# Civil: Structural Engineering (Option A)

**September 2017** (students who entered first year in September 2016)

## Year 2:

### Term A
- AM 2270a/b: 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 2277a/b: 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 & Professional Communication for Engineers

*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.*

## 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
- 0.5 non-technical 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
- One 0.5 Non-technical elective taken from approved list
- ES 4498G: Engineering Ethics, Sustainable Development and the Law
- Two 0.5 technical electives

## Technical Elective List:

Some technical electives may not be offered in a given academic year. Consult the department for accurate listing.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<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 4458a/b</td>
<td>Risk Analysis and Decision Making in Engineering</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 4477a/b</td>
<td>Environmental Applications of Nanotechnology</td>
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<tr>
<td>CEE 4480a/b</td>
<td>Wind Engineering: Modelling, Assessment and Mitigation</td>
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<tr>
<td>CEE 4440</td>
<td>Civil Engineering Thesis (full year course - counts as two technical electives)</td>
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<tr>
<td>Earth Sc. 3340a/b</td>
<td>Watershed Hydrology</td>
</tr>
<tr>
<td>Earth Sci 4440a/b</td>
<td>Hydrogeology</td>
</tr>
</tbody>
</table>

*The official version of the academic calendar can be found at: [www.westerncalendar.uwo.ca](http://www.westerncalendar.uwo.ca)*