

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

**September 2019** (students who entered *first year* in September 2016 or later)

Year 2:	
Term A	
AM 2270a	Applied Math for Engineering II
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	
AM 2277b	Applied Math for Chemical and Civil Engineering II
CEE 2224	Engineering Fluid Mechanics
CEE 2219b	Computation Tools for Civil Engineers
CEE 2221b	Structural Theory and Design
Earth Sc. 2281b	Geology for Engineers
Writing 2130G	Building Better (Communication) Bridges: Rhetoric &

**Note: CEE 3324a (Surveying).** This course is available each summer (15 days) and must be completed before a student may graduate from the Civil Engineering program.

**Professional Communication for Engineers** 

#### Year 3:

### Term A

CEE 3321a	Soil Mechanics and Hydrogeologic Engineering
CEE 3340a	Analysis of Indeterminate Structures
CEE 3344a	Structural Dynamics I
CEE 3347a	Reinforced Concrete Design
CEE 3348a	Project Management and Engineering Cases
One 0.5 Non-tech	inical elective taken from the approved list

# Term B

CEE 3322b	Introduction to Geotechnical Engineering
CEE 3343b	Finite Element Methods and Application to Lateral
	Analysis of Buildings
CEE 3346b	Steel Design
CEE 3358b	Reinforced and Prestressed Concrete Design
CEE 3369b	Materials for Civil Engineering

# **Year 4:**

## Term A

CEE 4441	Civil Engineering Design Project
CEE 4426a	Geotechnical Engineering Design

CEE 4491a Structural Dynamics II

One 0.5 Non-technical elective taken from approved list

One 0.5 Technical elective

#### Term B

CEE 4441	Civil Engineering Design Project
CEE 4478b	Case Studies in Civil Engineering

ES 4498G Engineering Ethics, Sustainable Development and the Law

One 0.5 Non-technical elective taken from approved list

Two 0.5 Technical electives

### **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:**

Please choose a maximum of 1.0 credits (one 1.0 credit course or two 0.5 credit courses) from the 1000 level and a minimum of one 0.5 credit from the 2000 (or higher) level.

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.

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CEE 3355a/b	Municipal Engineering Design	
CEE 4401 a/b	Principles of Transportation	
CEE 4401 a/b	Engineering	
CEE 4418a/b	Systems Approach for Civil and	
	Environmental Engineering	
CEE 4428a/b	Selected Topics in Civil Engineering I	
CEE 4429a/b	Selected Topics in Civil Engineering II	
CEE 4440	Civil Engineering Thesis (full year course	
CEE 4440	- counts as two technical electives)	
CEE 4458a/b	Risk Analysis and Decision Making in	
CEE 4436d/U	Engineering	
CEE 4459a/b	Design of Lateral Load Structural Systems	
CEE 4465a/b	Environmental Design for Waste Disposal	
CEE 4476a/b	Environmental Hydraulics Design	
CEE 4480a/b	Wind Engineering: Modelling,	
CEE 4400d/D	Assessment and Mitigation	
CEE 4485a/b	Cities: Resilience and Sustainability	
Earth Sc. 3340a/b	Watershed Hydrology	