

**BACHELOR OF SCIENCE IN CIVIL ENGINEERING
CURRICULUM OUTLINE - CLASS OF 2024**

Sample Only – Actual Curriculum Sequence May Deviate from Sample

	FALL		SPRING		SUMMER 1		SUMMER 2					
Year 1	CHEM1151	General Chem. for Engrs.	4	GE1502	Cornerstone of Eng'g. 2	4	CIVE2221	Statics and Solid Mechanics	4	Vacation		
	CHEM1153	Recitation for CHEM1151	0	MATH2321	Calculus 3 for Engrs.	4	CIVE2222	Recitation for CIVE2221	0			
	ENGW1111	First Year Writing	4	PHYS1151	Physics 1 for Engrs.	3	Elective	General Elective	4			
	GE1000	Intro. to Eng.	1	PHYS1152	Physics 1 Lab	1						
	GE1501	Cornerstone Eng'g. 1	4	PHYS1153	ILS for PHYS1151	1						
	MATH1342	Calculus 2 for Engrs.	4	Elective	General Elective	4						
Year 2 MC	CIVE2260	Materials for the Built Environ.	4	CIVE2320	Structural Analysis	4	*CIVE2324	Concrete Str. Design	4	Co-op		
	CIVE2261	Lab for 2260	1	CIVE2321	Recitation for CIVE2320	0	Elective	General Elective	4			
	CIVE2334	Environmental Engineering: Principles, Technology, and Sustainability	4	Choose One (prioritize Project Elective prereq):								
	ECON1115 or ECON1116	Macro or Micro Economics	4	CIVE2331	Fluid Mechanics and Hydraulics	4						
	MATH2341	Diff. Eq./Lin. Alg.	4	CIVE2340	Geotechnical Engineering	4						
				CIVE2341	Lab for CIVE 2340	1						
	ENCP2000	Intro. to Eng'g. Co-op	1	ENCP2000	Intro. to Eng'g. Co-op	1						
	MATH2341	Diff. Eq./Lin. Alg.	4	GE3300	Energy Systems: Science, Tech, & Sustainability	4						
				Elective	General Elective	4						
Year 2 MD	CIVE2260	Materials for the Built Environ.	4						Elective	General Elective	4	
	CIVE2261	Lab for 2260	1						Elective	General Elective	4	
	CIVE2320	Struct. Analysis	4									
	CIVE2321	Recitation for CIVE2320	0									
	CIVE2334	Environmental Engineering: Principles, Technology, and Sustainability	4									
	ENCP2000	Intro. to Eng'g. Co-op	1									
	MATH2341	Diff. Eq./Lin. Alg.	4									
Year 3 MC	**ENGW3302	Adv. Writing for Prof. (to be taken online)	4	Choose One (prioritize Project Elective prereq):			Elective	General Elective	4	Co-op		
		Co-op		CIVE2331	Fluid Mechanics and Hydraulics	4	Elective	General Elective	4			
				CIVE2340	Geotechnical Engineering	4						
				CIVE2341	Lab for CIVE 2340	1						
				CIVE3464	Prob./Eng'g. Econ.	4						
				Elective	Project Elective	4						
				Elective	Technical Elective	4						
Year 3	*CIVE2324	Concrete Str. Design	4	**ENGW3302	Adv. Writing for Prof. (to be taken online)	4				CIVE2340	Geotechnical Engineerir	4
	CIVE2331	Fluid Mechanics and Hydraulics	4							CIVE2341	Lab for CIVE 2340	1
	ECON1115 or ECON1116	Macro- or Microeconomics	4							Elective	General Elective	4
	GE3300	Energy Systems: Science, Tech, & Sustainability	4									
Year 4 MC		Co-op		CIVE 476x	Sr. Design Project	5						
				ENCP3000	Prof. Issues in Eng'g.	1						
				Elective	Technical Elective	3						
				Elective	Technical Elective	4						
				Elective	Science Elective	4						
Year 4 MD	ENCP3000	Prof. Issues in Eng'g.	1	CIVE 476x	Sr. Design Project	5						
	CIVE3464	Prob./Eng'g. Econ.	4	Elective	General Elective	4						
	Elective	Project Elective	4	Elective	Technical Elective	4						
	Elective	Technical Elective	4	Elective	Technical Elective	3						
	Elective	Science Elective	4									

Revised 6/5/20

Students will need to have Advanced Standing Credit (such as AP, IB or college credit) for Math 1341 Calculus 1 - see advisor

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

**ENGW3315 is an acceptable substitution.

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,

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)

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

Course sequence may be changed, subject to prerequisites.

Degree requirements can be found in the academic catalog and DARS provides a degree audit for students.