# Western S Engineering

# **Civil: Structural Engineering (Option A)**

# September 2024 (students who entered *first year* in September 2023 or later)

<u>Year 2:</u>				
Term A				
NMM 2270a	Applied Math for Engineering II (Formerly AM 2270B)			
CEE 2224	Engineering Fluid Mechanics			
CEE 2202a	Mechanics of Materials			
CEE 2217a	Introduction to Environmental Engineering			
CEE 2220a	Introduction to Structural Engineering			
SS 2141a	Applied Probability and Statistics for Engineers			
Term B				
NMM 2277b	Applied Math for Chemical and Civil Engineering II			
	(Formerly AM 2277B)			
CEE 2224	Engineering Fluid Mechanics			
CEE 2219b	Computation Tools for Civil Engineers			
CEE 2221b	Structural Theory and Design			
EarthSci 2281b	Geology for Engineers			
Writing 2130g	Building Better (Communication) Bridges: Rhetoric &			
	Professional Communication for Engineers			
Note: CEE 3324a (Surveying). This course is available each summer (10 days)				

Must complete before graduation from program.

# Year 3:

### Term A

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	CEE 3321a	Soil Mechanics and Hydrogeologic Engineering	
	CEE 3340a	Analysis of Indeterminate Structures	
	CEE 3369a	Materials for Civil Engineering	
	CEE 3347a	Reinforced Concrete Design	
	CEE 3348a	Project Management and Engineering Cases	
	One 0.5 Non-tech	nical elective taken from the approved list	

#### Term B

CEE 3322b	Introduction to Geotechnical Engineering
CEE 3343b	Finite Element Methods and Application to Latera
	Analysis of Buildings
CEE 3346b	Steel Design
CEE 3358b	Reinforced and Prestressed Concrete Design
CEE 3344b	Structural Dynamics I

# Year 4:

Term A				
Civil Engineering Design Project				
Geotechnical Engineering Design				
Structural Dynamics II				
One 0.5 Non-technical elective taken from approved list				
Two 0.5 Technical electives				

## Term B

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	CEE 4441	Civil Engineering Design Project	
	CEE 4424b	Earth Structures Engineering	
	CEE 4478b	Case Studies in Civil Engineering	
	ELI 4110g	Engineering Ethics, Sustainable Development and the Law	
	One 0.5 Non-technical elective taken from approved list		
	One 0.5 Technical elective		

# NOTES:

### Important:

Students are responsible for ensuring they have the correct courses required for their degree. If you are unsure which courses you still need or if you see courses listed on the progression sheet that are no longer offered or are not offered in the term you see listed here, please contact your Academic Counsellor.

#### Non-technical Electives:

http://www.eng.uwo.ca/undergraduate/upper\_year/electives.html

#### **Technical Elective List:**

Some technical electives may not be offered in a given academic year. Consult the Academic Timetable for a current listing.

CEE 3355a/b	Municipal Engineering Design
CEE 4401 a/b	Principles of Transportation
CEE 4401 a/D	Engineering
CEE 4419a/b	Systems Approach for Civil and
CEE 4418a/b	Environmental Engineering
CEE 4420a/b	Data Science for Geotechnical
CEE 4420a/b	Engineers
CEE 4428a/b	Selected Topics in Civil Engineering I
CEE 4429a/b	Selected Topics in Civil Engineering II
CEE 4438a/b	Introduction to Wood Design
	Civil Engineering Thesis (full year course
CEE 4440	– 1.0 Technical Elective)
	Risk Analysis and Decision Making in
CEE 4458a/b	Engineering
CEE 4459a/b	Design of Lateral Load Structural Systems
CEE 4465a/b	Environmental Design for Waste Disposal
CEE 4476a/b	Environmental Hydraulics Design
	Wind Engineering: Modelling,
CEE 4480a/b	Assessment and Mitigation
CEE 4485a/b	Cities: Resilience and Sustainability
CBE 4405a/b	Air Pollution
EarthSci 3340a/b	Watershed Hydrology
EarthSci 4440a/b	Hydrogeology: Principles, Processes,
	and Professional Practice