

**BACHELOR OF SCIENCE IN CIVIL ENGINEERING  
CURRICULUM OUTLINE - CLASS OF 2023**

*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 CHEM1153 Recitation for CHEM1151 0 GE 1501 Cornerstone of Eng'g. 1 4 GE 1000 Intro. to Eng'g. 1 ENGW1111 First Year Writing 4	MATH1342 Calculus 2 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	Vacation	Vacation
Year 2 (AA)	MATH2321 Calculus 3 for Engrs. 4 ECON1115 Macro or Micro Economics 4 or 1116 CIVE2221 Statics and Solid Mechanics 4 CIVE2222 Recitation for CIVE 2221 0 CIVE2334 Environmental Engineering: Principles, Technology, and Sustainability 4	MATH2341 Diff. Eq./Lin. Alg. 4 ENCP2000 Intro to Engineering Co-op 1 CIVE2260 Materials for the Built Environ. 4 CIVE2261 Lab for 2260 1 CIVE2320 Struct. Analysis 4 CIVE2321 Recitation for CIVE2320 0 GE 3300 Energy Systems: Science, Tech., & Sustainability 4	Vacation	Co-op
Year 2 (BB)	MATH2321 Calculus 3 for Engrs. 4 ENCP2000 Intro to Engineering Co-op 1 CIVE2221 Statics and Solid Mechanics 4 CIVE2222 Recitation for CIVE2221 0 CIVE2260 Materials for the Built Environ. 4 CIVE2261 Lab for 2260 1 CIVE2334 Environmental Engineering: Principles, Technology, and Sustainability 4	Co-op	Co-op	Vacation
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	CIVE2324 Concrete Str. Design* 4 Elective General Elective 4	Co-op
Year 3 (BB)	GE 3300 Energy Systems: Science, Tech., & Sustainability 4 CIVE2320 Struct. Analysis 4 CIVE2321 Recitation for CIVE2320 0 CIVE2331 Fluid Mechanics and Hydraulics 4 ECON1115 Macro- or Microeconomics 4 or 1116	Co-op	Co-op	MATH2341 Diff. Eq./Lin. Alg. 4 CIVE2340 Geotechnical Engineering 4 CIVE2341 Lab for CIVE 2340 1
Year 4 (AA)	Co-op	ENCP3000 Prof. Issues in Engineering 1 CIVE3464 Prob./Eng'g. Econ. 4 Elective Project Elective 4 Elective Technical Elective 3 ENGW3302 Adv. Writing for Prof.** 4	Elective General Elective 4 Elective General Elective 4	Co-op
Year 4 (BB)	CIVE2324 Concrete Str. Design* 4 ENCP3000 Prof. Issues in Engineering 1 Elective Technical Elective 3 Elective Science Elective 4 ENGW3302 Adv. Writing for Prof.** 4	Co-op	Co-op	Elective General Elective 4 Elective General Elective 4
Year 5 (AA)	Co-op	CIVE 476x Sr. Design Project 5 Elective General Elective 4 Elective Technical Elective 4 Elective General Elective 4		
Year 5 (BB)	CIVE3464 Prob./Eng'g. Econ. 4 Elective General Elective 4 Elective Technical Elective 4 Elective Project Elective 4	CIVE 476x Sr. Design Proj 5 Elective General Elective 4 Elective General Elective 4 Elective Technical Elective 4		

Revised version, 02/23/2018

\*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 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.