**2021-2022**

**Degree Map:** [**Geology (BS) – Physics Track**](https://www.york.cuny.edu/produce-and-print/contents/bulletin/school-of-arts-and-sciences/earth-and-physical-sciences/geology-bs)

Department of Earth and Physical Science

School of Arts & Sciences | York College | CUNY

Academic Core 2F09 | 718-262-2654

The following is a **suggested** plan of study for completion of this degree program.

The goal of a Degree Map is to ensure that students graduate with no more than 120 credits and in four years.

* All students should speak with an academic advisor about their academic programs.

**This document is not a substitute for academic advisement.**

* Students are encouraged to take Winter and Summer courses to facilitate their progress towards graduation.

Transfer students do not need to take all courses in the plan; they should consult with an academic advisor.

| Course | Credit | Course | Credit |
| --- | --- | --- | --- |
| **FIRST YEAR - FALL** | **13** | **FIRST YEAR - SPRING** | **16** |
| English Composition (EC): ENGL 125 | 3 | English Composition (EC): ENGL 126 | 3 |
| Mathematical & Quantitative Reasoning (MQR): MATH 120 | 4 | MATH 111 (recommended) | 4 |
| Life & Physical Science (LPS):  GEOL 140 | 3 | Scientific World (SW):  CHEM 108 + CHEM 109 | 5 |
| US Experience in its Diversity (USED) | 3 | GEOL 211 | 4 |

| Course | Credit | Course | Credit |
| --- | --- | --- | --- |
| **SECOND YEAR - FALL** | **15** | **SECOND YEAR - SPRING** | **13** |
| College Option: Foreign Language† | 3 | College Option: Foreign Language† | 3 |
| World Culture & Global Issues (WCGI) | 3 | GEOL 225 | 5 |
| MATH 121 | 4 | PHYS 117 + PHYS 113 | 5 |
| CHEM 111 + CHEM 112 | 5 |  |  |

| Course | Credit | Course | Credit |
| --- | --- | --- | --- |
| **THIRD YEAR - FALL** | **16** | **THIRD YEAR - SPRING** | **13.5** |
| College Option: HE 111 | 3 | College Option: Writing Intensive (WI) | 3 |
| PHYS 118 + PHYS 114 | 5 | Individual & Society (IS) | 3 |
| GEOL 217 | 5 | GEOL 323 | 1.5 |
| Creative Expression (CE) | 3 | GEOL Elective\* | 3 |
|  |  | Free Elective | 3 |

| Course | Credit |
| --- | --- |
| **THIRD YEAR - SUMMER** | **4** |
| Writing Intensive (WI): GEOL 425 WI | 4 |

| Course | Credit | Course | Credit |
| --- | --- | --- | --- |
| **FOURTH YEAR - FALL** | **14** | **FOURTH YEAR - SPRING** | **15.5** |
| Additional Flexible Core Course | 3 | GEOL 334 | 4 |
| Writing Intensive (WI) | 3 | GEOL Elective\* | 3 |
| GEOL 332 | 2 | Free Elective | 3 |
| GEOL Elective\* | 3 | Free Elective | 3 |
| Free Elective | 3 | Free Elective | 2.5 |

* York students are required to complete (pass) three (3) Writing intensive (WI) courses: two (2) in the lower division (100-200 level) and one (1) in the upper division (300-level).
* If you transferred to York College with credit for General Education requirements, you must still complete one (1) WI course in the upper division within your major. If your major has no upper division WI course, you must take a WI course chosen in consultation with your major advisor.
* B.S. students must complete 60 credits of liberal arts – See Bulletin.
* Students are strongly encouraged to select a Minor program of study, in consultation with an academic advisor, especially those planning to attend graduate school. Minor courses would replace the “free electives” in the Degree Map.

†Foreign language courses are determined through placement by the Foreign Language Department, AC-3C08

**Notes on Geology – Physics Track Major Requirements**

**\*Geology Electives**

**Choose 8 credits from the following electives:**

| **Course** | **Title** | **Credit** | **Prerequisite** |
| --- | --- | --- | --- |
| [GEOL282](https://www.york.cuny.edu/produce-and-print/contents/bulletin/listing-of-courses/listing-of-courses-by-department/GEOL/GEOL282) | Weather and Climate | 3 |  |
| [GEOL308](https://www.york.cuny.edu/produce-and-print/contents/bulletin/listing-of-courses/listing-of-courses-by-department/GEOL/GEOL308) | Geomorphology | 3 | GEOL211 |
| [GEOL340](https://www.york.cuny.edu/produce-and-print/contents/bulletin/listing-of-courses/listing-of-courses-by-department/GEOL/GEOL340) | Remote Sensing and Air Photo Interpretation | 2 | GEOL110 or GEOL140 & MATH 101 |
| [GEOL341](https://www.york.cuny.edu/produce-and-print/contents/bulletin/listing-of-courses/listing-of-courses-by-department/GEOL/GEOL341) | Ground Water Hydrology | 2 | GEOL110 or GEOL140 & MATH121 |
| [GEOL342](https://www.york.cuny.edu/produce-and-print/contents/bulletin/listing-of-courses/listing-of-courses-by-department/GEOL/GEOL342) | Rock and Soil Mechanics | 2 | GEOL211 & Trigonometry |
| [GEOL343](https://www.york.cuny.edu/produce-and-print/contents/bulletin/listing-of-courses/listing-of-courses-by-department/GEOL/GEOL343) | Ore Deposits and Ore Evaluation | 2 | GEOL225 |
| [GEOL344](https://www.york.cuny.edu/produce-and-print/contents/bulletin/listing-of-courses/listing-of-courses-by-department/GEOL/GEOL344) | Industrial Minerals and Fossil Fuels | 2 | GEOL225 |
| [GEOL346](https://www.york.cuny.edu/produce-and-print/contents/bulletin/listing-of-courses/listing-of-courses-by-department/GEOL/GEOL346) | Laboratory Techniques in Geology | 2 | GEOL110 or GEOL140 & GEOL225 |
| [GEOL349](https://www.york.cuny.edu/produce-and-print/contents/bulletin/listing-of-courses/listing-of-courses-by-department/GEOL/GEOL349) | Assessment of Environment Impact | 1 | GEOL110 or 140 |
| [GEOL403](https://www.york.cuny.edu/produce-and-print/contents/bulletin/listing-of-courses/listing-of-courses-by-department/GEOL/GEOL403) | Paleoecology | 3 | GEOL213 or perm. of instr. |
| [GEOL411](https://www.york.cuny.edu/produce-and-print/contents/bulletin/listing-of-courses/listing-of-courses-by-department/GEOL/GEOL411) | Sedimentation | 3 | GEOL232 |
| [GEOL412](https://www.york.cuny.edu/produce-and-print/contents/bulletin/listing-of-courses/listing-of-courses-by-department/GEOL/GEOL412) | Stratigraphy | 3 | GEOL211 & 213 or perm. of instr. |
| [GEOL441](https://www.york.cuny.edu/produce-and-print/contents/bulletin/listing-of-courses/listing-of-courses-by-department/GEOL/GEOL441) | Geochemistry | 3 | GEOL333 |
| [GEOL442](https://www.york.cuny.edu/produce-and-print/contents/bulletin/listing-of-courses/listing-of-courses-by-department/GEOL/GEOL442) | Geophysics | 3 |  |
| [EHS140](https://www.york.cuny.edu/produce-and-print/contents/bulletin/listing-of-courses/listing-of-courses-by-department/HPEH/HPEH140) | Environmental Management (Basic) | 3 |  |
| EHS[340](https://www.york.cuny.edu/produce-and-print/contents/bulletin/listing-of-courses/listing-of-courses-by-department/HPEH/HPEH340) | Pollution Control Technology | 3 | PHYS113, PHYS115 or PHYS117, EHS211, EHS212 |
| EHS[420](https://www.york.cuny.edu/produce-and-print/contents/bulletin/listing-of-courses/listing-of-courses-by-department/HPEH/HPEH420) | Water Quality Analysis & Management | 4 | EHS340 |
| EHS[426](https://www.york.cuny.edu/produce-and-print/contents/bulletin/listing-of-courses/listing-of-courses-by-department/HPEH/HPEH426) | Solid Waste Management | 3 | EHS211, EHS212, CHEM230; or Dept. Perm. Req. |
| [EHS429](https://www.york.cuny.edu/produce-and-print/contents/bulletin/listing-of-courses/listing-of-courses-by-department/HPEH/HPEH429) | Environmental Management (Advanced) | 3 | EHS211 and EHS212; or Dept. Perm. Req. |