BEng Requirements

Complementary Studies Requirement

A total of 12 credits of complementary studies courses, with no more than 6.00 credits at the 1000 level, must be taken, as identified below by a thematic area. At least 3 of the 12 (maximum of 9 credits) credits must be taken in the humanities or social sciences, defined by the following areas of study: Anthropology, Humanities, English, History, Linguistics and Languages, Philosophy, Social Science, Modes of Reasoning and Gender and Women's Studies**. Asterisked courses below in the Science and Technology Studies thematic area are also considered to meet this requirement.

Entrepreneurship

9.00 credits from:

- SB/ENTR 3400 3.00 Business Essentials for Technology Entrepreneurs I
- SB/ENTR 3600 3.00 Business Essentials for Technology Entrepreneurs II
- SB/ENTR 4500 3.00 Entrepreneurship and Technology Ventures
- LE/TECL 3033 3.00 International Entrepreneurial Engineering Immersion

Plus: 3.00 credits in humanities/social sciences

Environmental Studies

- EU/ENVS 2151 3.00 (follow-on to EU/ENVS 2150 3.00)

6.00 credits from the areas of:

1. Environmental Management: Policy Resources and Conservation:
   - EU/ENVS 3130 3.00 Energy and Environment
   - EU/ENVS 3230 3.00 Restoration Ecology
   - EU/ENVS 3420 3.00 Environmental Law
   - EU/ENVS 3430 3.00 Environmental Assessment
   - EU/ENVS 3440 3.00 Resource Management
   - EU/ENVS 3505 3.00 Business and Sustainability
   - EU/ENVS 3510 3.00 Environmental Economics
   - EU/ENVS 3520 3.00 Applications of Geographic Information Systems in Environmental Studies
   - EU/ENVS 4230 6.00 Design for Sustainability Workshop
   - EU/ENVS 4400 3.00 Fundamentals of Renewable Energy
   - EU/ENVS 4401 3.00 Fundamentals of Energy Efficiency
   - EU/ENVS 4402 3.00 Climate Change Mitigation (EU/ENVS 3130 3.00 recommended prerequisite)
   - EU/ENVS 4430 3.00 Impact Assessment Processes and Practice (EU/ENVS 3430 3.00 prerequisite)
   - EU/ENVS 4440 3.00 Environmental Disasters
2. **Urban and Regional Environments**
   - **EU/ENVS 3222 3.00** Urban Infrastructure
   - **EU/ENVS 3226 3.00** Sustainable Urbanism: Environmental Planning and Design
   - **EU/ENVS 3230 3.00** Restoration Ecology
   - **EU/ENVS 3520 3.00** Applications of Geographic Information Systems in Environmental Studies
   - **EU/ENVS 3710 3.00** Landscape Ecology
   - **EU/ENVS 3740 3.00** Urban Ecology
   - **EU/ENVS 4210 3.00** Global Populations: Critical Environmental Perspectives
   - **EU/ENVS 4220 3.00** Urbanization in Developing Countries
   - **EU/ENVS 4225 3.00** Urban Sustainability
   - **EU/ENVS 4230 6.00** Design for Sustainability Workshop
   - **EU/ENVS 4440 3.00** Environmental Auditing
   - **EU/ENVS 4442 3.00** Environmental Auditing
   - **EU/ENVS 4520 3.00** Geographic Information Systems Applications in Environmental Studies
   - **EU/ENVS 4700 3.00** Urban Ecologies Workshop
   - **EU/ENVS 4800 3.00** Urban Development Processes

3. **Environmental Politics: Development, Globalization and Justice:**
   - **EU/ENVS 3151 3.00** Environmental Politics and Advocacy I
   - **EU/ENVS 3160 3.00** Race/Racism and Environmental Justice
   - **EU/ENVS 3340 3.00** Global Environmental Politics
   - **EU/ENVS 3410 3.00** Environmental Policy I
   - **EU/ENVS 3420 3.00** Environmental Law
   - **EU/ENVS 3510 3.00** Environmental Economics
   - **EU/ENVS 4011 3.00** Food, Land and Culture
   - **EU/ENVS 4161 3.00** Social Movements, Activism and Social Change
   - **EU/ENVS 4210 3.00** Global Populations
   - **EU/ENVS 4312 3.00** Global Justice and Humanitarian Internationalism
   - **EU/ENVS 4315 3.00** Humanitarian Crises and Action
   - **EU/ENVS 4320 3.00** Gender and Development
   - **EU/ENVS 4440 3.00** Environmental Disasters

4. **Environment and Culture**
   - **EU/ENVS 3122 3.00** Community Arts Practice Preparatory Workshop
   - **EU/ENVS 3125 3.00** Popular Education for Environmental and Social Justice
   - **EU/ENVS 3150 3.00** Human/Non-Human Animal Relations
   - **EU/ENVS 3170 3.00** Indigenous Environmental Thought
   - **EU/ENVS 3320 3.00** Sex, Gender, Nature: Ecofeminist Perspectives
   - **EU/ENVS 4100 3.00** Environmental Literatures
   - **EU/ENVS 4140 3.00** Environmental Thought
   - **EU/ENVS 4161 3.00** Social Movements, Activism and Social Change
EU/ENVS 4420 3.00 Environment, Media, Culture and Communication

Plus: 3.00 credits in humanities/social sciences

Fine Arts

9.00 credits from:

- FA/DANC 1340 6.00 Introduction to Dance Studies
- FA/DANC 2340 3.00 Dance History: 20th Century and Later
- FA/FILM 1401 6.00 Introduction to Film (for Non-Majors)
- FA/FILM 1701 3.00 Hollywood: Old and New
- FA/FILM 2401 6.00 Film, Television and Society
- FA/FILM 1401 6.00 Introduction to Film (for Non-Majors)
- FA/FILM 1701 3.00 Hollywood: Old and New
- FA/FILM 2401 6.00 Film, Television and Society
- FA/MUSI 1500 6.00 The Music of Bollywood Films
- FA/MUSI 1510 6.00 The Musical Experience
- FA/MUSI 1520 6.00 Rhythm and Blues, Soul, Funk, and Rap
- FA/MUSI 1530 6.00 Rock and Popular Music
- FA/MUSI 1540 6.00 Popular Music of the World
- FA/MUSI 1550 6.00 Latin and Caribbean Popular Music
- FA/THEA 1500 6.00 Aspects of Theatre
- FA/VISA 2110 6.00 Introduction to the Study of Western Architecture
- FA/VISA 2620 6.00 Modern Art: 1750 to the Present
- Select one from:
  - FA/ARTH 1900 3.00 Art in the City
  - FA/DANC 1900 3.00 Dance, Film, and Culture
  - FA/DATT 1900 3.00 Art Science: At the Intersection of Arts and Science
  - FA/FILM 1900 3.00 Anatomy of the Feature Film
  - FA/MUSI 1900 3.00 Music in the City
  - FA/THEA 1900 3.00 Intercultural Theatre and Performance in Toronto
  - FA/YSDN 1900 3.00 Design and Contemporary Culture

Plus: 3.00 credits in humanities/social sciences

Global Engineer

Languages (e.g. Arabic, Chinese, German, Hindi, Japanese, Korean, Portuguese, Spanish)

- 12.00 credits in languages and culture courses with the same rubric, with a minimum of 6.00 credits of language skills and a minimum of 3.00 credits culture course (counts as humanities/social sciences)

French Studies

- 12.00 credit certificate in French or French for Business, plus 3.00 credits in humanities/social sciences
General Studies

Students may choose 12.00 credits from all the courses listed in the other areas, subject to prerequisites, the humanities or social sciences requirements, and some other restrictions. Up to 9.00 credits of humanities or social sciences (as defined above) may be used to satisfy this requirement.

**AP/ECON 1000 3.00** and **AP/ECON 1010 3.00** and **HH/PSYC 1010 6.00** and **AP/SOCI 1010 6.00** and other specified courses in the thematic areas may also be taken.

Law

- Up to 9.00 credits of Osgoode ‘Perspectives’ courses, such as **LW/LAW 3040X 3.00** (Comparative Law: Privacy & Access to Information)

**Plus:** 3.00 credits in humanities/social sciences

Public Policy

Choose one of three areas:

1. **The Canadian State and Public Administration:**
   - **AP/PPAS 2110 3.00** Canadian Government
   - **AP/PPAS 3190 6.00** Public Administration

2. **Public Law**
   - **AP/PPAS 2200 3.00** Communities and Public Law
   - Choose two of the following:
     - **AP/PPAS 3000 3.00** Politics, Policy and the Law of Minority Rights;
     - **AP/PPAS 3135 3.00** Public Law I: The Constitution and the Courts in Canada;
     - **AP/PPAS 3136 3.00** Public Law II: The Charter of Rights and Freedoms and Limits of Public Administration

3. **Science, Technology and Public Policy:**
   - **AP/PPAS 2110 3.00** Canadian Government;
   - **AP/PPAS 3120 3.00** Science Technology and Public Policy;
   - **AP/PPAS 3122 3.00** Science Policy in Context

**Plus:** 3.00 credits in humanities/social sciences

Science & Technology Studies

6.00 credits from:

- **SC/STS 2210 3.00** Technology in the Modern World
- **SC/STS 3500 3.00** The Global Information Society
- **SC/STS 3600 3.00** Technological Failure
- **SC/STS 3726 3.00** Technology, Experts and Society
- **SC/STS 3765 3.00** Natures of Experiment
- **SC/STS 3790 3.00** Science and Technology Issues in Global Development

**Plus:** 6.00 credits from (counts as humanities/social sciences requirement):

- **SC/STS 2110 3.00** Revolutions in Science*
- **SC/STS 3170 3.00** Philosophy of Science*
- **AP/HUMA 3226 3.00** Representations of Nature: Cultural and Historical Perspectives*
- **SC/STS 3561 3.00** History of Computing and Information Technology*
- **SC/STS 3725 3.00** Science and Exploration*

**Restrictions & Notes**

- The following course(s) contain a substantial overlap in content with engineering core material and hence may not be taken for degree credit by BEng degree candidates: **AP/PHIL 2100 3.00** Introduction to Logic.
- No more than 6.00 credits may be taken at the 1000-level.
- Quantitative courses focusing on techniques of mathematics or statistics cannot count as general education courses.
- Courses which are cross-listed as SC courses or which are eligible for SC credit cannot count towards this requirement, except the specific courses identified in the Science and Technology Studies cluster.
- **Excluding gender and women's studies courses which are cross-listed with natural science courses.**

Note: Many 3000 & 4000-level courses are eligible for complementary studies credit. Students must meet the listed prerequisites and be confident in their ability to complete course work in that subject area at a third/fourth-year level.

https://calendars.students.yorku.ca/2021-2022/programs/IE/computer-science#regulations-governing-undergraduate-degree-requirement