Software Engineering
September 2020 (for students who entered first year in September 2015 or earlier)

Year 2:
Term A
- AM 2270a Applied Mathematics for Engineering II
- ECE 2277a Digital Logic Systems
- SE 2203a Software Design
- Math 2151a Discrete Structures for Engineering
- CS 1037a Computer Science Fundamentals II
- SS 2141a Applied Probability and Statistics

Term B
- AM 2276b Applied Mathematics for Elec & Mech Eng III
- ECE 2238b Introduction to Electrical Engineering
- SE 2250b Software Construction
- SE 2205b Algorithms and Data Structures
- ES 2211G Engineering Communications
- 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 3313a Operating Systems for Software Engineering
- SE 3316a Web Technologies
- SE 3352a Software Requirements & Analysis

Term B
- ECE 3375b Microprocessors and Microcomputers
- SE 3310b Theoretical Foundations of Software Engineering
- SE 3314b Computer Networks Applications
- SE 3351b Software Project and Process Management
- SE 3353b Human-Computer Interaction
- SE 3350b Software Engineering Design I

Year 4:
Term A
- Bus 2299E Business for Engineers
- SE 4450 Software Engineering Design II
- SE 4452a Software Testing and Maintenance
- SE 4472a Information Security
- Two 0.5 technical electives

Term B
- Bus 2299E Business for Engineers
- SE 4450 Software Engineering Design II
- SE 4455b Cloud computing: concepts, technologies and applications
- ES 4498G Engineering Ethics, Sustainable Development and the Law
- 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.

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 BESc degree. All courses outside the SE technical elective list must be approved by the ECE Department.

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 1</th>
<th>Course Code 2</th>
<th>Title</th>
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<tbody>
<tr>
<td>ECE 4460A/B</td>
<td>ECE 3389A/B</td>
<td>Real-Time and Embedded Systems</td>
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<tr>
<td>ECE 3390A/B</td>
<td>SE 4460A/B</td>
<td>Computer System Design</td>
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<tr>
<td>ECE 4472A/B</td>
<td>CS 3346A/B</td>
<td>Hardware/Software Co-Design</td>
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<tr>
<td>CS 4442A/B</td>
<td>CS 3388A/B</td>
<td>Artificial Intelligence II</td>
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<tr>
<td>CS 4482A/B</td>
<td>CS 4483A/B</td>
<td>Artificial Intelligence II</td>
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<tr>
<td>CS 4483A/B</td>
<td>CS 3342A/B</td>
<td>Game Design</td>
</tr>
<tr>
<td>CS 4498G</td>
<td>ES 4498G</td>
<td>Organization of programming languages</td>
</tr>
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