

GEOLOGY TRACK

Degrees: Only a BS degree is available in the Geology Track

Perspective:

This track offers classical training in the Earth Sciences with emphasis on Geology.

Intended Audience:

This track is intended for those pursuing graduate-level training or technical careers in the Geoscience.

Recommended General Education Courses for this Track:- Students must complete 4 Tier 1 and 6 Tier 2 with at least 2 in each mode of inquiry—The Gen Ed Modes are- Creative Process & Production (CPP); Lang., Lit., and Cultural Studies (LLCS); Scientific and Quantitative Inquiry (SQI); Social and Historical Perspectives (SHP)

Tier 1

- ___ ART 145 Websites for Everyone (3) (Tier 1) (CPP)
- ___ EESC 121 Mapping the City (3) (Tier 1) (SQI)
- ___ ECON 115 Money and Markets (3) (Tier 1) (SHP)
- ___ ENGL 130 Reading the Environment (3) (Tier 1) (LLCS & SHP)
- ___ PHIL 113 Environmental Ethics (3) (Tier 1) (LLCS)
- ___ POLI 120 Global Challenges (3) (Tier 1) (SHP)

Tier 2

- ___ ART 286 Infographics for the Sciences (3) (Tier 2) (CPP)
- ___ BIOL 240 Scientific Communication (3) (Tier 2) (LLCS & SQI)
- ___ EESC 220 Geographies of Immigration (3) (Tier 2) (SHP)
- ___ EESC 226 Earth 360: Integrated Geography (3) (Tier 2) (SQI)
- ___ EESC 231 Water Chronicles (3) Tier 2 (LLCS & SHP)
- ___ EESC 235 Global Climate Change (3) Tier 2 (LLCS & SHP)
- ___ PHIL 246 Food, Philosophy and Global Health (3) (Tier 2) (LLCS & SHP)
- ___ PHIL 245 Social Justice (3) (Tier 2) (SHP)
- ___ POLI 217 Globalization and Governance (3) (Tier 2) (SHP)
- ___ SOCI 230 Cities of Industry (3) (Tier 2) (SHP)
- ___ SOCI 237 Refugees and Forced Migrations (3) (Tier 2) (SHP)

Tier 3

- ___ EESC 3XX Energy, Society and Sustainability (3) (Tier 3) (*Pending approval*)

TRACK REQUIREMENTS

Mathematics (7-8 credits)

- ___ MATH 192 Calculus I (4)

___ MATH 193 Calc II (4) **OR** ___ MATH 140 Statistics (3)

Related Natural Sciences (18 credits)

___ CHEM 105/1105 General Chemistry & Lab I (5) &

___ CHEM 106/1106 General Chemistry & Lab II (5)

___ PHYS 130/1130 General Physics and Lab I (4) &

___ PHYS 131/1131 General Physics & Lab II (4)

Geology Core Curriculum (26 Credits):

___ EESC 112 Introduction to Geology (3)

___ EESC 221 Essential Methods in Geology (3)

___ EESC 241 Historical Geology (4)

___ EESC 246 Earth Materials (4)

___ EESC 317 Structural Geology (4)

___ EESC 334 Sedimentology and Stratigraphy (4)

___ EESC 336 Field Methods (4)

Geology Electives (12 credits): Choose **any 300+ level EESC course**, with the following recommended. Only 1 GIS course will count toward elective credit, if the student is in the GIS Certificate Program.

___ EESC 340 Hydrology (3)

___ EESC 348 Environmental Geology (3)

___ EESC 349 Introduction to Hazmat Field Techniques (4)

___ EESC 350 Analysis with GIS (3)

___ EESC 410 Urban Soil Survey (4)

___ EESC 434 Earth Surface Processes (4)

___ EESC 446 Introduction to Geochemistry (3)

___ EESC 447 Introduction Geophysics (4)

___ EESC 455 Modeling with GIS (3)

___^T EESC211 Geology of the Bahamas (3)

___^T EESC 503 Field Studies in Geoscience (3)

___^T EESC 540 Geology of NJ (3)

___^T EESC 550 Geology of National Parks (4)

^T students may choose one course from this group