CIVIL ENGINEERING

Curriculum Guide Spring 2024

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|  | **STUDENT** | |  |  |  |  | **NAID #** | |  |  |  |  |  | **ADVISOR** |  |  |  |  |
| **Fall** | | | | | | **Spring** | | | | | |  | **General Education (Gen Ed) Electives** | | | | |
| **Course** | | | **Crs** | **Grade** | **Gen Ed** | **Course** | | | **Crs** | **Grade** | **Gen Ed** | *University general education categories, credit requirements, and approved course offerings are printed as a centerfold in the registration schedule for each term. Many categories have been integrated into the Civil Engineering program with specific course requirements (left). For the remaining categories (below), students select approved courses of their choice (unless otherwise noted).* | | | | |
| **Freshman** (<27 crs) | **CHEM** | **121** | General Chem I | 3 |  | S | **CE** | **112** | Computer/Apps in Civil Engr | 1 |  |  |
| **CHEM** | **121L** | General Chem I Lab | 1 |  | S | **CHEM** | **122** | General Chem II | 3 |  | S |
| **~ENGL** | **110** | College Comp I | 3 |  | C | **CHEM** | **122L** | General Chem II Lab | 1 |  |  |
| **ENGL** | **120** | College Comp II | 3 |  | C | **COMM** | **110** | Fund Public Speaking | 3 |  | C |
| **MATH** | **165** | Calculus I | 4 |  | R | **MATH** | **166** | Calculus II | 4 |  |  |
| **CE** | **111** | Intro Civil Engr | 1 |  |  | **ME** | **221** | Engr Mechanics I | 3 |  |  | **Gen Ed** | **Course** | | **Crs** | **Grade** |
|  |  |  |  |  |  | **ENGR 311** | | See side bar | 3 |  | A | A | **ENGR 311 required** | | 3 |  |
|  | |  | **15** |  |  |  | |  | **18** |  |  | A | **ENGR 327 required** | | 3 |  |
| **Sophomore** (27-59 crs) | **CE** | **204** | Surveying | 3 |  |  | **IME** | **460** | Eval Engr Data | 3 |  |  | B |  | | 3 |  |
| **CE** | **212** | CE Graphic Comm | 3 |  |  | **MATH** | **266** | Intro Diff Equations | 3 |  |  | B |  | | 3 |  |
| **GEOL** | **105** | Physical Geology | 3 |  | S | **ME** | **223** | Mech of Materials | 3 |  |  | D  | (covered by ENGR 327) | | 3 |  |
| **MATH** | **128** (129) | Intro Linear Algebra | 1 |  |  | **PHYS** | **252** | Univ Physics II | 4 |  |  | G  | (double-count with A or B above) | | 3 |  |
| **MATH** | **259** (265) | Multivariate Calc | 3 |  |  | *Gen Ed Elective* | | See side bar | 2 |  | W | W |  | | 2 |  |
| **ME** | **222** | Engr Mechanics II | 3 |  |  |  | |  |  |  |  |  | **NOTE:** |  |  |  |
|  | |  | **16** |  |  |  | |  | **15** |  |  | *One of Gen Ed 's A or B (above) should be global perspectives* ■ | | | | |
| **Junior** (60 - 89 crs) | **CE** | **309** | Fluid Mechanics | 3 |  |  | **CE** | **303** | Civil Engr Materials | 2 |  |  |  | A or B |  | | 3 |  |
| **CE** | **316** | Soil Mechanics | 3 |  |  | **CE** | **303 L** | Civil Engr Materials Lab | 1 |  |  | A or B |  | | 3 |  |
| **ENGL** | **321** | Writing/Tech Prof | 3 |  | C | **CE** | **343** | Structural Engineering Analysis | 4 |  |  |  | **Technical Electives** | |  |  |
| **ME** | **350** | Therm & Heat Transfer | 3 |  |  | **CE** | **370** | Intro Environ Engr | 3 |  |  | *A list of approved courses is provided by the department.* | | | | |
| **ENGR 327** | | See side bar | *3* |  | A/D | **CE** | **371** | Environ Engr Lab | 1 |  |  | **Area** | **Course** | **Design** | **Crs** | **Grade** |
|  | |  |  |  |  | **CE** | **408** | Water Resource & Supply | 3 |  |  |  |  |  |  |  |
|  | |  |  |  |  | **CE** | **418** | Transportation Engr | 4 |  |  |  |  |  |  |  |
|  | |  | **15** |  |  |  | |  | **18** |  |  |  |  |  |  |  |
| **Senior** (90 + crs) | **CE** | **310** | Fluid Mechanics Lab | 1 |  |  | **CE** | **483** | Contracts & Specs | 3 |  |  |  |  |  |  |  |
| **CE** | **404** | Reinforced Concrete | 3 |  |  | **CE** | **489** | Senior Design | 3 |  |  |  |  |  |  |  |
| **CE** | **444** | Structural Steel Design | 3 |  |  | **IME** | **440** | Engr Economy | 3 |  |  |  |  |  |  |  |
| **Gen Ed Elective** | | See side bar | 3 |  | B | *Technical Elective* | | See side bar | 3 |  |  |  |  |  |  |  |
| *Gen Ed Elective* | | See side bar | 3 |  | B | *Technical Elective* | | See side bar | 3 |  |  | Minimum of 3 |  | 6 | 12 |  |
| *Technical Elective* | | See side bar | 2 |  |  | *Technical Elective* | | See side bar | 2 |  |  |  | | | | |
| *Technical Elective* | | See side bar | 2 |  |  |  | |  |  |  |  | **Gen Ed Categories:** | | | | |
|  | |  | **17** |  |  |  | |  | **16** |  |  | A - Humanities/Fine Arts G - Global Perspectives   B - Social/Behavioral Sciences R - Quantitative Reasoning  C - Communication S - Science & Technology  D - Cultural Diversity  W - Wellness | | | | |
| **All civil engineering students are required to have ‘C’ and above grades in Math 165,166,128,259, 266 before enrolling in any civil engineering courses that utilize these courses as**  **prerequisites.** | | | | | | | | | | | | |
| **Notes:** No grades less than "C" accepted in MATH courses. | | | | | | | | | | | | |
| **Key:** "T" indicated requirement satisfied with transfer credits. "IP" indicates a course currently in progress () indicates old course numbers. | | | | | | | | | | | | | | | **TOTAL CREDITS** | | | **130** |
| *"NR" indicates that it is not required* | | | | | | | | | | | | | | | | | | |
| Students with an ACT sub-test score of 18+ (or SAT of 480+) are advised to enroll in ENGL 120. A passing grade will be awarded for 110 by completing 120 with a "C" or better. | | | | | | | | | | | | | | | | | | |
| **Last Revised 03/23/2023** | | | | | | | | | | | | | | | | | | |