## BACHELOR OF SCIENCE IN CIVIL ENGINEERING

### CURRICULUM OUTLINE - CLASS OF 2021

Sample Only – Actual Curriculum Sequence May Deviate from Sample

### FALL | SPRING | SUMMER 1 | SUMMER 2
---|---|---|---
**Year 1**
- MATH1341 Calculus 1 for Engrs. 4  
  CHEM1151 General Chem. for Engrs. 4  
  GE 1300 Intro. to Engrg. 1  
  ENGW1111 First Year Writing 4  
  MATH1342 Calculus 2 for Engrs. 4  
  PHYS1151 Physics 1 for Engrs. 4  
  PHYS1152 Physics 1 Lab 1  
  PHYS1153 Lab for PHYS1151 1  
  GE 1502 Cornerstone of Eng'g. 2 4  
  Elective  General Elective 4  

**Year 2 (AA)**
- MATH2321 Calculus 3 for Engrs. 4  
  ENCP1000 Intro to Engineering Co-op 1  
  CIVE2221 Statics and Solid Mechanics 4  
  CIVE2222 Recitation for CIVE2221 0  
  CIVE2260 Materials for the Built Environment 4  
  CIVE2261 Lab for CIVE 2260 1  
  CIVE2334 Environmental Engineering: Principles, Technology, and Sustainability 4  
  Elective  General Elective 4  

**Year 2 (BB)**
- MATH2321 Calculus 3 for Engrs. 4  
  ENCP1000 Intro to Engineering Co-op 1  
  CIVE2221 Statics and Solid Mechanics 4  
  CIVE2222 Recitation for CIVE2221 0  
  CIVE2260 Materials for the Built Environment 4  
  CIVE2261 Lab for CIVE 2260 1  
  CIVE2334 Environmental Engineering: Principles, Technology, and Sustainability 4  
  Elective  General Elective 4  

**Year 3 (AA)**
- Co-op  
  CIVE2331 Fluid Mechanics and Hydraulics 4  
  CIVE2340 Geotechnical Engineering 4  
  CIVE2341 Lab for CIVE 2340 1  
  Elective  Technical Elective 4  
  Elective  Science Elective 4  

**Year 3 (BB)**
- GE 3300 Energy Systems: Science, Tech., & Sustainability 4  
  CIVE2320 Struct. Analysis 4  
  CIVE2331 Fluid Mechanics and Hydraulics 4  
  ENCP1315 or 1116 Macro- or Microeconomics 4  
  CIVE2331 Fluid Mechanics and Hydraulics 4  
  Elective  General Elective 4  

**Year 4 (AA)**
- SNCP3000 Prof. Issues in Engineering Prog./Engrg. Econ. 4  
  SNCP3000 Technical Elective 3  
  ENGW3302 Adv. Writing for Prof.** 4  
  Elective  General Elective 4  
  Elective  General Elective 4  

**Year 4 (BB)**
- CIVE2324 Concrete Str. Design* 4  
  SNCP3000 Prof. Issues in Engineering Prog./Engrg. Econ. 4  
  SNCP3000 Technical Elective 3  
  SNCP3000 Adv. Writing for Prof.** 4  
  Elective  General Elective 4  

**Year 5 (AA)**
- Co-op  
  CIVE 476a Sr. Design Project 5  
  Elective  General Elective 4  
  Elective  Technical Elective 4  
  Elective  General Elective 4  

**Year 5 (BB)**
- CIVE3464 Prob./Engg. Econ. 4  
  CIVE 476a Sr. Design Proj 5  
  Elective  General Elective 4  
  Elective  Technical Elective 4  
  Elective  Project Elective 4  

### Notes

- *CIVE3425 Steel Design is an acceptable substitution for CIVE2324 Concrete Design.
- **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 the registrar’s website provides a listing of degree requirements and the DARS system provides a degree audit utility for students.

#### 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 is required.

See the undergraduate catalog for the list of Project Electives.

#### Senior Design Project (Capstone elective):
One (1) course is 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.