

## Civil: Structural Engineering (Option A)

September 2023 (students who entered *first year* in September 2018 or later)

<p><b>Year 2:</b></p> <p><b>Term A</b></p> <p>NMM 2270a Applied Math for Engineering II (Formerly AM 2270B)</p> <p>CEE 2224 Engineering Fluid Mechanics</p> <p>CEE 2202a Mechanics of Materials</p> <p>CEE 2217a Introduction to Environmental Engineering</p> <p>CEE 2220a Introduction to Structural Engineering</p> <p>SS 2141a Applied Probability and Statistics for Engineers</p> <p><b>Term B</b></p> <p>NMM 2277b Applied Math for Chemical and Civil Engineering II (Formerly AM 2277B)</p> <p>CEE 2224 Engineering Fluid Mechanics</p> <p>CEE 2219b Computation Tools for Civil Engineers</p> <p>CEE 2221b Structural Theory and Design</p> <p>EarthSci 2281b Geology for Engineers</p> <p>Writing 2130g Building Better (Communication) Bridges: Rhetoric &amp; Professional Communication for Engineers</p> <p><i>Note: CEE 3324a (Surveying). This course is available each summer (10 days) Must complete before graduation from program.</i></p> <p><b>Year 3:</b></p> <p><b>Term A</b></p> <p>CEE 3321a Soil Mechanics and Hydrogeologic Engineering</p> <p>CEE 3340a Analysis of Indeterminate Structures</p> <p>CEE 3369a Materials for Civil Engineering</p> <p>CEE 3347a Reinforced Concrete Design</p> <p>CEE 3348a Project Management and Engineering Cases</p> <p>One 0.5 Non-technical elective taken from the approved list</p> <p><b>Term B</b></p> <p>CEE 3322b Introduction to Geotechnical Engineering</p> <p>CEE 3343b Finite Element Methods and Application to Lateral Analysis of Buildings</p> <p>CEE 3346b Steel Design</p> <p>CEE 3358b Reinforced and Prestressed Concrete Design</p> <p>CEE 3344b Structural Dynamics I</p> <p><b>Year 4:</b></p> <p><b>Term A</b></p> <p>CEE 4441 Civil Engineering Design Project</p> <p>CEE 4426a Geotechnical Engineering Design</p> <p>CEE 4491a Structural Dynamics II</p> <p>One 0.5 Non-technical elective taken from approved list</p> <p>Two 0.5 Technical electives</p> <p><b>Term B</b></p> <p>CEE 4441 Civil Engineering Design Project</p> <p>CEE 4424b Earth Structures Engineering</p> <p>CEE 4478b Case Studies in Civil Engineering</p> <p>ELI 4110g Engineering Ethics, Sustainable Development and the Law</p> <p>One 0.5 Non-technical elective taken from approved list</p> <p>One 0.5 Technical elective</p>	<p><b>NOTES:</b></p> <p><b>Important:</b></p> <p>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.</p> <p><b>Non-technical Electives:</b></p> <p><a href="http://www.eng.uwo.ca/undergraduate/upper_year/electives.html">http://www.eng.uwo.ca/undergraduate/upper_year/electives.html</a></p> <p><b>Technical Elective List:</b></p> <p>Some technical electives may not be offered in a given academic year. Consult the Academic Timetable for a current listing.</p> <table border="1"> <tr> <td>CEE 3355a/b</td> <td>Municipal Engineering Design</td> </tr> <tr> <td>CEE 4401 a/b</td> <td>Principles of Transportation Engineering</td> </tr> <tr> <td>CEE 4418a/b</td> <td>Systems Approach for Civil and Environmental Engineering</td> </tr> <tr> <td>CEE 4428a/b</td> <td>Selected Topics in Civil Engineering I</td> </tr> <tr> <td>CEE 4429a/b</td> <td>Selected Topics in Civil Engineering II</td> </tr> <tr> <td>CEE 4438a/b</td> <td>Introduction to Wood Design</td> </tr> <tr> <td>CEE 4440</td> <td>Civil Engineering Thesis (full year course – 1.0 Technical Elective)</td> </tr> <tr> <td>CEE 4458a/b</td> <td>Risk Analysis and Decision Making in Engineering</td> </tr> <tr> <td>CEE 4459a/b</td> <td>Design of Lateral Load Structural Systems</td> </tr> <tr> <td>CEE 4465a/b</td> <td>Environmental Design for Waste Disposal</td> </tr> <tr> <td>CEE 4476a/b</td> <td>Environmental Hydraulics Design</td> </tr> <tr> <td>CEE 4480a/b</td> <td>Wind Engineering: Modelling, Assessment and Mitigation</td> </tr> <tr> <td>CEE 4485a/b</td> <td>Cities: Resilience and Sustainability</td> </tr> <tr> <td>CBE 4405a/b</td> <td>Air Pollution</td> </tr> <tr> <td>EarthSci 3340a/b</td> <td>Watershed Hydrology</td> </tr> <tr> <td>EarthSci 4440a/b</td> <td>Hydrogeology: Principles, Processes, and Professional Practice</td> </tr> </table>	CEE 3355a/b	Municipal Engineering Design	CEE 4401 a/b	Principles of Transportation 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 4438a/b	Introduction to Wood Design	CEE 4440	Civil Engineering Thesis (full year course – 1.0 Technical Elective)	CEE 4458a/b	Risk Analysis and Decision Making in 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, 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
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