

Software Engineering

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

<p>Year 2:</p> <p>Term A</p> <p>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</p> <p>Term B</p> <p>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</p> <p>Year 3:</p> <p>Term A</p> <p>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</p> <p>Term B</p> <p>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</p> <p>Year 4:</p> <p>Term A</p> <p>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</p> <p>Term B</p> <p>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</p>	<p>NOTES:</p> <p>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.</p> <p>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 <i>must</i> be approved by the ECE Department.</p> <p>Technical Elective List:</p> <p>Some technical electives may not be offered in a given academic year. Consult the department for accurate listing.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>ECE 4460A/B</td><td>Real-Time and Embedded Systems</td></tr> <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>SE 4460A/B</td><td>Machine Learning & Design</td></tr> <tr><td>CS 3346A/B</td><td>Artificial Intelligence I</td></tr> <tr><td>CS 4442A/B</td><td>Artificial Intelligence II</td></tr> <tr><td>CS 3388A/B</td><td>Computer Graphics I</td></tr> <tr><td>CS 4482A/B</td><td>Game Engine Development</td></tr> <tr><td>CS 4483A/B</td><td>Game Design</td></tr> <tr><td>CS 3342A/B</td><td>Organization of programming languages</td></tr> </table>	ECE 4460A/B	Real-Time and Embedded Systems	ECE 3389A/B	Computer System Design	ECE 3390A/B	Hardware/Software Co-Design	SE 4460A/B	Machine Learning & Design	CS 3346A/B	Artificial Intelligence I	CS 4442A/B	Artificial Intelligence II	CS 3388A/B	Computer Graphics I	CS 4482A/B	Game Engine Development	CS 4483A/B	Game Design	CS 3342A/B	Organization of programming languages
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