



Curricular Plan Civil Engineering BS



A curricular plan provides a roadmap for completing this academic program and the UB Curriculum in four years. Your actual plan may vary depending on point of entry to the university, course placement and/or waivers based on standardized test scores, earned alternative credit and/or college transfer credit.

All students are encouraged to use this plan in conjunction with other academic planning resources such as your academic advisor, the hUB Academic Advisement Report, My Planner and Path Finder tool.

In addition to following this course roadmap, all other admission and academic requirements of this major as listed in the Undergraduate Catalog must be met in order to successfully complete this degree.

| Freshman Year – Fall Semester | | |
|--------------------------------|-----------|--------|
| Course | Category | Credit |
| EAS 199 | M/UBS | 3 |
| MTH 141 | M/MQR | 4 |
| CHE 107 | M/SLI 1 | 4 |
| Pathway or ENG 105 | P or CL 1 | 3 or 4 |
| | | |
| <i>Total Credits:</i> 14 or 15 | | |

| Freshman Year – Spring Semester | | |
|---------------------------------|-----------|--------|
| Course | Category | Credit |
| MTH 142 | M | 4 |
| Earth Science Elective | M | 3 |
| PHY 107 | M/SLI 2 | 4 |
| EAS 202 | M | 1 |
| Pathway or ENG 105 | P or CL 1 | 3 or 4 |
| | | |
| <i>Total Credits:</i> 15 or 16 | | |

| Sophomore Year – Fall Semester | | |
|--------------------------------|----------|--------|
| Course | Category | Credit |
| MTH 241 | M | 4 |
| EAS 207 | M | 3 |
| PHY 108 | M | 4 |
| PHY 158 | M | 1 |
| CIE 177 | M | 2 |
| EAS 230 | M | 3 |
| | | |
| <i>Total Credits:</i> 17 | | |

| Sophomore Year – Spring Semester | | |
|----------------------------------|----------|--------|
| Course | Category | Credit |
| MTH 306 | M | 4 |
| EAS 209 | M | 3 |
| Engineering Elective | M | 3 |
| CIE 327 | M/P | 4 |
| Pathway and Diversity Learning | P/DL* | 3 |
| | | |
| <i>Total Credits:</i> 17 | | |

| Junior Year – Fall Semester | | |
|-----------------------------|----------|--------|
| Course | Category | Credit |
| CIE 340 | M/P | 3 |
| CIE 323 | M | 4 |
| CIE 334 | M | 4 |
| CIE 354 | M | 3 |
| CIE 308 | M | 3 |
| <i>Total Credits:</i> | | 17 |

| Junior Year – Spring Semester | | |
|-------------------------------|----------|--------|
| Course | Category | Credit |
| EAS 360 | M/CL 2 | 3 |
| CIE 324 | M | 3 |
| CIE 435 | M | 3 |
| CIE 343 | M | 4 |
| CIE 439 | M | 3 |
| <i>Total Credits:</i> | | 16 |

| Senior Year – Fall Semester | | |
|--------------------------------|----------|--------|
| Course | Category | Credit |
| CIE 415 | M | 3 |
| Technical Elective with Design | M | 3 |
| Technical Elective | M | 3 |
| GIS Elective | M | 3 |
| Pathway | P | 3 |
| <i>Total Credits:</i> | | 15 |

| Senior Year – Spring Semester | | |
|-------------------------------|----------|--------|
| Course | Category | Credit |
| Capstone Design | M | 3 |
| Technical Elective | M | 3 |
| Technical Elective | M | 3 |
| UBC 399 | CAP | 1 |
| LAS Elective | E | 3 |
| Pathway | P | 3 |
| <i>Total Credits:</i> | | 16 |

| | |
|---|-----|
| Total Credits Required for Degree: | 128 |
|---|-----|

**Approved Diversity Learning course if not met through approved major, elective, or UBC course.*

Category Legend:

M = Course Required for Major (including pre-requisites needed for admission to the major)

E = Elective (course not required for major or UB Curriculum)

The following are all components of the UB Curriculum (UBC) For more information on the UBC and course options visit: <https://catalog.buffalo.edu/policies/ubcurriculum.html>

- UBS = UB Seminar
- CL1/CL 2 = Communication Literacy (2 required)
- CAP = UB Capstone
- DL = Diversity Learning
- MQR = Math and Quantitative Reasoning
- P = Pathway Course (6 required: 3 Global, 3 Thematic)
- SLI1/SLI2 = Scientific Literacy and Inquiry (2 required)

Note: Some classes may count toward both a major (M) and UB Curriculum (UBC) requirement. Courses that count towards more than one requirement are indicated by a "/" (slash) in the category column indicating which categories the course will satisfy.