DEGREE CHECKLIST 2024-2025	BACHELOR OF ENGINEERING (BEng) COMPUTER ENGINEERING
NAME	
STUDENT #	

		COURSES	CREDITS EARNED	GRADE
First Year Courses				
	☐ SC/CHEM 1100 4.00	Chemistry and Materials Science for Engineers		
	☐ LE/EECS 1011 3.00	Computational Thinking Through Mechatronics		
	☐ LE/EECS 1021 3.00	Object Oriented Programming from Sensors to Actuators		
	☐ LE/EECS 1028 3.00	Discrete Mathematics for Engineers		
	☐ LE/ENG 1101 4.00	Renaissance Engineer 1: Ethics, Communication and Problem Solving		
	☐ LE/ENG 1102 4.00	Renaissance Engineer 2: Engineering Design Principles		
	☐ SC/MATH 1013 3.00	Applied Calculus I		
	☐ SC/MATH 1014 3.00	Applied Calculus II		
	☐ SC/MATH 1025 3.00	Applied Linear Algebra		
	☐ SC/PHYS 1800 3.00	Engineering Mechanics		
	☐ SC/PHYS 1801 3.00	Electricity, Magnetism and Optics for Engineers		
Second Year Courses				
	☐ SC/MATH 1090 3.00	Introduction to Logic for Computer Science		
	☐ LE/EECS 2101 3.00	Fundamentals of Data Structures		
	☐ LE/EECS 2021 4.00	Computer Organization		
	☐ LE/EECS 2030 3.00	Advanced Object Oriented Programming		
	☐ LE/EECS 2032 4.00	Introduction to Embedded Systems		
	☐ LE/EECS 2200 3.00	Electrical Circuits		
	☐ LE/EECS 2210 3.00	Electronic Circuits and Devices		
	☐ LE/ENG 2001 3.00	Engineering Projects: Management, Economics & Safety		
	☐ LE/ENG 2003 3.00	Effective Engineering Communication		
	☐ SC/MATH 2015 3.00	Applied Multivariate and Vector Calculus		
	☐ SC/MATH 2930 3.00	Introduction to Probability and Statistics		
	☐ SC/PHYS 2020 3.00	Electricity and Magnetism		
	☐ SC/PHYS 2211 1.00	Experimental Electromagnetism		
Notes				

		COURSES		CREDITS EARNED	GRADE
		Third Year Courses			
	☐	LE/ENG 3000 3.00	Professional Engineering Practice		
	☐	LE/EECS 3101 3.00	Design and Analysis of Algorithms		
	☐	LE/EECS 3201 4.00	Digital Logic Design		
	☐	LE/EECS 3213 3.00	Communication Networks		
	☐	LE/EECS 3216 3.00	Digital Systems Engineering: Modeling, Implementation and Validation		
	☐	LE/EECS 3221 3.00	Operating System Fundamentals		
	☐	LE/EECS 3311 3.00	Software Design		
	☐	LE/EECS 3451 4.00	Signals and Systems		
	☐	LE/ESSE 2210 3.00	Engineering and the Environment		
At least 6.00 additional credits from 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 (or SC/PHYS 1470 3.00), SC/PHYS 2010 3.00, SC/PHYS 2040 3.00, SC/PHYS 2060 3.00, HH/GH 1001 3.00; HH/GH 1002 3.00	☐				
	☐				
3.00 additional credits from EECS courses at 3000 or 4000 level	☐				
		Fourth Year Courses			
	☐	LE/ENG 4000 6.00	Engineering Project		
	☐	LE/EECS 4201 3.00	Computer Architecture		
	☐	LE/EECS 4214 4.00	Digital Communications		
	☐	LE/EECS 4312 3.00	Software Engineering Requirements		
Complementary Studies (12.00 credits)	☐				
	☐				
	☐				
	☐				
12.00 credits from the following list, including at least <u>two courses</u> **with significant laboratory experience:** **Significant Laboratory Experience:** LE/EECS 3603 4.00; LE/EECS 3604 4.00; LE/EECS 3611 4.00; LE/EECS 4210 3.00; LE/EECS 4215 3.00; LE/EECS 4352 3.00; LE/EECS 4421 3.00; LE/EECS 4422 3.00; LE/EECS 4431 3.00 **Insignificant Laboratory Experience:** LE/EECS 3214 3.00; LE/EECS 3405 3.00; LE/EECS 3431 3.00; LE/EECS 3452 3.00; LE/EECS 3601 3.00; LE/EECS 4211 3.00; LE/EECS 4313 3.00; LE/EECS 4404 3.00; LE/EECS 4405 3.00; LE/EECS 4441 3.00; LE/EECS 4452 3.00; LE/EECS 4471 3.00; LE/ENG 3320 3.00; any List A Electrical Engineering technical elective courses (see below)	☐				
	☐				
	☐				
	☐				

List A Electrical Engineering technical elective courses: LE/EECS 3216 3.00, LE/EECS 3601 4.00, LE/EECS 3603 4.00, LE/EECS 3610 4.00, LE/EECS 3611 4.00, LE/EECS 3612 4.00, LE/EECS 3623 4.00, LE/EECS 3640 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, LE/EECS 4623 4.00, LE/EECS 4640 3.00, LE/EECS 4642 4.00, LE/EECS 4643 4.00

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

Complementary Studies - BEng General Education

Essentials

- You need to pass a total of 12 credits to satisfy this requirement
- These credits are typically completed throughout **second, third, and fourth year**
- You need to pass **at least** 3 credits from approved humanities/social science subject areas
- The remaining 9 credits must be completed from the humanities/social science subject areas listed on page 1 or the specified courses listed on page 2
- If you wish, you may complete all 12 credits in the approved humanities/social science subject areas

Restrictions & Reminders

- Unless specified with an asterisk (*), Faculty of Science (SC) courses and courses cross-listed to Faculty of Science, **do not** count towards the humanities/social science component
  (e.g. AP/HIST 2810 3.00 History of Modern Science is cross-listed to SC/STS 2010 3.00 and therefore **does not** count towards Complementary Studies)
- Courses with a focus on math or statistics **do not** count (e.g. MODR 1650)
- PHIL 2100 3.00 Introduction to Logic **does not** count.
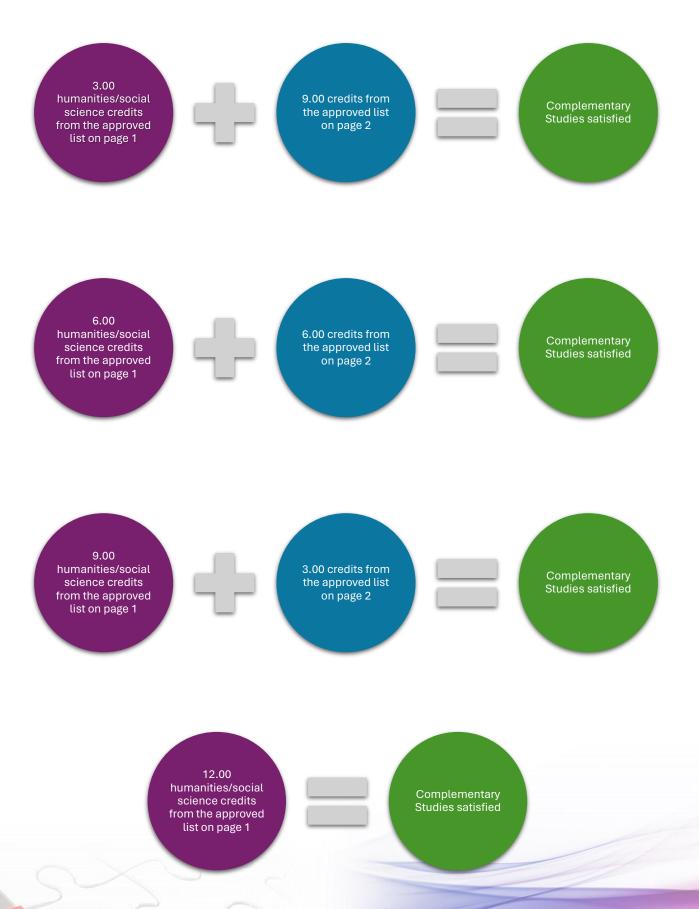
Approved Humanities/Social Science Subject Areas:

Students must **complete at least 3 credits** from the subject areas listed below:

Anthropology (ANTH)	English (EN)	Indigenous Studies (INDG)	Philosophy (PHIL)
Canadian Studies (CDNS)	Gender & Women's Studies (GWST)	Linguistics (LING, LIN)	Political Science (POLS)
Children, Childhood & Youth Studies (CCY)	History (HIST)	Modes of Reasoning (MODR)	Religious Studies (RLST)
Communications (COMS, CMDS)	Human Rights and Equity Studies (HREQ)	Multicultural and Indigenous Studies (MIST)	Social Science (SOSC)
Culture (CLTR)	Humanities (HUMA)		Sociology (SOCI)
			Writing (WRIT)

Languages:

American Sign Language (ASL)	Modern Greek (GKM)	German (GR)	Korean (KOR)
Arabic (ARB)	English as a Second Language (ESL)	Hebrew (HEB)Hindi (HND)	Latin (LA)
Catalan (CAT)	French as a Second Language (FSL)	Italian (IT)	Persian (PERS)
Chinese (CH)	French (FR, FRAN)	Jamaican Creole (JC)	Portuguese (POR)
Greek (GK)		Japanese (JP)	Spanish (SP)
			Swahili (SWAH)

The remaining 9 credits must be completed from the humanities/social science subject areas listed on page 1 or the specified courses listed below:

AP/ADMS 1000 3.00	EU/ENVS 3230 3.00	EU/GEOG 2110 3.00	FA/THEA 1500 6.00
AP/ADMS 1010 3.00	EU/ENVS 3320 3.00	EU/GEOG 2220 3.00	FA/THEA1520 3.00
AP/DEMS 1701 3.00	EU/ENVS 3340 3.00	EU/GEOG 2310 6.00	FA/THEA 1900 3.00
AP/DEMS 2700 3.00	EU/ENVS 3410 3.00	EU/GEOG 3070 3.00	FA/THEA 2060 3.00
AP/DEMS 3706 3.00	EU/ENVS 3420 3.00	EU/GEOG 3150 3.00	FA/YSDN 1900 3.00
AP/DEMS 3707 3.00	EU/ENVS 3430 3.00	EU/GEOG 3230 3.00	HH/IHST 1020 6.00
AP/DEMS 3708 3.00	EU/ENVS 3505 3.00	FA/ARTH 1900 3.00	HH/PSYC1010 6.00
AP/DLLL 1000 6.00	EU/ENVS 3520 3.00	FA/ARTH 2350 3.00	LE/TECL1000 3.00
AP/ECON 1000 3.00	EU/ENVS 3740 3.00	FA/ARTH 2390 3.00	LE/TECL3033 3.00
AP/ECON 1010 3.00	EU/ENVS 4011 3.00	FA/ARTH 2620 3.00	LE/TECL 3099 3.00
AP/HUMA 3226 3.00*	EU/ENVS 4140 3.00	FA/CMA 1401 6.00	LW/LAW 3591 3.00
AP/LLS 1000 6.00	EU/ENVS 4161 3.00	FA/CMA 1701 3.00	SB/ENTR 3400 3.00
AP/PPAS 2110 3.00	EU/ENVS 4210 3.00	FA/CMA 1900 3.00	SB/ENTR 3600 3.00
AP/PPAS 2200 3.00	EU/ENVS 4220 3.00	FA/CMA 2401 6.00	SB/ENTR 4500 3.00
AP/PPAS 3000 3.00	EU/ENVS 4225 3.00	FA/DANC 1340 3.00	SC/BC 3010 3.00
AP/PPAS 3120 3.00	EU/ENVS 4230 3.00	FA/DANC 1900 3.00	SC/STS 1411 3.00
AP/PPAS 3122 3.00	EU/ENVS 4400 3.00	FA/DANC 2340 3.00	SC/STS 2110 3.00*
AP/PPAS 3135 3.00	EU/ENVS 4401 3.00	FA/DATT 1900 3.00	SC/STS 2210 3.00
AP/PPAS 3136 3.00	EU/ENVS4402 3.00	FA/MUSI 1500 6.00	SC/STS 2222 3.00
AP/PPAS 3190 6.00	EU/ENVS4420 3.00	FA/MUSI 1510 3.00	SC/STS 2333 3.00
EU/ENVS 3122 3.00	EU/ENVS4430 3.00	FA/MUSI 1520 6.00	SC/STS 2411 3.00
EU/ENVS 3130 3.00	EU/ENVS4440 3.00	FA/MUSI 1530 3.00	SC/STS 3170 3.00*
EU/ENVS 3150 3.00	EU/ENVS4442 3.00	FA/MUSI 1540 6.00	SC/STS 3500 3.00
EU/ENVS 3151 3.00	EU/ENVS4446 3.00	FA/MUSI 1550 6.00	SC/STS 3561 3.00*
EU/ENVS 3160 3.00	EU/ENVS4520 3.00	FA/MUSI 1556 3.00	SC/STS 3600 3.00
EU/ENVS 3170 3.00	EU/ENVS4523 3.00	FA/MUSI 1580 6.00	SC/STS 3725 3.00*
EU/ENVS 3222 3.00	EU/ENVS4800Q 3.00	FA/MUSI 1900 3.00	SC/STS 3726 3.00
EU/ENVS 3226 3.00	EU/GEOG1000 6.00	FA/MUSI 2520 6.00	SC/STS 3765 3.00
			SC/STS 3790 3.00

*AP/HUMA 3226 3.00, SC/STS 2110 3.00, SC/STS 3170 3.00, SC/STS 3561 3.00, and SC/STS 3725 3.00 count as approved humanities/social science credits.

The following sample combinations demonstrate how complementary studies can be satisfied:

3.00 humanities/social science credits from the approved list on page 1 **+** 9.00 credits from the approved list on page 2 **=** Complementary Studies satisfied

6.00 humanities/social science credits from the approved list on page 1 **+** 6.00 credits from the approved list on page 2 **=** Complementary Studies satisfied

9.00 humanities/social science credits from the approved list on page 1 **+** 3.00 credits from the approved list on page 2 **=** Complementary Studies satisfied

12.00 humanities/social science credits from the approved list on page 1 **=** Complementary Studies satisfied

Lassonde Academic Advising
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