



**DEGREE CHECKLIST  
2022-2023**

**BACHELOR OF ENGINEERING (BEng)  
COMPUTER ENGINEERING**

NAME

STUDENT #

Students are strongly advised to refer to online Academic Calendars before enrolling into courses: <http://calendars.registrar.yorku.ca/>

			COURSES	CREDITS EARNED	GRADE
<b>First Year Courses</b>					
<input type="checkbox"/>	SC/CHEM 1100 4.00	Chemistry and Materials Science for Engineers			
<input type="checkbox"/>	LE/EECS 1011 3.00	Computational Thinking Through Mechatronics			
<input type="checkbox"/>	LE/EECS 1021 3.00	Object Oriented Programming from Sensors to Actuators			
<input type="checkbox"/>	LE/EECS 1028 3.00	Discrete Mathematics for Engineers			
<input type="checkbox"/>	LE/ENG 1101 4.00	Renaissance Engineer 1: Ethics, Communication and Problem Solving			
<input type="checkbox"/>	LE/ENG 1102 4.00	Renaissance Engineer 2: Engineering Design Principles			
<input type="checkbox"/>	SC/MATH 1013 3.00	Applied Calculus I			
<input type="checkbox"/>	SC/MATH 1014 3.00	Applied Calculus II			
<input type="checkbox"/>	SC/MATH 1025 3.00	Applied Linear Algebra			
<input type="checkbox"/>	SC/PHYS 1800 3.00	Engineering Mechanics			
<input type="checkbox"/>	SC/PHYS 1801 3.00	Electricity, Magnetism and Optics for Engineers			
<b>Second Year Courses</b>					
<input type="checkbox"/>	SC/MATH 1090 3.00	Introduction to Logic for Computer Science			
<input type="checkbox"/>	LE/EECS 2011 3.00	Fundamentals of Data Structures			
<input type="checkbox"/>	LE/EECS 2021 4.00	Computer Organization			
<input type="checkbox"/>	LE/EECS 2030 3.00	Advanced Object Oriented Programming			
<input type="checkbox"/>	LE/EECS 2032 4.00	Introduction to Embedded Systems			
<input type="checkbox"/>	LE/EECS 2200 3.00	Electrical Circuits			
<input type="checkbox"/>	LE/EECS 2210 3.00	Electronic Circuits and Devices			
<input type="checkbox"/>	LE/ENG 2001 3.00	Engineering Projects: Management, Economics & Safety			
<input type="checkbox"/>	LE/ENG 2003 3.00	Effective Engineering Communication			
<input type="checkbox"/>	SC/MATH 2015 3.00	Applied Multivariate and Vector Calculus			
<input type="checkbox"/>	SC/MATH 2930 3.00	Introduction to Probability and Statistics			
<input type="checkbox"/>	SC/PHYS 2020 3.00	Electricity and Magnetism			
<input type="checkbox"/>	SC/PHYS 2211 1.00	Experimental Electromagnetism			
<b>BEng, Computer Engineering</b>				<b>Page 1 of 2</b>	

	COURSES			CREDITS EARNED	GRADE
<b>Third Year Courses</b>					
	<input type="checkbox"/>	LE/ENG 3000 3.00	Professional Engineering Practice		
	<input type="checkbox"/>	LE/EECS 3101 3.00	Design and Analysis of Algorithms		
	<input type="checkbox"/>	LE/EECS 3201 4.00	Digital Logic Design		
	<input type="checkbox"/>	LE/EECS 3213 3.00	Communication Networks		
	<input type="checkbox"/>	LE/EECS 3216 3.00	Digital Systems Engineering: Modeling, Implementation and Validation		
	<input type="checkbox"/>	LE/EECS 3221 3.00	Operating System Fundamentals		
	<input type="checkbox"/>	LE/EECS 3311 3.00	Software Design		
	<input type="checkbox"/>	LE/EECS 3451 4.00	Signals and Systems		
	<input type="checkbox"/>	LE/ESSE 2210 3.00 or ES/ENVS 2150 3.00	Engineering and the Environment or Environment, Technology and Sustainable Society I		
<b>At least 6 additional credits from</b> SC/BIOL 1000 3.00, SC/BIOL 1001 3.00, SC/CHEM 1001 3.00, SC/CHEM 2011 3.00, LE/ESSE 1011 3.00, LE/ESSE 1012 3.00, SC/PHYS 1070 3.00 [alternatively SC/PHYS 1470 3.00], SC/PHYS 2010 3.00, SC/PHYS 2040 3.00, SC/PHYS 2060 3.00, HH/IHST 1001 3.00; HH/IHST 1002 3.00	<input type="checkbox"/>				
	<input type="checkbox"/>				
<b>3 additional credits from EECS courses at 3000 or 4000 level</b>	<input type="checkbox"/>				
<b>Fourth Year Courses</b>					
	<input type="checkbox"/>	LE/ENG 4000 6.00	Engineering Project		
	<input type="checkbox"/>	LE/EECS 4201 3.00	Computer Architecture		
	<input type="checkbox"/>	LE/EECS 4214 4.00	Digital Communications		
	<input type="checkbox"/>	LE/EECS 4312 3.00	Software Engineering Requirements		
<b>Complementary Studies (12 credits)</b>	<input type="checkbox"/>				
	<input type="checkbox"/>				
	<input type="checkbox"/>				
	<input type="checkbox"/>				
<b>12 credits from:</b> LE/EECS 3214 3.00; LE/ENG 3320 3.00; LE/EECS 3431 3.00; LE/EECS 3603 4.00*; LE/EECS 3604 4.00*; LE/EECS 3611 4.00*; LE/EECS 4210 3.00*; LE/EECS 4211 3.00; LE/EECS 4215 3.00*; LE/EECS 4313 3.00; LE/EECS 4352 3.00*; LE/EECS 4404 3.00; LE/EECS 4421 3.00*; LE/EECS 4422 3.00*; LE/EECS 4431 3.00*; LE/EECS 4441 3.00; LE/EECS 4452 3.00; LE/EECS 4471 3.00; LE/ENG 4550 3.00; all List A Electrical Engineering technical elective courses <b>*The 12 credits from the final list must include at least two courses with significant laboratory experience. Those courses are designated with an asterisk (*).</b>	<input type="checkbox"/>				
	<input type="checkbox"/>				
	<input type="checkbox"/>				
	<input type="checkbox"/>				
<b>TOTAL CREDITS &amp; CGPA (minimum overall GPA of 5.00 required to graduate in the BEng program)</b>					
<b>List A Electives:</b> LE/EECS 3216 3.00, LE/EECS 3603 4.00, LE/EECS 3610 4.00, LE/EECS 3611 4.00, LE/EECS 3612 4.00, LE/EECS 3641 4.00, LE/EECS 4214 4.00, LE/EECS 4610 4.00, LE/EECS 4611 4.00, LE/EECS 4612 4.00, LE/EECS 4613 4.00, LE/EECS 4614 4.00, LE/EECS 4621 4.00, LE/EECS 4622 4.00 (now LE/EECS 3622 4.00), LE/EECS 4623 4.00, LE/EECS 4640 3.00, LE/EECS 4642 4.00, LE/EECS 4643 4.00.					
General Prerequisite: Most 2000-, 3000-, and 4000-level EECS courses require the following general (that is, common) prerequisites, in addition to other course-specific prerequisites: a cumulative grade point average of 4.50 or better over all completed major EECS courses. Note: "Major" courses are all EECS courses with second digit other than 5 and include LE/EECS 1028 3.00 (cross-listed to: SC/MATH 1028 3.00) and LE/EECS 1019 3.00 (cross-listed to: SC/MATH 1019 3.00).					
Participation in the Co-op Program is highly recommended for all engineering students, but is not a degree requirement.					
<b>Notes</b>					
<b>BEng, Computer Engineering Revised October 25, 2022</b>				<b>Page 2 of 2</b>	