

Geology Major

Total Major hours: 44 (BA), 52 (BS)
Suggested hours per semester: 16-18

Major Academic Plan (MAP) for Catalog Year 2020-2021

The catalog is the final authority on CATC and major requirements; this is intended as a tool for planning purposes. Student course sequencing may vary depending on course offerings and other variables.

<p>Fall Semester 1</p> <p>GEOL 212 Dynamic Earth and Environment¹ MATH 221 Applied Calculus⁴ or MATH 231 Calculus I⁴ PHYS 221 General Physics I⁴</p> <p>CORE 101: First Year Seminar First-Year CATC options-</p> <ul style="list-style-type: none"> ▪ AHS 101: Wellness (2) ▪ COMM 101: Oral Comm (2) ▪ ENGW 103: First-Year Writing ▪ Language Core Competency or Thematic Core Course 	<p>Spring Semester 1</p> <p>GEOL 212 Dynamic Earth and Environment¹ OR GEOL 343 Fundamentals of Mineral Science (2)^{**}</p> <p>First-Year CATC Options Language Core Competency BITH 211/ARCH 211: Old Testament</p>	<p>Summer 1</p> <p>Consider study, internship or research options –Wheaton In summer program, WIN (HoneyRock), non-major internship, summer research or other options. (See faculty for advising.)</p>
<p>Fall Semester 2</p> <p>GEOL 336 Process Geomorphology^{#*} or GEOL 344 Igneous and Metamorphic Petrology[*] MATH 221⁴ or 231⁴, if not complete PHYS 221⁴</p> <p>Thematic Core or Core Competency Courses (4-8) BITH 213/ARCH 213: New Testament</p>	<p>Spring Semester 2</p> <p>GEOL 321 Earth History and Stratigraphy¹ or GEOL 443 Structural Geology^{#*} Major Electives^{4, 5} (1-4)</p> <p>Thematic Core Course BITH 315: Christian Thought[*] Advanced Integrative Seminar?[*]</p>	<p>Summer 2</p> <p>GEOL 345 Sedimentary Geology (2)^{6#*} GEOL 412 Field Geology (6)^{6#*} or Consider study, internship or research options –Wheaton In summer program, WIN (HoneyRock), non-major internship, summer research or other options. (See faculty for advising.)</p>
<p>Fall Semester 3</p> <p>CHEM 231 General Chemistry I Major Electives^{4, 5} (1-4) MATH 263 Introduction to Statistics³ or B EC 321 Statistics³ or ENVR 341 Quantitative Methods for Environmental Analysis and Problem Solving³ or GEOL 341³</p> <p>Thematic Core Course Advanced Integrative Seminar?[*]</p>	<p>Spring Semester 3</p> <p>GEOL 232 Environmental Geochemistry[*] GEOL 343 Fundamentals of Mineral Science (2) ^{**}, if not complete Major Electives^{4, 5} (1-4)</p> <p>Advanced Integrative Seminar?[*] Thematic Core Course</p>	<p>Summer 3</p> <p>Consider study, internship or research options –Wheaton In summer program, WIN (HoneyRock), non-major internship, summer research or other options. (See faculty for advising.)</p>

Fall Semester 4	Spring Semester 4	Summer 4
GEOL 494 Senior Capstone (2)* GEOL 336 Process Geomorphology ^{#*} or GEOL 344 Igneous and Metamorphic Petrology* <i>Complete CATC Coursework</i>	GEOL 321 Earth History and Stratigraphy ¹ or GEOL 443 Structural Geology ^{**} <i>Complete CATC Coursework</i>	If not complete: GEOL 345 Sedimentary Geology (2) ^{6**} GEOL 412 Field Geology (6) ^{6**}

Notes or Special Guidance for Majors:

*Course has prerequisite

^F Fall only course

^S Spring only course

[#]Offered every other year

¹ Courses that meet the CATC Thematic Core tags: GEOL 212 (SP), GEOL 321 (SIP), GEOL 341 (AAQR). A maximum of 3 Thematic Core tags can count toward the major and CATC requirements.

²GEOL 343^{**}, GEOL 344* and GEOL 443^{**} must be taken in sequence prior to attending summer Field Camp (GEOL 345^{**}, GEOL 412^{**}).

³ Required for Bachelor of Arts only.

⁴ Required for Bachelor of Science only.

⁵ B.S. Geology students must choose a 4 hour elective credit in Geology. Choose from:

GEOL 332 Studies in Regional Geology* (1-2, repeatable course)

GEOL 341 Quant. Methods for Env. Analysis and Problem Solving (AAQR)

GEOL 355 Introduction to Soil Science[#] (2)

GEOL 371 Introduction to Geographic Information Systems (GIS)

GEOL 372 GIS Practicum (2)

GEOL 385 Topics in Earth Science (Climate Change, Petroleum Geology)* (2-4)

GEOL 437 Hydrogeology*

⁶ Summer only course at the Wheaton Science Center.

-It is recommended that Bachelor of Science students also take PHYS 222 and MATH 232.