All Engineering programs offered by EECS comprise a Common Major component, the Core, and a Common General Education (Complementary Studies) component, as described below.

A. Complementary Studies Requirement (General Education):
A total of 12 credits of complementary studies courses must be taken, as identified below. At least 3 of the 12 credits must be taken in the humanities or social sciences, defined by the following areas: Anthropology, Humanities, English, History, Linguistics and Languages, Philosophy, Social Science, Modes of Reasoning and Women’s Studies. (Asterisked courses below are also considered to meet this requirement.)

- **Entrepreneurship:** SB/ENTR 3400 3.00; SB/ENTR 3600 3.00; SB/ENTR 4500 3.00; and 3 credits from Humanities/Social Sciences
- **Law:** Up to 9 credits of Osgoode 'Perspectives' courses; and 3 credits from Humanities/Social Sciences
- **Global Engineer:** One of:
  - Languages (e.g., Arabic, Chinese, German, Hindi, Japanese, Korean, Portuguese, Spanish): 12 credits of languages and culture courses with the same rubric, with a minimum of 6 credits of languages skills and a minimum of a 3 credit culture course*. (The culture course counts as a CEAB Humanities requirement.)
  - French Studies: 12-credit certificate in French or French for Business, and 3 credits from Humanities/Social Sciences. (Note; these pure language courses do not count for social science or humanities under the CEAB regulation B, therefore this option requires students to complete 15 credits instead of 12 credits.)
- **Public Policy:** Choose one of:
  - The Canadian State and Public Administration: AP/PPAS 2110 3.00; AP/PPAS 3190 6.00; and 3 credits from Humanities/Social Sciences.
  - Law: AP/PPAS 2200 3.00; and two of the following: AP/PPAS 3000 3.00, AP/PPAS 3135 3.00, or AP/PPAS 3136 3.00; and 3 credits from Humanities/Social Sciences.
  - Science, Technology and Public Policy: AP/PPAS 2110 3.00; AP/PPAS 3120 3.00; AP/PPAS 3122 3.00; and 3 credits from Humanities/Social Sciences.
- **Environmental Studies:** ES/ENVS 2151 3.00 (following on ES/ENVS 2150 3.00); 3 credits from Humanities/Social Sciences; and 6 credits from the areas of:
  - Environmental Management: ES/ENVS 3130 3.00; ES/ENVS 3230 3.00; ES/ENVS 3430 3.00; ES/ENVS 3440 3.00; ES/ENVS 3505 3.00; ES/ENVS 3510 3.00; ES/ENVS 3520 3.00; ES/ENVS 4230 6.00; ES/ENVS 4400 3.00; ES/ENVS 4401 3.00; ES/ENVS 4402 3.00; ES/ENVS 4430 3.00; ES/ENVS 4440 3.00; ES/ENVS 4442 3.00; ES/ENVS 4446 3.00; ES/ENVS 4520 3.00; ES/ENVS 4523 3.00
  - Urban & Regional Environments: ES/ENVS 3222 3.00; ES/ENVS 3226 3.00; ES/ENVS 3320 3.00; ES/ENVS 3710 3.00; ES/ENVS 3740 3.00; ES/ENVS 4210 3.00; ES/ENVS 4220 3.00; ES/ENVS 4225 3.00; ES/ENVS 4420 3.00; ES/ENVS 4440 3.00; ES/ENVS 4442 3.00; ES/ENVS 4520 3.00; ES/ENVS 4523 3.00
  - Politics: ES/ENVS 3151 3.00; ES/ENVS 3160 3.00; ES/ENVS 3340 3.00; ES/ENVS 3410 3.00; ES/ENVS 3420 3.00; ES/ENVS 3510 3.00; ES/ENVS 4011 3.00; ES/ENVS 4161 3.00; ES/ENVS 4210 3.00; ES/ENVS 4312 3.00; ES/ENVS 4315 3.00; ES/ENVS 4320 3.00; ES/ENVS 4440 3.00
  - Environment & Culture: ES/ENVS 3122 3.00; ES/ENVS 3125 3.00; ES/ENVS 3150 3.00; ES/ENVS 3170 3.00; ES/ENVS 3320 3.00; ES/ENVS 4100 3.00; ES/ENVS 4140 3.00; ES/ENVS 4161 3.00; ES/ENVS 4420 3.00
- **Science & Technology Studies:** 6 credits from: SC/STS 2210 3.00; SC/STS 2350 3.00; SC/STS 3600 3.00; SC/STS 3726 3.00; SC/STS 3765 3.00; SC/STS 3790 3.00; and 6 credits from (counts as Humanities): SC/STS 2110 3.00; SC/STS 3170 3.00; AP/HUMA 3226 3.00; SC/STS 3561 3.00; SC/STS 3725 3.00
- **General Studies:** Choose 12 credits from any of the lists above, including a 3-credit Humanities/Social Sciences course.

Co-op. A Co-op or Internship option is highly recommended for all engineering students, but is not a degree requirement.

B. Major PROGRAM CORE (Common) Requirements
All Specialized Honours BEng degree candidates must complete the Engineering Program Core (60 credits):
- **SC/CHEM 1100 4.00**
- **LE/EECS 1011 3.00; LE/EECS 1021 3.00**
- **LE/ENG 1101 4.00; LE/ENG 1102 4.00; LE/ENG 2001 3.00; LE/ENG 2003 3.00; LE/ENG 3000 3.00; LE/ENG 4000 6.00**
- **ES/ENVS 2150 3.00**
- **SC/MATH 1013 3.00; SC/MATH 1014 3.00; SC/MATH 1025 3.00; SC/MATH 2015 3.00; SC/MATH 2930 3.00**
- **SC/PHYS 1800 3.00; SC/PHYS 1801 3.00**
All BEng degree candidates in computer, electrical and software engineering programs must complete: LE/EECS 1028 3.00
All BEng degree candidates in civil, geomatics, mechanical and space engineering programs must complete: LE/ESSE 1012 3.00
COMPUTER ENGINEERING
- Complementary Studies;
- The engineering program core;
- SC/MATH 1090 3.00;
- LE/EECS 2021 3.00; LE/EECS 2030 3.00; LE/EECS 2031 3.00; LE/EECS 2200 3.00; LE/EECS 2210 3.00;
- S/PHYS 2020 3.00; S/PHYS 2211 1.00;
- At least six additional credits from SC/BIOL 1000 3.00; SC/BIOL 1001 3.00 or SC/BIOL 1010 6.00; SC/CHM 1001 3.00; SC/CHM 2011 3.00; LE/EESE 1011 3.00; S/PHYS 1070 3.00; S/PHYS 2010 3.00; S/PHYS 2040 3.00; S/PHYS 2060 3.00;
- LE/EECS 3101 3.00; LE/EECS 3201 4.00; LE/EECS 3213 3.00; LE/EECS 3215 4.00; LE/EECS 3221 3.00; LE/EECS 3313 3.00; LE/EECS 3451 4.00;
- Three additional credits from computer science courses at the 3000 or 4000 level;
- LE/EECS 4201 3.00; LE/EECS 4214 4.00; LE/EECS 4312 3.00;
- 12 credits from: LE/EECS 3214 3.00; LE/EECS 3431 3.00; LE/EECS 4210 3.00*; LE/EECS 4211 3.00; LE/EECS 4215 3.00; LE/EECS 4217 3.00; LE/EECS 4218 3.00; LE/EECS 4441 3.00; LE/EECS 4442 3.00; LE/EECS 4471 3.00;
- 12 credits* must include at least two courses with significant laboratory experience.

ELECTRICAL ENGINEERING
- Complementary Studies;
- The engineering program core;
- LE/EECS 2021 3.00; LE/EECS 2030 3.00; LE/EECS 2031 3.00; LE/EECS 2200 3.00; LE/EECS 2210 3.00; LE/EECS 2602 4.00; SC/PHYS 2020 3.00; SC/PHYS 2211 1.00;
- LE/EECS 3201 4.00; LE/EECS 3215 4.00; LE/EECS 3602 4.00; LE/EECS 3603 4.00; LE/EECS 3604 4.00;
- LE/ENG 4550 3.00;
- three credits chosen from: SC/CHEM 1001 3.00; SC/CHEM 2011 3.00; LE/ESSE 1011 3.00; SC/PHYS 1070 3.00; SC/PHYS 1470 3.00; SC/PHYS 2010 3.00; SC/PHYS 2040 3.00; or SC/PHYS 2060 3.00.

Options: At least 28 additional credits from the following five lists, subject to the conditions below:
- Electronics option: *LE/EECS 3611 4.00; *LE/EECS 4611 4.00; LE/EECS 4612 4.00; LE/EECS 4613 4.00; LE/EECS 4614 4.00.
- Power option: LE/EECS 4613 4.00; *LE/EECS 4621 4.00; *LE/EECS 4622 4.00; LE/EECS 4623 4.00.
- Communications and Signal Processing option: LE/EECS 3213 3.00; LE/EECS 4210 3.00; *LE/EECS 4631 4.00.
- Medical and Assistive Devices option: LE/EECS 3213 3.00; *LE/EECS 4641 4.00; *LE/EECS 4642 4.00.
- General option: LE/EECS 3214 3.00; LE/EECS 3221 3.00; LE/EECS 3311 3.00; LE/EECS 3342 3.00; LE/EECS 3431 3.00; LE/EECS 3482 3.00; LE/EECS 4201 3.00; LE/EECS 4211 3.00; LE/EECS 4312 3.00; LE/EECS 4313 3.00; LE/EECS 4352 3.00; LE/EECS 4441 3.00; LE/EECS 4442 3.00; LE/EECS 4443 3.00; LE/EECS 4444 3.00; LE/EECS 4445 3.00; LE/EECS 4446 3.00; LE/EECS 4447 3.00; LE/EECS 4448 3.00; LE/EECS 4449 3.00; LE/EECS 4450 3.00; LE/EECS 4451 3.00; LE/EECS 4452 3.00; LE/EECS 4453 3.00; LE/EECS 4454 3.00; LE/EECS 4455 3.00; LE/EECS 4456 3.00; LE/EECS 4457 3.00; LE/EECS 4458 3.00; LE/EECS 4459 3.00; LE/EECS 4460 3.00; LE/EECS 4461 3.00; LE/EECS 4462 3.00; LE/EECS 4463 4.00; LE/EECS 4464 4.00.

Conditions: Students selecting an option must complete at least 15 credits from a single option list (any list other than the "General list"), including all courses on that list with an asterisk (*); and at least seven credits in total from at least two other lists (24 credits in total).
- Students not selecting an option must complete credits from at least three lists, with no more than 12 credits selected from any single list; and at least two courses marked with an asterisk (*).
- If a student completes an option, a notation will be made on the student's transcript, indicating the option completed. No notation will be made for students not completing an option.
- Courses appearing on multiple lists may not be used to satisfy credit requirements simultaneously from more than one list.

SOFTWARE ENGINEERING
- Complementary Studies;
- The engineering program core;
- SC/MATH 1090 3.00;
- LE/EECS 2021 3.00; LE/EECS 2030 3.00; LE/EECS 2031 3.00; LE/EECS 2200 3.00; LE/EECS 2210 3.00; LE/EECS 2311 3.00; SC/PHYS 2020 3.00; SC/PHYS 2211 1.00;
- LE/EECS 3201 4.00; LE/EECS 3215 4.00; LE/EECS 3313 3.00; LE/EECS 3451 4.00;
- LE/EECS 4312 3.00; LE/EECS 4313 3.00; LE/EECS 4314 3.00; LE/EECS 4315 3.00; LE/EECS 4413 3.00; LE/EECS 4414 3.00; LE/EECS 4415 3.00; LE/ENG 4550 3.00;
- 12 additional credits from computer science courses at the 3000 and 4000 level. At least six of these credits must be from the following list: LE/EECS 3214 3.00; LE/EECS 3421 3.00; LE/EECS 3461 3.00; LE/EECS 3481 3.00; LE/EECS 3482 3.00; LE/EECS 4214 3.00; LE/EECS 4215 3.00; LE/EECS 4411 3.00; LE/EECS 4412 3.00; LE/EECS 4441 3.00; LE/EECS 4442 3.00; LE/EECS 4443 3.00; LE/EECS 4444 3.00; LE/EECS 4445 3.00; LE/EECS 4481 4.00; or LE/EECS 4492 3.00
- Security Option: Students selecting the software security option must choose 4 of the following 5 courses from the list above: LE/EECS 3214 3.00; LE/EECS 3481 3.00; LE/EECS 3482 3.00; LE/EECS 4481 4.00; or LE/EECS 4492 3.00