DEGREE CHECKLIST BACHELOR OF SCIENCE (BSc) COMPUTER SCIENCE						
YORK 2	2024-2025			Specialized Honours		
LASSONDE DESCRIPTION OF THE PROPERTY OF THE PR	NAME					
	TUDENT #	1+0 =	ofor to online Academic Calend	dars before enrolling into courses:		
			tudents.yorku.ca/academic-ca			
				COURSES	CREDITS EARNED	GRADE
First Year Courses						
			LE/EECS 1001 1.00	Research Directions in Computing		
			LE/EECS 1012 3.00	Introduction to Computer Science		
			or LE/EECS 1015 3.00	or Introduction to Computer Science and Programming		
Prerequisite: LE/EECS 1012 3.00 or LE/EECS 1015 3.00			LE/EECS 1019 3.00	Discrete Mathematics for Computer Science		
			LE/EECS 1022 3.00	Introduction to Object Oriented Programming		
			SC/MATH 1025 3.00	Applied Linear Algebra		
Prerequisite: SC/MATH 1300 3.00 or SC/MATH 1013 3.00			SC/MATH 1300 3.00	1300 3.00 Differential Calculus with Applications		
			SC/MATH 1310 3.00	Integral Calculus with Applications		
Foundational science:	200 2 00					
six credits from SC/BIOL 1000 3.00, SC/BIOL 1001 3.00, SC/CHEM 1000 3.00, SC/CHEM 1001 3.00, SC/PHYS 1011 3.00, SC/PHYS 1012 3.00, SC/PHYS 1010 6.00, SC/PHYS 1411 3.00, SC/PHYS 1412 3.00, SC/PHYS 1410 6.00, SC/PHYS 1421 3.00, SC/PHYS 1420 6.00	1010 6.00,					
	1421 3.00,					
General Education and/or Science Breadth						
See sections "A" and "C" on page 2						
			Second Year Courses			
			SC/MATH 1090 3.00	Introduction to Logic for Computer Science		
			SC/MATH 2030 3.00	Elementary Probability		
			LE/EECS 2001 3.00	Introduction to the Theory of Computation		
			LE/EECS 2030 3.00	Advanced Object Oriented Programming		
			LE/EECS 2101 3.00	Fundamentals of Data Structures		
			LE/EECS 2021 4.00	Computer Organization		
			LE/EECS 2031 3.00	Software Tools		
General Education and/or Science Breadth See sections "A" and "C" on page 2						
Notes						

	COURSES CREDITS GRADE EARNED				
Third Year Courses					
		LE/EECS 3000 3.00	Professional Practice in Computing		
		LE/EECS 3101 3.00	Design and Analysis of Algorithms		
		LE/EECS 3311 3.00	Software Design		
At least 3 credits from: LE/EECS 3215 4.00, LE/EECS 3221 3.00					
At least 3 credits from: LE/EECS 3401 3.00, LE/EECS 3421 3.00, LE/EECS 3461 3.00					
At least 3 additional credits from EECS courses at the 3000 level					
At least 6 additional credits in EECS courses at the 3000-level or above					
General Education and/or Science Breadth and/or Electives					
See sections "A", "C", and "D" below					
		Fourth Year Courses			
At least 9 additional credits in EECS courses at the 4000-level					
At least 3 additional credits:					
LE/EECS 4101 3.00 or LE/EECS 4111 3.00 or LE/EECS 4115 3.00 or LE/EECS 4171 3.00					
for an overall total of at least 62 credits from EECS courses.					
Additional elective credits including - 12 credits outside of EECS, MATH, and ITEC					
- 6 credits at the 3000-level or higher					
For a minimum of 120 total credits					
A. General Education Requirement:  non-science requirement: 12 credits from the approved list of courses and subject areas in your Academic Calendar;  mathematics: satisfied within the core requirements;  computer science: satisfied by the major requirements;  science: satisfied by the BIOL, CHEM, or PHYS labs as stated on your degree checklist.					
		<b>B. Major Requirements:</b> As stated on your degree checklist.			
		C. Science Breadth:			
In addition to the courses specified in	the che	cklist, 3 credits at any level are requir	red in approved non-EECS science disciplines.		
In addition to the upper year c	ourses	<b>D. Upper Level Requirement:</b> specified in the checklist, 6 credits at	the 3000-level or higher are required.		
E. Additional	elective	e credits, as required, for a minimum	total of 120 credits.		
TOTAL CGPA (minimum cumulative GPA of 5.00 (C+) required to graduate with an Honours degree)					
EECS GPA Prerequisite:  Most 2000-, 3000-, and 4000-level EECS courses require a cumulative GPA or 4.5 or better over all EECS major courses in addition to other course-specific prerequisites. "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 Co-op is highly recommended, but is not a degree requirement.					
Notes					
SC/MATH 1013 3.00 may be taken in lieu of SC/MATH 1300 3.00; SC/MATH 1014 3.00 may be taken in lieu of SC/MATH 1310 3.00;					
			<b>BSc Specialized Honours Computer Science</b>	Page 2	2 of 2

## Non-Science Requirement BSc, Honours BSc, iBSc General Education

#### **Essentials**

- You need to pass a total of 12 credits to satisfy this requirement
- You need to choose from at least two different subject areas (for example: ECON and HUMA)

#### \*Restrictions & Reminders

- Courses taken to learn a language **do not** count
- Courses cross-listed to a Faculty of Science (SC) course do not count
- Courses with a Faculty of Science (SC) course listed as a course credit exclusion (CCE) do not count
- Courses with a focus on science, math or statistics **do not** count (e.g. MODR 1650, ECON 1530, etc.)
- Courses taken to satisfy a second major/minor **cannot** be double counted towards the non-science requirement

### Courses in the following subject areas may be taken (subject to the restrictions noted above):

Anthropology (ANTH) Classical Studies (CLST) English (EN) Economics (ECON)	French Studies (FR) Gender and Women's Studies (GWST) Geography (GEOG)	History (HIST) Humanities (HUMA) Modes of Reasoning (MODR) Philosophy (PHIL)	Political Science (POLS) Social Science (SOSC) Sociology (SOCI)
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# Students may also take literature, linguistics, or culture courses (NOT language courses) from the subject areas listed below:

Arabic (ARB), Chinese (CH), Department of Languages, Literature and Linguistics (DLLL), English as a Second Language (ESL), French (FR, FRAN), Greek (GK), Modern Greek (GKM), Hindi (HND), Italian (IT), Japanese (JP), Korean (KOR), Latin (LA), Linguistics (LING, LIN), Language Learning Seminar (LLS), Persian (PERS), Portuguese (POR), Spanish (SP)

(e.g. ARB 2700 Intro to Arab Culture counts, but <u>not</u> ARB 1000 Intro to Modern Standard Arabic)

#### Courses from the list below may also be taken:

EU/ENVS 1000 6.00	FA/MUSI 1500 6.00	FA/MUSI 1550 6.00	FA/VISA 2110 6.00
EU/ENVS 2100 6.00	FA/MUSI 1510 6.00	FA/MUSI 2520 6.00	FA/VISA 2540 6.00
EU/ENVS 2150 3.00	FA/MUSI 1520 6.00	FA/THEA 1500 6.00	FA/VISA 2550 6.00
FA/DANC 1340 3.00	FA/MUSI 1530 6.00	SB/ENTR 3400 3.00	FA/VISA 2620 6.00
FA/DANC 2340 3.00	FA/FILM 1401 6.00	SB/ENTR 3600 3.00	LW/LAW 3591M 3.00
FA/FACS 1900 6.00	FA/MUSI 1540 6.00	SB/ENTR 4500 3.00	