

**ENVS Earth and Atmospheric Sciences (EAS) BS Track Requirements**  
**Spring 2023 Update – Courses listed are REGULARLY offered**

**FOUNDATION COURSES:** *All required*

ENVS 120\*: Living in the Anthropocene

ENVS 131\*\*: Intro to ENVS Field Studies

ENVS 390: Seminar in Environmental Issues (taken JR or SR year)

\*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 239: Physical Oceanography

ENVS 245: Fundamentals in Soil Science

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 239: Physical Oceanography

ENVS 241+242: Modern and Ancient Tropical Environments (and field)

ENVS 245: Fundamentals in Soil Science

ENVS 250: Fundamentals of Cartography & GIS  
ENVS 255W: Environmental Communication  
ENVS 260: Quantitative Methods in ENVS  
ENVS 270: Environmental Data Science  
ENVS 326/526: Climate Change and Society  
ENVS 328: Intro to Atmospheric Chemistry  
ENVS 330: Climatology  
ENVS 331: Earth Systems Science  
ENVS 342: Barrier Island  
ENVS 347/347L: Landscapes and Geomorphology (with optional lab)  
ENVS 365: Urban Geography

*Pre-approved Special Topics:* Approved special topics are posted on ENVS web site each semester.

*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: Environmental Sciences Practicum  
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 of the four courses must include a lab or lab pair.*

| <u>Natural Science</u>   | <u>Quantitative Science</u>  |
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| <p><b>Chemistry</b><br/>CHEM 150: Structure and Properties (w/ 150L)<br/>CHEM 202: Principles of Reactivity (w/ 202L)<br/>CHEM 203: Advanced Reactivity<br/>CHEM 204: Macromolecules</p> <p><b>Physics</b><br/>PHYS 141: Intro Physics I w/ Lab<br/>PHYS 142: Intro Physics II w/ Lab<br/>PHYS 151: Phys for Sci &amp; Engin I w/ Lab<br/>PHYS 152: Phys for Sci &amp; Engin II w/ Lab</p> | <p><b>Computer Science</b><br/>CS 170: Intro to Computer Science I<br/>CS 171: Intro to Computer Science II<br/>CS 224: Foundations of Computer Science</p> <p><b>Mathematics</b><br/>MATH 111: Calc I<br/>MATH 112: Calc II (or 112Z)<br/>MATH 210: Adv. Calc for Data Sciences<br/>MATH 211: Adv Calc (Multivariable)<br/>MATH 212: Differential Equations<br/>MATH 221: Linear Algebra</p> <p><b>Quantitative Theory and Methods</b><br/>QTM 200: Applied Regression Analysis<br/>QTM 210: Probability and Statistics<br/>QTM 250: Data Science Computing</p> |