

| Fall 2024 | | | | | | | |
|------------------------------------|--------------------------------------|------------------|--------------|------------------------|-------------------------------------|------------------|--------------|
| Total Credit Hours: 129 | | | | | | | |
| Maximum of 6 Tech Elective credits | | | | | | | |
| | | Cr. Hours | Grade | | | Cr. Hours | Grade |
| FALL SEMESTER | | | | SPRING SEMESTER | | | |
| CIE 100 | Intro to Civil Eng. | 1 | | CIE 101 | Civil Engr Graphics | 3 | |
| CIE 110 | Materials | 3 | | CIE 115 | Computing in CIE | 3 | |
| CIE 111 | Materials Lab | 1 | | ENG 101* | College Comp. | 3 | |
| MAT 126* | Calculus I | 4 | | MAT 127* | Calculus II | 4 | |
| | Approved Sci. Elec. ^{6,7} | 4 | | PHY 121+ | Engr Physics I | 4 | |
| | HVSC W S C P A ¹ | 3 | | | | | |
| Semester Credits | | 16 | | Semester Credits | | 17 | |
| FALL SEMESTER | | | | SPRING SEMESTER | | | |
| MAT 228 | Calculus III | 4 | | CIE 225# | Transportation Engr | 3 | |
| MEE 150* | Statics | 3 | | MAT 258 | Diff Eq & Lin Algebra | 4 | |
| PHY 122 | Engr Physics II | 4 | | MEE 251* | Strength of Materials | 3 | |
| SVT 102 | Surveying Principles | 3 | | CHY 131* | Chemistry for Engr | 3 | |
| CMJ 103 | Fund of Public Comm | 3 | | CHY 133* | Chemistry Lab | 1 | |
| | | | | | HVSC W S C P A ¹ | 3 | |
| Semester Credits | | 17 | | Semester Credits | | 17 | |
| FALL SEMESTER | | | | SPRING SEMESTER | | | |
| CIE 331# | Fund Env Engr | 3 | | CIE 365# | Soil Mechanics | 3 | |
| CIE 340# | Intro to Structural Anal | 4 | | CIE 366 | Soil Mechanics Lab | 1 | |
| CIE 350# | Hydraulics | 3 | | STS 332 | Statistics for Engr | 3 | |
| CIE 351 | Hydraulics Lab | 1 | | | CIE Elective ^{3,4} | 3 4 | |
| ENG 320 | Tech Comm for Engr ² | 3 | | | CIE Elective ^{3,4} | 3 4 | |
| | HVSC W S C P A ¹ | 3 | | | Engr Sci Elective ⁵ | 3 | |
| Semester Credits | | 17 | | Semester Credits | | 16 | |
| FALL SEMESTER | | | | SPRING SEMESTER | | | |
| CIE 412 | Engineering Decisions ^{2,5} | 3 | | CIE 411 | Engr Project Design ⁵ | 3 | |
| CIE 413 | Project Management ⁵ | 2 | | | CIE Elective ^{3,4} | 3 4 | |
| | CIE Elective ^{3,4} | 3 4 | | | CIE or Tech Elective ^{3,4} | 3 | |
| | CIE Elective ^{3,4} | 3 4 | | | HVSC W S C P A ¹ | 3 | |
| | CIE or Tech Elective ^{3,4} | 3 | | | | | |
| | HVSC W S C P A ¹ | 3 | | Semester Credits | | 12 | |
| Semester Credits | | 17 | | | | | |

*Must receive a C- or better

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#Must receive a C or better in three of these five

- Students are assisted by faculty advisors in developing an elective program to meet their individual needs within the University's general education requirements. While most of the general education requirements are automatically met with a civil engineering degree, a student is required to select an additional 15 credit hours of electives to help meet the 18 credit hour "Human Values and Social Context" requirement (the required CMJ 103 satisfies the other three credit hours). **Courses used for credit as an Approved Science Elective, Technical Elective and ENG 320 cannot be used for credit in the Human Values and Social Contexts area, but can be used to fulfill HVSC sub-categories such as Population and the Environment.**
- General education requirements mandate two writing intensive courses. CIE 412 is designated as a writing intensive course within the CIE major, while ENG 320 meets the outside-the-major writing intensive course.
- Civil Engineering and technical electives must be a minimum of 21 credit hours with no more than two technical elective courses (**6 credits maximum**). Civil engineering electives are advanced (400 or 500 level) civil engineering courses. The technical elective is an advanced Civil Engineering course or CIE 394 Civil Engineering Practice or other advanced level engineering, science, or mathematics course relevant to Civil Engineering. In addition, ERS 101 Intro to Geology, BIO 100 Basic Biology and CHY 122/124 can be taken as technical electives.
- An additional requirement of the CIE Electives is that students take a CIE elective course in three of the five civil engineering sub-disciplines: Transportation (CIE 42X), Environmental (CIE 43X), Structural (CIE44X), Water Resources (CIE 45X), and Geotechnical (CIE 46X).
- Three credits of approved engineering science electives, usually in mechanical or electrical engineering, are required. Civil Engineering courses cannot be used for these three specific credit hours. Typical courses taken are:

| | | | | | |
|-----|-----|-----------------------------------|-----|-----|----------|
| MEE | 230 | Thermodynamics I | MEE | 270 | Dynamics |
| ECE | 209 | Fundamentals of Electric Circuits | | | |
- CIE 413 must be taken in the fall semester immediately preceding CIE 411. The prerequisites for CIE 413 are as follows: ENG 320 and Senior standing and 6 credits of CIE engineering electives or the instructor's permission. The Six credits of CIE engineering electives may be taken concurrently.
- Courses satisfying the Approved Science Elective requirement are: BIO 100 Basic Biology, ERS 101 Introduction to Geology 102 Environmental Geology of Maine, EES 140/141 Soil Science, and SMS 302/303 Oceanography
- Either ERS 101 or ERS 102 satisfy either the Approved Science Elective or one Technical Elective. Only one of the two courses counts towards the CIE degree, and that course only satisfies one of these two requirements.

SPECIAL NOTE:

Sixteen credit hours of engineering design courses are required. Eleven hours are earned in the required courses. At least five additional design hours must be included in the electives selected by the student. The College of Engineering only allows seniors whose "advancement in the field will permit their taking a graduate level course among graduate students without disadvantage to themselves" to take 500-level courses. The design content of CIE electives is as follows:

Engineering Science & Design Content of Departmental Electives

| Course No. | * | Engr. Design | Engr. Science | Course No. | * | Engr. Design | Engr. Science |
|------------|---|--------------|---------------|------------|---|--------------|---------------|
| CIE 394 | | 1-3 | 0 | CIE 533 | E | 0 | 3 |
| CIE 424 | T | 2 | 1 | CIE 534 | E | 0 | 3 |
| CIE 425 | T | 1 | 2 | CIE 537 | E | 0 | 3 |
| CIE 426 | T | 3 | 0 | CIE 540 | S | 0 | 3 |
| CIE 428 | T | 2 | 1 | CIE 543 | S | 2 | 1 |
| CIE 430 | E | 3 | 1 | CIE 544 | S | 4 | 0 |
| CIE 431 | E | 3 | 0 | CIE 545 | S | 0 | 3 |
| CIE 434 | E | 4 | 0 | CIE 548 | S | 3 | 0 |
| CIE 439 | E | 0 | 3 | CIE 549 | S | 0 | 3 |
| CIE 440 | S | 0 | 4 | CIE 556 | W | 1 | 2 |
| CIE 442 | S | 4 | 0 | CIE 562 | G | 3 | 0 |
| CIE 443 | S | 4 | 0 | CIE 563 | G | 1 | 1 |
| CIE 450 | W | 1 | 2 | CIE 564 | G | 3 | 0 |
| CIE 455 | W | 1 | 2 | CIE 565 | G | 3 | 0 |
| CIE 456 | W | 1 | 2 | CIE 566 | G | 3 | 0 |
| CIE 460 | G | 3 | 0 | CIE 567 | G | 3 | 0 |
| CIE 480 | | 0 | 3 | | | | |

- T = transportation; E = environmental; W = water resources; S = structures; G = geotechnical