## **Geology Major**

## Major Academic Plan (MAP) for Catalog Year 2021-2022

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.

| Fall Semester 1   | Spring Semester 1                                   | Summer 1                           |
|---|---|------------------------------------|
| GEOL 212 Dynamic Earth and  | GEOL 321 Earth History and                          | Consider study, internship or      |
| Environment <sup>1</sup>  | Stratigraphy <sup>#15</sup>                         | research options –Wheaton In       |
| MATH 221 Applied Calculus <sup>4</sup> or                         | Major Electives <sup>4, 5</sup> (1-4)               | summer program, WIN                |
| MATH 231 Calculus I <sup>4</sup>                                  | (_ )  | (HoneyRock), non-major internship, |
| PHYS 221 General Physics I <sup>4</sup>                           |   | summer research or other options.  |
|   |   | (See faculty for advising.)        |
| CORE 101: First Year Seminar                                      |   |                                    |
| First-Year CATC options-  |   |                                    |
| <ul> <li>AHS 101: Wellness (2)</li> </ul>                         |   |                                    |
| <ul> <li>COMM 101: Oral Comm (2)</li> </ul>                       | Thematic Core Course                                |                                    |
| ENGW 103: First-Year Writing                                      | BITH 315: Christian Thought*                        |                                    |
| <ul> <li>Language Core Competency or</li> </ul>                   | Advanced Integrative Seminar?*                      |                                    |
| Thematic Core Course  | Suring Compositor 2                                 | Summer of 2                        |
| Fall Semester 2   | Spring Semester 2                                   | Summer 2                           |
| CHEM 231 General Chemistry I                                      | GEOL 232 Environmental                              | Consider study, internship or      |
| Major Electives <sup>4, 5</sup> (1-4)                             | Geochemistry <sup>#S</sup> and                      | research options –Wheaton In       |
| MATH 221 <sup>4</sup> or 231 <sup>4</sup> , PHYS 221 <sup>4</sup> | GEOL 343 Mineralogy <sup>#S</sup> (2)               | summer program, WIN                |
| if not complete   |   | (HoneyRock), non-major internship, |
|   | Thematic Core Course (4)                            | summer research or other options.  |
| Thematic Core Course  | BITH 315: Christian Thought (4)                     | (See faculty for advising.)        |
| Advanced Integrative Seminar?*                                    | Advanced Integrative Seminar? (4)                   |                                    |
| Fall Semester 3   | Spring Semester 3                                   | Summer 3                           |
| GEOL 336 Process  | GEOL 443 Structural Geology <sup>#*s</sup>          | GEOL 345 Sedimentary Geology       |
| Geomorphology <sup>#*F</sup>                                      | GEOL 321 Earth History and                          | (2) <sup>6#*</sup>                 |
| GEOL 344 Igneous and  | Stratigraphy <sup>#1S</sup> if not complete         | GEOL 412 Field Geology (6) 6#*     |
| Metamorphic Petrology <sup>#*F</sup>                              | Major Electives <sup>4, 5</sup> (1-4)               | or                                 |
| MATH 221 <sup>4</sup> or 231 <sup>4</sup> , PHYS 221 <sup>4</sup> |   | Consider study, internship or      |
| if not complete   |   | research options –Wheaton In       |
|   |   | summer program, WIN                |
| Thematic Core or Core Competency                                  |   | (HoneyRock), non-major internship, |
| Courses (4-8)   |   | summer research or other options.  |
| BITH 213/ARCH 213: New  |   | (See faculty for advising.)        |
| Testament Fall Semester 4   | Advanced Integrative Seminar? (4) Spring Semester 4 | Summer 4                           |
| Fail Semester 4   | Spring Semester 4                                   | Summer 4                           |
| GEOL 494 Senior Capstone (2) <sup>#*F</sup>                       | GEOL 232 Environmental                              |                                    |
| Major Electives <sup>4, 5</sup> (1-4)                             | Geochemistry <sup>#S</sup> and GEOL 343             |                                    |
| MATH 221 <sup>4</sup> or 231 <sup>4</sup> , CHEM 231,             | Mineralogy <sup>#S</sup> (2) if not complete        |                                    |
| PHYS 221 <sup>4</sup> if not complete                             | Major Electives <sup>4, 5</sup> (1-4)               |                                    |
| Complete CATC Coursework  | Complete CATC Coursework                            |                                    |

## Notes or Special Guidance for Majors:

\*Course has prerequisite <sup>F</sup> Fall only course <sup>S</sup> Spring only course #Offered every other year

<sup>1</sup> 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.

<sup>2</sup>GEOL 343<sup>#\*</sup>, GEOL 344<sup>#\*</sup> and GEOL 443<sup>#\*</sup> must be taken in sequence prior to attending summer Field Camp (GEOL 345<sup>#\*</sup>, GEOL 412<sup>#\*</sup>).

<sup>3</sup> Required for Bachelor of Arts only.

<sup>4</sup> Required for Bachelor of Science only.

<sup>5</sup> 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 (2) GEOL 372 GIS Practicum (2) GEOL 385 Topics in Earth Science\* (2-4) GEOL 395 Geoscience Research. (1-2) GEOL 437 Hydrogeology\* GEOL 495 Geoscience Independent Study (2 -4)

<sup>6</sup> Summer only course at the Wheaton Science Center.

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