# Software Engineering

**September 2024 (for students who started first year in 2022 or later)**

## Year 2:

### Term A
- NMM 2270a Applied Mathematics for Engineering II
- ECE 2277a Digital Logic Systems
- SE 2202a Scripting Programming Language Fundamentals
- SE 2205a Algorithms and Data Structures
- Math 2151a Discrete Structures for Engineering
- SS 2141a Applied Probability and Statistics

### Term B
- NMM 2276b Applied Mathematics for Elec & Mech Eng III
- ECE 2238b Introduction to Electrical Engineering
- SE 2203b Software Design
- SE 2250b Software Construction
- Writing 2130f/g Building Better (Communication) Bridges: Rhetoric & Professional Communication for Engineers

One 0.5 non-technical elective from the approved list

## Year 3:

### Term A
- ECE 4436a Networking: Principles, Protocols, and Architecture
- SE 3309a Database Management Systems
- SE 3351a Software Project and Process Management
- SE 3316a Web Technologies
- SE 3352a Software Requirements & Analysis
- SE 3310a Theoretical Foundations of Software Engineering

### Term B
- ECE 3375b Microprocessors and Microcomputers
- Physics 2300 Quantum Computation and Information
- SE 3314b Computer Networks Applications
- SE 3313b Operating Systems for Software Engineering
- SE 3353b Human-Computer Interaction
- SE 3350b Software Engineering Design I

## Year 4:

### Term A
- SE 4450 Software Engineering Design II
- SE 4452a Software Testing and Maintenance
- SE 4472a Information Security

Two 0.5 Technical Electives

One 0.5 Non-Technical Elective from the approved list

### Term B
- SE 4450 Software Engineering Design II
- SE 4455b Cloud computing: concepts, technologies and applications
- ELI 4110g Engineering Ethics, Sustainable Development and the Law

Two 0.5 Technical Electives

One 0.5 Non-Technical Elective from the approved list

## 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 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 electives:
Students may elect to substitute technical electives from other engineering disciplines or from the Faculty of Science, provided they have the required prerequisites, and provided at least half of their technical electives be from the list below. A maximum of two 0.5-credit courses may be taken from the Faculty of Science and used towards the B.E.Sc degree. All courses outside the SE technical elective list must be approved by the ECE Department.

### List of Approved Technical Electives:

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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<tbody>
<tr>
<td>ECE 3389A/B</td>
<td>Computer System Design</td>
</tr>
<tr>
<td>ECE 3390A/B</td>
<td>Hardware/Software Co-Design</td>
</tr>
<tr>
<td>ECE 4460A/B</td>
<td>Real-Time and Embedded Systems</td>
</tr>
<tr>
<td>DS 3000A/B</td>
<td>Intro to Machine Learning</td>
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<tr>
<td>SE 4470A/B</td>
<td>Selected Topics in Software Engineering I</td>
</tr>
<tr>
<td>SE 4471A/B</td>
<td>Selected Topics in Software Engineering II</td>
</tr>
<tr>
<td>CS 3342A/B</td>
<td>Organization of Programming Languages</td>
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<tr>
<td>CS 3346A/B</td>
<td>Artificial Intelligence I</td>
</tr>
<tr>
<td>CS 3388A/B</td>
<td>Computer Graphics I</td>
</tr>
<tr>
<td>CS 4442A/B</td>
<td>Artificial Intelligence II</td>
</tr>
<tr>
<td>CS 4482A/B</td>
<td>Game Engine Development</td>
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<tr>
<td>CS 4483A/B</td>
<td>Game Design</td>
</tr>
<tr>
<td>CS 4463A/B</td>
<td>Computational Biology (!)</td>
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<tr>
<td>CS 4459A/B</td>
<td>Selected Topics in Distributed Systems (!)</td>
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<tr>
<td>CS 4417A/B</td>
<td>Unstructured Data (!)</td>
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