

**BACHELOR OF SCIENCE IN CIVIL ENGINEERING
CURRICULUM OUTLINE - CLASS OF 2022**

Sample Only – Actual Curriculum Sequence May Deviate from Sample

| | FALL | SPRING | SUMMER 1 | SUMMER 2 |
|--------------------|---|--|---|--|
| Year 1 | MATH1342 Calculus 2 for Engrs. * 4 CHEM1151 General Chem. for Engrs. 4 CHEM1153 Recitation for CHEM1151 0 GE 1501 Cornerstone Eng'g. 1 4 GE 1000 Intro. to Eng. 1 ENGW1111 First Year Writing 4 | MATH2321 Calculus 3 for Engrs. 4 PHYS1151 Physics 1 for Engrs. 3 PHYS1152 Physics 1 Lab 1 PHYS1153 ILS for PHYS1151 1 GE 1502 Cornerstone of Eng'g. 2 4 Elective General Elective 4 | Elective General Elective 4 CIVE2221 Statics and Solid Mechanics 4 CIVE2222 Recitation for CIVE2221 0 | Vacation |
| Year 2 (MC) | MATH2341 Diff. Eq./Lin. Alg. 4 ECON1115 Macro or Micro Economics <i>or 1116</i> 4 CIVE2260 Materials for the Built Environ. Lab for 2260 4 CIVE2261 Lab for 2260 1 CIVE2334 Environmental Engineering: Principles, Technology, and Sustainability 4 | ENCP2000 Intro to Engineering Co-op 1 CIVE2320 Structural Analysis 4 CIVE2321 Recitation for CIVE2320 0 GE 3300 Energy Systems: Science, Tech., & Sustainability 4 Elective General Elective 4 CIVE2331 <i>Fluid Mechanics and Hydraulics OR Geotechnical Engineering</i> 4 CIVE2340 <i>Lab for CIVE 2340</i> 4 CIVE2341 <i>Lab for CIVE 2340</i> 1 (prioritize Project Elective prerequisite) | CIVE2324 Concrete Str. Design** 4 Elective General Elective 4 | Co-op |
| Year 2 (MD) | MATH2341 Diff. Eq./Lin. Alg. 4 ENCP2000 Intro to Engineering Co-op 1 CIVE2320 Struct. Analysis 4 CIVE2321 Recitation for CIVE2320 0 CIVE2260 Materials for the Built Environ. Lab for 2260 4 CIVE2261 Lab for 2260 1 CIVE2334 Environmental Engineering: Principles, Technology, and Sustainability 4 | Co-op | Co-op | Elective General Elective 4 Elective General Elective 4 |
| Year 3 (MC) | ENGW3302 Adv. Writing for Prof.*** 4 Co-op | Elective Technical Elective 4 Elective Project Elective 4 CIVE3464 Prob./Eng'g. Econ. 4 CIVE2331 <i>Fluid Mechanics and Hydraulics OR Geotechnical Engineering</i> 4 CIVE2340 <i>Lab for CIVE 2340</i> 4 CIVE2341 <i>Lab for CIVE 2340</i> 1 (whichever was not taken in Spring of Year 2) | Elective General Elective 4 Elective General Elective 4 | Co-op |
| Year 3 (MD) | GE 3300 Energy Systems: Science, Tech., & Sustainability 4 CIVE2324 Concrete Str. Design** 4 CIVE2331 Fluid Mechanics and Hydraulics 4 ECON1115 Macro- or Microeconomics <i>or 1116</i> 4 | ENGW3302 Adv. Writing for Prof.*** 4 Co-op | Co-op | CIVE2340 Geotechnical Engineering 4 CIVE2341 Lab for CIVE 2340 1 Elective General Elective 4 |
| Year 4 (MC) | Co-op | ENCP3000 Prof. Issues in Engineering 1 Elective Technical Elective 3 Elective Technical Elective 4 Elective Science Elective 4 CIVE 476x Sr. Design Project 5 | | |
| Year 4 (MD) | CIVE3464 Prob./Eng'g. Econ. 4 ENCP3000 Prof. Issues in Engineering 1 Elective Technical Elective 4 Elective Project Elective 4 Elective Science Elective 4 | CIVE 476x Sr. Design Project 5 Elective Technical Elective 4 Elective General Elective 4 Elective Technical Elective 3 | | |

* Students will need to have Advanced Standing Credit (such as Advanced Placement, International Baccalaureate or college credit) for Math 1341 Calculus 1. - see academic advisor

**CIVE3425 Steel Design may be substituted for CIVE2324 Concrete Design.

** Students will need to take Advanced Writing in the Professions online during this co-op. ENGW3315 Interdisciplinary Advanced Writing is an acceptable substitution for engineering majors.

BS in Civil Engineering - Requirements:

General Electives: Six (6) courses are required.

General electives are academic, non-remedial, non-repetitive courses.

Nupath requirements: Interpreting Culture (IC) and Differences and Diversity (DD) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements, and if these are not fulfilled in engineering courses, should use general electives to do so.

Science Elective: One (1) course is required.

See the undergraduate catalog for the list of approved Science Electives.

Technical Electives: Three (3) courses are required.

See the undergraduate catalog for the list of Technical Electives.

Project Elective: One (1) course required.

See the undergraduate catalog for the list of Project Electives.

Senior Design Project (Capstone elective): One (1) course required, either CIVE 4765 (Environmental), CIVE 4767 (Structural), or CIVE 4768 (Transportation)

Course sequence may be changed, subject to prerequisite requirements.

[Please consult with your Academic Advisor, found here.](#)

The registrar's website provides a listing of degree requirements and the DARS system provides a degree audit utility for students.