Macromolecules CHEM 205: Light and Matter (w/ 205L)</p> <p>Physics PHYS 141: Intro Physics I w/ Lab PHYS 142: Intro Physics II w/ Lab PHYS 151: Phys for Sci & Engin I w/ Lab PHYS 152: Phys for Sci & Engin II w/ Lab PHYS 253: Modern Physics w/ Lab PHYS 311: Astrophysics I w/ Lab PHYS 365: Electricity and Magnetism PHYS 421: Thermodynamics & Stat Physics</p>	<p>Computer Science CS 170: Intro to Computer Science I CS 171: Intro to Computer Science II CS 224: Foundations of Computer Science</p> <p>Mathematics MATH 111: Calc I (or 111L) MATH 112: Calc II (or 112Z) MATH 210: Adv. Calc for Data Sciences MATH 211: Adv Calc (Multivariate) MATH 212: Differential Equations MATH 221: Linear Algebra</p> <p>Physics PHYS 220: Math Methods for Sci & Engin</p> <p>Quantitative Theory and Methods QTM 200: Applied Regression Analysis QTM 210: Probability and Statistics QTM 220: Regression Analysis QTM 355: Into to Time Series Analysis</p>