SOC APPROVALS
March 13, 2024

The following proposals were approved at the March 13, 2024 meeting of the Subcommittee on Undergraduate Academic Courses (SOC).

FACULTY OF ARTS AND HUMANITIES

DEPARTMENT OF VISUAL ARTS

Course Introduction – Effective September 1, 2024, the following course be introduced:

ART HISTORY 3602F/G
ART HISTORY AND STUDIO IN DIALOGUE
(Short title: Art History Studio Dialogue)
An advanced course intersecting the study of a topic in art history and theory with related studio practices.

Antirequisite(s): Studio Art 3604F/G, the former VAH 3379F/G, the former VAH 3389E, the former VAS 3379F/G, the former VAS 3389E.
Prerequisite(s): Registration in a Visual Art module or permission of the Department.
Extra Information: 4 seminar/studio hours, lecture, blended, or online format.
Cross-listed with Studio Art 3604F/G.
Course Weight**:** 0.50

Course Introduction – Effective September 1, 2024, the following course be introduced:

STUDIO ART 3604F/G
ART HISTORY AND STUDIO IN DIALOGUE
(Short title: Art History Studio Dialogue)
An advanced course intersecting the study of a topic in art history and theory with related studio practices.

Antirequisite(s): Art History 3602F/G, the former VAH 3379F/G, the former VAH 3389E, the former VAS 3379F/G, the former VAS 3389E.
Prerequisite(s): Registration in a Visual Art module or permission of the Department.
Extra Information: 4 seminar/studio hours, lecture, blended, or online format.
Cross-listed with Art History 3602F/G.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2024, the following course be withdrawn:

ART HISTORY 3502F/G
ART HISTORY AND STUDIO IN DIALOGUE
An advanced course intersecting the study of a topic in art history and theory with related studio practices.

Antirequisite(s): Studio Art 3502F/G, the former VAH 3379F/G, the former VAS 3379F/G.
Prerequisite(s): Registration in years 2 – 4 of a Department of Visual Arts Honours Specialization or Major, or permission of the Department.
Extra Information: 4 seminar/studio hours, lecture, blended, or online format.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2024, the following course be withdrawn:

STUDIO ART 3502F/G
ART HISTORY AND STUDIO IN DIALOGUE
An advanced course intersecting the study of a topic in art history and theory with related studio practices.

Antirequisite(s): the former VAH 3379F/G, the former VAH 3389E, the former VAS 3379F/G, the former VAS 3389E.
Prerequisite(s): Registration in a Visual Art module or permission of the Department.
Extra Information: 4 seminar/studio hours, lecture, blended, or online format.
Course Weight: 0.50

IVEY BUSINESS SCHOOL

Program Revision – Effective September 1, 2024, the following change(s) be made:

HBA/MECHATRONIC SYSTEMS ENGINEERING

Admission Requirements

Normally, students apply to the HBA program during their second year in Engineering by the published deadline. Application for the combined program is made during the first year in the HBA program. Students applying to the Ivey Business School's Advanced Entry Opportunity (AEO) are also eligible to be considered for the combined program. Admission to the program is competitive and limited. Upon completion of the program students will receive two degrees: a BA in Honours Business Administration and a BESc degree.

To be eligible for the combined program, all students, including those admitted via the AEO route, must have completed all the requirements of the first year curriculum in the Faculty of Engineering and the second year program in Option A of the Mechatronic Systems Engineering Program. Students must obtain a weighted average (YWA) of 78% in each year.

During the second year of the Engineering program students are required to complete Business Administration 2257 with a minimum grade of 70%. Mechatronic Systems Engineering students may take Business Administration 2257 during Intersession either after their first or second year. Demonstrated participation in extra-curricular and/or community activities, leadership and work experience are also admission criteria.

Module/Program Information

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B.

(Three of the half courses are taken in each term as scheduled)

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B, Computer Science 1037A/B, ECE 2205A/B, MSE 2200Q/R/S/T, MSE 2201A/B, MSE 2202A/B, MSE 2212A/B, MSE 2213A/B, MSE 2214A/B, MSE 2233A/B, MSE 2273A/B, Business Administration 2257.

Third Year Program

The third year of the undergraduate program in Business Administration consists of an integrated set of courses (7.5 courses) designed to give a basic understanding of the functions and the interrelationships of the major areas of management, as well as to develop problem-solving and action-planning skills.

All students will take: Business Administration 3300K, Business Administration 3301K, Business Administration 3302K, Business Administration 3303K, Business Administration 3304K, Business Administration 3311K, Business Administration 3316K, Business Administration 3321K, Business Administration 3322K, Business Administration 3323K.

Fourth Year Program

~~Numerical and Mathematical Methods 3415A/B,~~ ECE 2277A/B, ECE 3330A/B, ECE 3331A/B, ECE 3375A/B, **MSE 2221A/B,** MSE 3301A/B, MSE 3302A/B, MSE 3310A/B, MSE 3360A/B, MSE 3380A/B, MSE 3381A/B.

Applied Project Requirement: Business Administration 4569

Fifth Year Program

MSE 4499, MSE 4401A/B, ELI 4110F/G or the former ES 4498F/G, Statistical Sciences 2141A/B, two 0.5 TE from the approved list.

3.0 Business Administration courses:

- 0.5 course: International Perspective Requirement: Business Administration 4505A/B.
- 0.5 course: Corporations and Society Perspective Requirement: At least one 0.5 course from Business Administration - Corporations and Society designated electives offered during the academic year (Business Administration 4538A/B, Business Administration 4539A/B, Business Administration 4588A/B, Business Administration 4625A/B) or other business elective as determined and approved by the HBA Program Director to satisfy this requirement.
- 0.5 course: Managerial Accounting Requirement: Business Administration 4624A/B.

- 1.5 elective courses chosen from 4000 level Business courses.

Approved Technical Electives: ECE 4455A/B, ECE 4460A/B, ECE 4469A/B

Program Revision – Effective September 1, 2024, the following change(s) be made:

HBA/INTEGRATED ENGINEERING

Admission Requirements

Normally, students apply to the HBA program during their second year in Engineering by the published deadline. Application for the combined program is made during the first year in the HBA program. Students applying to the Ivey Business School's Advanced Entry Opportunity (AEO) are also eligible to be considered for the combined program. Admission to the program is competitive and limited. Upon completion of the program students will receive two degrees: a BA in Honours Business Administration and a BESc degree.

To be eligible for the combined program, all students, including those admitted via the AEO route, must have completed all the requirements of the first year curriculum in the Faculty of Engineering and the second year program in Option B of the Integrated Engineering program. Students must obtain a weighted average (YWA) of 78% in each year.

During the second year of the program students are required to complete Business Administration 2257 with a minimum grade of 70%. Integrated Engineering students may take Business Administration 2257 during Intersession either after their first or second year. Demonstrated participation in extra curricular and/or community activities, leadership and work experience are also admission criteria.

Module/Program Information

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B.

(Three of the half courses are taken in each term as scheduled)

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B, CBE 2221A/B, ~~CBE 2291A/B, CEE 2202A/B, ECE 2238A/B,~~ **CEE 2220A/B,** ECE 2277A/B, **IE 2298** ~~IE 2297A/B or the former ES 2297A/B~~, MSE 2214A/B, **MME 2285A/B,** Statistical Sciences 2143A/B, Business Administration 2257.

Third Year Program

The third year of the undergraduate program in Business Administration consists of an integrated set of courses (7.5 courses) designed to give a basic understanding of the functions and the interrelationships of the major areas of management, as well as to develop problem-solving and action-planning skills.

All students will take: Business Administration 3300K, Business Administration 3301K, Business Administration 3302K, Business Administration 3303K, Business Administration 3304K, Business Administration 3311K, Business Administration 3316K, Business Administration 3321K, Business Administration 3322K, Business Administration 3323K.

Fourth Year Program

CBE 2220A/B, **CBE 2291A/B,** CBE 3322A/B, ~~CEE 2220A/B~~ **CEE 2202A/B**, MME 3374A/B, ELI 3000A/B or the former ES 3331A/B, **ELI 3100A/B or** ELI 3200A/B or the former ES 3330A/B, ELI 4110F/G or the former ES 4498F/G, ~~MME 2285A/B,~~ MSE 2213A/B, MSE 3360A/B.

Applied Project Requirement: Business Administration 4569.

Fifth Year Program

ELI 4100A/B or the former ES 4480A/B, IE 4499 or the former ES 4499, three 0.5 technical electives (see list below).

3.0 Business Administration courses:

- **0.5 course**: International Perspective Requirement: Business Administration 4505A/B.
- **0.5 course:** Corporations and Society Perspective Requirement: At least one 0.5 course from Business Administration - Corporations and Society designated electives offered during the academic year (Business Administration 4538A/B, Business Administration 4539A/B, Business Administration 4588A/B, Business Administration 4625A/B) or other business elective as determined and approved by the HBA Program Director to satisfy this requirement.

- **0.5 course:** Managerial Accounting Requirement: Business Administration 4624A/B.
- **1.5 elective courses** chosen from 4000 level Business courses.

Chemical and Biochemical Engineering:
CBE 2290A/B, CBE 3310A/B, CBE 3324A/B, CBE 4421A/B, CBE 4409A/B.

Civil and Environmental Engineering:
CEE 3348A/B, CEE 3362A/B, CEE 4405A/B, CEE 4418A/B, CEE 4458A/B, CEE 4465A/B, CEE 4477A/B.

Electrical and Computer Engineering:
ECE 3349A/B, ECE 3375A/B, ECE 4436A/B, ECE 4468A/B, SE 3314A/B.

Mechanical and Materials Engineering:
MME 3348A/B, MME 3379A/B, MME 3381A/B, MME 4452A/B, MME 4473A/B, MME 4487A/B, MME 4492A/B.

Additional Technical Electives: IE 4990A/B, IE 4491A/B.

FACULTY OF ENGINEERING

DEPARTMENT OF CHEMICAL AND BIOCHEMICAL ENGINEERING

Program Revision – Effective September 1, 2024, the following change(s) be made:

A. GENERAL CHEMICAL ENGINEERING OPTION

Module/Program Information

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2277A/B, CBE 2206A/B, CBE 2207A/B,
CBE 2214A/B, CBE 2220A/B, CBE 2221A/B, CBE 2224A/B,
CBE 2290A/B, CBE 2291A/B, Statistical Sciences 2143A/B, Writing 2130F/G.

Third Year Program

CBE 3307A/B, CBE 3310A/B, CBE 3315A/B, CBE 3316A/B, CBE 3318A/B, CBE 3319A/B, CBE 3322A/B, CBE 3323A/B, CBE 3324A/B, CBE 3395Y, two 0.5 non-technical electives.

Fourth Year Program

CBE 4497, CBE 4415*, ELI 4110F/G or the former ES 4498F/G, four 0.5 technical electives†, 0.5 non-technical elective**.

~~Students who entered before September 2016 are required to take Business Administration 2299E.~~

*A student may substitute two 0.5 technical electives from the list below for CBE 4415.

†Accelerated Master's students can take up to two 0.5 graduate courses with special permission from the Department Chair.

**Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies, and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website.

Technical Electives: General Chemical Engineering Option

CBE 4404A/B, CBE 4407A/B, CBE 4411A/B, CBE 4413A/B, CBE 4416A/B, CBE 4417A/B, CBE 4418A/B, CBE 4420A/B, CBE 4428A/B, CBE 4432A/B, CBE 4463A/B, CBE 4485A/B, CBE 4493A/B, CEE 3362A/B, CBE 4405A/B, CBE 4484A/B, MME 4429A/B, the former CBE 4424A/B.

Some technical electives may not be offered in a given academic year.

Special permission from the Department is needed to take courses from Science or Engineering not listed above.

Program Revision – Effective September 1, 2024, the following change(s) be made:

B. BIOCHEMICAL AND ENVIRONMENTAL ENGINEERING OPTION

Module/Program Information

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2277A/B, CBE 2206A/B, CBE 2207A/B, CBE 2214A/B, CBE 2220A/B, CBE 2221A/B, CBE 2224A/B, CBE 2290A/B, CBE 2291A/B, Statistical Sciences 2143A/B, Writing 2130F/G.

Third Year Program

CBE 3307A/B, CBE 3310A/B, CBE 3315A/B, CBE 3316A/B, CBE 3318A/B, CBE 3319A/B, CBE 3322A/B, CBE 3323A/B, CBE 3324A/B, CBE 3330A/B, CBE 3396Y, CBE 4403A/B.

Fourth Year Program

CBE 4425*, CBE 4498, ELI 4110F/G or the former ES 4498F/G, 1.0 technical elective, 1.5 non-technical elective**.

~~Students who entered before September 2016 are required to take Business Administration 2299E.~~

*A student may substitute two 0.5 technical electives from Technical Electives: Biochemical and Environmental Engineering Course List for CBE 4425.

Accelerated Master's students can take up to two 0.5 graduate courses with special permission from the Department Chair.

**Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with

central issues, methodologies, and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website.

Technical Electives: Biochemical Engineering Option
CBE 4405A/B, CBE 4407A/B, CBE 4409A/B, CBE 4411A/B, CBE 4416A/B, CBE 4421A/B, CBE 4422A/B, CBE 4423A/B, CBE 4463A/B, CEE 3362A/B, CBE 4484A/B.

Some technical electives may not be offered in a given academic year.

Special permission from the Department is needed to take courses from Science or Engineering not listed above.

Program Revision – Effective September 1, 2024, the following change(s) be made:

D. CHEMICAL ENGINEERING/LAW

Module/Program Information

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B.

(Three of the half courses are taken in each term as scheduled)

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2277A/B, CBE 2206A/B, CBE 2207A/B, CBE 2214A/B, CBE 2220A/B, CBE 2221A/B, CBE 2224A/B, CBE 2290A/B, CBE 2291A/B, Statistical Sciences 2143A/B, Writing 2130F/G.

Third Year Program

CBE 3307A/B, CBE 3310A/B, CBE 3315A/B, CBE 3316A/B, CBE 3318A/B, CBE 3319A/B, CBE 3322A/B, CBE 3323A/B, CBE 3324A/B, CBE 3395Y, two 0.5 technical electives***

Fourth Year Program

First year Law curriculum. No courses outside Law may be taken during this year.

Fifth and Sixth Year Programs

CBE 4497, two 0.5 Technical electives approved by the CBE program.

In years five and six, students must take courses in Law totaling 45 credit hours. These courses must include the **four** ~~three~~ compulsory upper-year courses and courses that satisfy the Faculty of Law writing requirements. They must also include one of the courses listed below under "Economics" and one listed under "Impact of Technology on Society".

Notes: Fulfillment of the Faculty of Engineering requirement of courses that expose students to the impact of technology on society, ethical issues, economics and the thought processes in the Humanities and Social Sciences must be taken as follows:

Economics: One of Law 5220 Income Taxation, **Law 5550 Competition Law,** Law 5555 Corporate Finance, or **another Law course approved by the Associate Dean (Academic)** ~~an approved Law Selected Topics course~~.
~~Ethical Issues: Law 5150 Legal Ethics and Professionalism.~~
Impact of Technology on Society: One of **Law 5814 Disruptive technologies and the Law,** Law 5615 Biotechnology Law, Law 5605 Advanced Issues in Technology Law, Law 5350 Media Law, Law 5600 Advanced Intellectual Property, Law 5620 Information Law, Law 5625 Intellectual Property, Law 5630 International Protection of Intellectual Property, Law 5610 Advanced Patent Law, or **another Law course approved by the Associate Dean (Academic)** ~~an approved Law Selected Topics course~~.
~~Thought Processes of the Humanities and Social Sciences: Law 5110 Constitutional Law, Law 5115 Contracts, Law 5120 Criminal Law, Law 5140 Property, Law 5145 Torts.~~

Program Revision – Effective September 1, 2024, the following change(s) be made:

G. CHEMICAL ENGINEERING AND ARTIFICIAL INTELLIGENCE SYSTEMS ENGINEERING OPTION

Admission Requirements

The *Chemical Engineering and Artificial Intelligence Systems Engineering (option G)* is a limited-enrollment program. Upon completion, students will receive two degrees: a BESc in Chemical Engineering and a BESc in Artificial Intelligence

Systems Engineering (non-accredited). Admission to Option G is competitive; meeting the minimum requirements does not guarantee admission. Students apply to Option G while in first-year through the Intent-to-Register process. To be eligible for Option G, all of the requirements of the first-year curriculum in the Faculty of Engineering must be completed with a minimum year-weighted average (YWA) of 75%.

Module/Program Information

Students who entered the Engineering Program in September 2021 will continue to follow their original AISE program progression.

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B. (Three of the half courses are taken in each term as scheduled.)

Second Year Program

AISE 2205A/B (or SE 2205A/B if taken prior to 2024-25), AISE 2251A/B (or the former SE 2251A/B), Numerical and Mathematical Methods 2270A/B, ~~Numerical and Mathematical Methods 2276A/B~~ **Numerical and Mathematical Methods 2277A/B**, CBE 2206A/B, **CBE 2207A/B,** CBE 2214A/B, CBE 2220A/B, CBE 2221A/B, CBE 2224A/B, **CBE 2290A/B,** ~~CBE 2291A/B,~~ **Statistical Sciences 2143A/B** ~~Statistical Sciences 2141A/B, Writing 2130F/G~~.

Third Year Program

AISE 3010A/B, AISE 3309A/B (or SE 3309A/B if taken prior to 2024-25), AISE 3350A/B (or the former ECE 3350A/B), AISE 3351A/B (or the former ECE 3351A/B), ~~CBE 2290A/B,~~ **CBE 2291A/B**, ~~CBE 3307A/B~~, CBE 3315A/B, ~~CBE 2207A/B,~~ CBE 3324A/B, CBE 3322A/B, CBE 3323A/B, DS 3000A/B, ~~AISE 3010A/B,~~ **Writing 2130F/G, One 0.5 non-technical elective**.

Fourth Year Program

CBE 3307A/B, CBE 3310A/B, CBE 3318A/B, CBE 331**6**A/B, CBE 3395**Y**~~A/B~~, CBE 3319A/B, ~~AISE 3020A/B~~, AISE 4010A/B, AISE 4020A/B, AISE 4430A/B (or the former SE 4430A/B), ~~AISE 4450A/B (or the former ECE 4450A/B),~~ **one** 0.5 AISE technical elective**, **one** 0.5 nontechnical elective.

Fifth Year Program

~~CBE 3310A/B,~~ **AISE 3020A/B,** AISE 4050, **AISE 4450A/B (or former ECE 4450A/B),** ELI 4110F, **two 0.5** ~~1.0~~ CBE technical electives, **one** 0.5 AISE technical elective, **one** ~~1.0~~ **0.5** non-technical electives*.

Technical Electives:
CBE 4404A/B, CBE 4405A/B, CBE 4407A/B, CBE 4409A/B, CBE 4411A/B, CBE 4413A/B, CBE 4416A/B, CBE 4417A/B, CBE 4420A/B, CBE 4421A/B, CBE 4422A/B, CBE 4423A/B, CBE 4428A/B, CBE 4432A/B, CBE 4463A/B, CBE 4485A/B, CBE 4493A/B, GPE 4484A/B.

*Selection of the non-technical elective must be approved by the department to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies and thought processes of the humanities and social sciences. More information about approved non-technical electives can be found on the Engineering website.

AISE Technical Electives:
Computer Science 3340A/B, Computer Science 4417A/B, **ECE 4438A/B, ECE 4445A/B, SE 4455A/B,** Statistical Sciences 4861A/B.

Some technical electives may not be offered in a given academic year.

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

Course Introduction – Effective September 1, 2024, the following course be introduced:

CIVIL AND ENVIRONMENTAL ENGINEERING 4442
SMART CITIES CAPSTONE DESIGN PROJECT
(Short title: Smart Cities Design Project)
Students undertake a comprehensive engineering design project which involves the creative, interactive process of designing a structure/system to meet a specific need subject to economic, health, safety, and environmental constraints. The design project will encompass elements of both Civil and Artificial Intelligence Systems engineering.

Antirequisite(s): AISE 4050, CBE 4497, CEE 4441, ECE 4415, ECE 4416, IE 4499, MME 4499, MSE 4499, SE 4450, the former ES 4499.
Prerequisite(s): Completion of fourth year of the Civil Engineering Program in Option H or Option I.
Extra Information: 1 lecture hour, 4 laboratory hours.

Course Weight: 1.0

Program Revision – Effective September 1, 2024, the following change(s) be made:

A. STRUCTURAL ENGINEERING OPTION

Module/Program Information

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2277A/B, CEE 2202A/B, CEE 2217A/B, CEE 2219A/B, CEE 2220A/B, CEE 2221A/B, CEE 2224, Earth Sciences 2281A/B, Statistical Sciences 2141A/B*, Writing 2130F/G.

*Note: A student may, with the permission of the department counsellor, substitute Statistical Sciences 2143A/B for Statistical Sciences 2141A/B.
Note: CEE 3324A/B (Surveying). This course is available each summer (15 days) and must be completed before a student may graduate from the Civil Engineering program.

Third Year Program

CEE 3321A/B, CEE 3322A/B, CEE 3340A/B, CEE 3343A/B, CEE 3344A/B, CEE 3346A/B, CEE 3347A/B, CEE 3348A/B, CEE 3358A/B, CEE 3369A/B, 0.5 non-technical elective.

Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies, and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website.

Fourth Year Program

CEE 4424A/B, CEE 4426A/B, CEE 4441, CEE 4478A/B, CEE 4491A/B, ELI 4110F/G or the former ES 4498F/G, three 0.5 technical electives, 1.0 non-technical elective.

~~Students who entered before September 2016 are required to take Business Administration 2299E.~~

*Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website.

Technical Electives: Structural Engineering Option

CEE 3355A/B, CEE 4401A/B, CEE 4412A/B, CEE 4418A/B, CEE 4420A/B, CEE 4428A/B, CEE 4429A/B, CEE 4438A/B, CEE 4440, CEE 4458A/B, CEE 4459A/B, CEE 4465A/B, CEE 4476A/B, CEE 4480A/B, CEE 4485A/B, Earth Sciences 3340A/B, Earth Sciences 4440A/B.

Some technical electives may not be offered in a given academic year.

Program Revision – Effective September 1, 2024, the following change(s) be made:

D. CIVIL ENGINEERING/LAW

Module/Program Information

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B.

(Three of the half courses are taken in each term as scheduled)

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2277A/B, CEE 2202A/B, CEE 2217A/B, CEE 2219A/B, CEE 2220A/B, CEE 2221A/B, CEE 2224, Earth Sciences 2281A/B, Statistical Sciences 2141A/B*, Writing 2130F/G.

* Note: A student may, with the permission of the department counsellor, substitute Statistical Sciences 2143A/B for Statistical Sciences 2141A/B.

Note: CEE 3324A/B (Surveying). This course is available each summer (15 days) and must be completed before a student may graduate from the Civil Engineering program.

Third Year Program

CEE 3321A/B, CEE 3322A/B, CEE 3340A/B, CEE 3343A/B, CEE 3344A/B, CEE 3346A/B, CEE 3347A/B, CEE 3348A/B, CEE 3358A/B, CEE 3369A/B, 0.5 non-technical elective.

Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies, and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website.

Fourth Year Program

First year Law curriculum. No courses outside Law may be taken during this year.

Fifth and Sixth Year Programs

CEE 4424A/B, CEE 4426A/B, CEE 4441, CEE 4465A/B.

In years five and six, students must take courses in Law totaling 45 credit hours. These courses must include the **four** ~~three~~ compulsory upper-year courses and courses that satisfy the Faculty of Law writing requirements. They must also include one of the courses listed below under “Economics” and one listed under “Impact of Technology on Society”.

Notes: Fulfillment of the Faculty of Engineering requirement of courses that expose students to the impact of technology on society, ethical issues, and economics must be taken as follows:

Economics: One of Law 5220 Income Taxation, **Law 5550 Competition Law,** Law 5555 Corporate Finance, or **another Law course approved by the Associate Dean (Academic)** ~~an approved Law Selected Topics course~~.
~~Ethical Issues: Law 5150 Legal Ethics and Professionalism.~~
Impact of Technology on Society: One of **Law 5814 Disruptive technologies and the Law,** Law 5615 Biotechnology Law, Law 5605 Advanced Issues in Technology Law, Law 5350 Media Law, Law 5600 Advanced Intellectual Property, Law 5620 Information Law, Law 5625 Intellectual Property, Law 5630 International Protection of Intellectual Property, Law 5610 Advanced Patent Law, or **another Law course approved by the Associate Dean (Academic)** ~~an approved Law Selected Topics course~~.

Program Revision – Effective September 1, 2024, the following change(s) be made:

F. ENVIRONMENTAL ENGINEERING WITH INTERNATIONAL DEVELOPMENT OPTION

Admission Requirements

Students entering the Environmental Engineering with International Development option must have completed the second-year curriculum of Civil Engineering with a minimum year-weighted average (YWA) of 75%.

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2277A/B, CEE 2202A/B, CEE 2217A/B, CEE 2219A/B, CEE 2220A/B, CEE 2221A/B, CEE 2224, Earth Sciences 2281A/B, Statistical Sciences 2141A/B, Writing 2130F/G.

*Note: A student may, with the permission of the Department Counsellor, substitute Statistical Sciences 2143A/B for Statistical Sciences 2141A/B.

Note: CEE 3324A/B (Surveying). This course is available each summer (15 days) and must be completed before a student may graduate from the Civil Engineering program.

Module/Program Information

Third Year Program

CEE 3321A/B, CEE 3322A/B, CEE 3327A/B, CEE 3328A/B, CEE 3348A/B, CEE 3355A/B, CEE 3362A/B, CEE 3369A/B, **CEE 3386A/B,** CEE 4476A/B, CBE 4409A/B, Earth Sciences 3340A/B~~, 0.5 non-technical elective*~~.

Fourth Year Program

~~CEE 3386A/B,~~ CEE 4404A/B, CEE 4424A/B, CEE 4426A/B, CEE 4441, CEE 4463A/B, CEE 4465A/B, CEE 4478A/B, ELI 4110F/G or the former ES 4498F/G, two 0.5 technical electives, **two** 0.5 non-technical elective**s***.

*Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website.

Technical Electives: Environmental Engineering with International Development Option

CEE 4401A/B, CEE 4412A/B, CEE 4418A/B, CEE 4420A/B, CEE 4427A/B, CEE 4428A/B, CEE 4429A/B, CEE 4438A/B, CEE 4463A/B, CEE 4476A/B, CEE 4479A/B, CEE 4440, CEE 4480A/B, CEE 4485A/B, CBE 4405A/B, Geography 2030A/B, Centre for Global Studies 2002F/G, the former Centre for Global Studies 3004A/B, the former Geography 2020A/B, the former Geography 2040A/B.

Some technical electives may not be offered in a given academic year.

It is recommended that students register for ES 3390 (Summer Community Development Placement) between their third and fourth years, although this is not a mandatory component of the program.

Program Revision – Effective September 1, 2024, the following change(s) be made:

G. STRUCTURAL ENGINEERING WITH INTERNATIONAL DEVELOPMENT OPTION

Module/Program Information

Third-Year Program

CEE 3321A/B, CEE 3322A/B, CEE 3327A/B, CEE 3328A/B, CEE 3340A/B, CEE 3343A/B, CEE 3344A/B, CEE 3346A/B, CEE 3347A/B, CEE 3348A/B, CEE 3358A/B, CEE 3369A/B.

Fourth-Year Program (effective September 2015)

CEE 4441, CEE 4404A/B, CEE 4424A/B, CEE 4426A/B, CEE 4478A/B, CEE 4491A/B, ELI 4110F/G or the former ES 4498F/G, two 0.5 technical electives, 1.0 non-technical elective*.

~~Students who entered before September 2016 are required to take Business Administration 2299E.~~

*Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website.

Technical Electives: Structural Engineering with International Development Option

CEE 4401A/B, CEE 4405A/B, CEE 4412A/B, CEE 4418A/B, CEE 4420A/B, CEE 4427A/B, CEE 4428A/B, CEE 4429A/B, CEE 4438A/B, CEE 4458A/B, CEE 4459A/B, CEE 4476A/B, CEE 4440, CEE 4480A/B, CEE 4485A/B, Geography 2030A/B, Centre for Global Studies 2002F/G, the former Centre for Global Studies 3004A/B, the former Geography 2020A/B, the former Geography 2040A/B.

Some technical electives may not be offered in a given academic year.

Program Revision – Effective September 1, 2024, the following change(s) be made:

H. CIVIL ENGINEERING AND ARTIFICIAL INTELLIGENCE SYSTEMS ENGINEERING, SMART CITIES AND STRUCTURAL ENGINEERING OPTION

Admission Requirements

The *Civil Engineering and Artificial Intelligence Systems Engineering (AISE), Smart Cities and Structural Engineering (Option H)* is a limited-enrollment program. Upon completion, students will receive two degrees: a BESc in Civil Engineering and a BESc in Artificial Intelligence Systems Engineering (non-accredited). Admission to Option H is competitive; meeting the minimum requirements does not guarantee admission. Students apply to Option H while in first-year through the Intent-toRegister process. To be eligible for Option H, all of the requirements of the first-year curriculum in the Faculty of Engineering must be completed with a minimum year weighted average (YWA) of 75%.

Module/Program Information

Students who entered the Engineering Program in September 2021 will continue to follow their original AISE program progression.

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B. (Three of the half courses are taken in each term as scheduled.)

Second Year Program

AISE 2205A/B (or SE 2205A/B if taken prior to 2024-25), AISE 2251A/B (or the former SE 2251A/B), CEE 2202A/B, CEE 2217A/B, CEE 2219A/B, CEE 2220A/B, CEE 2221A/B, **CEE 2224,** Numerical and Mathematical Methods 2270A/B, ~~Numerical and Mathematical Methods 2276A/B,~~ **Numerical and Mathematical Methods 2277A/B,** ~~Statistical Sciences 2141A/B,~~ **Statistical Sciences 2143A/B** ~~Writing 2130F/G, 0.5 non-technical electives~~.

Third Year Program

AISE 3309A/B (or SE 3309A/B if taken prior to 2024-25), AISE 3350A/B (or the former ECE 3350A/B), AISE 3351A/B (or the former ECE 3351A/B), ~~AISE 4430A/B (or the former SE 4430A/B), CEE 2224~~, **CEE 3348A/B,** CEE 4401A/B, CEE 4412A/B, DS 3000A/B, AISE 3010A/B, Earth Sciences 2281A/B, **Writing 2130F/G, two** 0.5 non-technical electives.

Note: CEE 3324A (Surveying). This course is available each summer (10 days) and must be completed before a student may graduate from a Civil Engineering program.

Fourth Year Program

CEE 3321A/B, CEE 3322A/B, CEE 3340A/B, CEE 3343A/B, CEE 3344A/B, CEE 3346A/B, CEE 3347A/B, ~~CEE 3348A/B,~~ CEE 3358A/B, CEE 3369A/B, **CEE 4413A/B,** ~~AISE 3020A/B,~~ AISE 4010A/B**, AISE 4430A/B (or the former SE 4430A/B)**.

Fifth Year Program

AISE 3020A/B, AISE 4020A/B or CEE 4420A/B, AISE 4050 **or CEE 4442**, AISE 4450A/B (or the former ECE 4450A/B), CEE 4426A/B, CEE 4478A/B, CEE 4491A/B, ~~CEE 4413A/B,~~ CEE 4415A/B, ELI 4110F/G, **one** 0.5 technical elective, **one** 0.5 non-technical elective.

*Selection of the non-technical elective must be approved by the department to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies and thought processes of the humanities and social sciences. More information about approved non-technical electives can be found on the Engineering website.

Technical electives: Structural Engineering Option
CEE 3355A/B, CEE 4418A/B, CEE 4428A/B, CEE 4429A/B, CEE 4438A/B, CEE 4440, CEE 4458A/B, CEE 4459A/B, CEE 4465A/B, CEE 4476A/B, CEE 4480A/B, CEE 4485A/B, Earth Sciences 3340A/B, Earth Sciences 4440A/B. Some technical electives may not be offered in a given academic year.

AISE Technical Electives:
CEE 4417A/B**, Computer Science 3340A/B, Computer Science 4417A/B, ECE 4438A/B, ECE 4445A/B, SE 4455A/B, Statistical Sciences 4861A/B**.

Some technical electives may not be offered in a given academic year.

Program Revision – Effective September 1, 2024, the following change(s) be made:

I. CIVIL ENGINEERING AND ARTIFICIAL INTELLIGENCE SYSTEMS ENGINEERING, SMART CITIES AND ENVIROMENTAL ENGINEERING OPTION

Admission Requirements

The *Civil Engineering and Artificial Intelligence Systems Engineering (AISE), Smart Cities and Environmental Engineering (Option I)* is a limited-enrollment program. Upon completion, students will receive two degrees: a BESc in Civil Engineering and a BESc in Artificial Intelligence Systems Engineering (non-accredited). Admission to Option I is competitive; meeting the minimum requirements does not guarantee admission. Students apply to Option I while in first-year through the Intent-to Register process. To be eligible for Option I, all of the requirements of the first-year curriculum in the Faculty of Engineering must be completed with a minimum year weighted average (YWA) of 75%.

Module/Program Information

Students who entered the Engineering Program in September 2021 will continue to follow their original AISE program progression.

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B. (Three of the half courses are taken in each term as scheduled.)

Second Year Program

AISE 2205A/B (or SE 2205A/B if taken prior to 2024-25), AISE 2251A/B (or the former SE 2251A/B), CEE 2202A/B, CEE 2217A/B, CEE 2219A/B, CEE 2220A/B, CEE 2221A/B, **CEE 2224,** Numerical and Mathematical Methods

2270A/B, ~~Numerical and Mathematical Methods 2276A/B,~~ **Numerical and Mathematical Methods 2277A/B,** ~~Statistical Sciences 2141A/B~~ **Statistical Sciences 2143A/B**, ~~Writing 2130F/G, 0.5 non-technical elective~~.

Third Year Program

AISE 3309A/B (or SE 3309A/B if taken prior to 2024-25), AISE 3350A/B (or the former ECE 3350A/B), AISE 3351A/B (or the former ECE 3351A/B), ~~AISE 4430A/B (or the former SE 4430A/B), CEE 2224,~~ **CEE 3348A/B,** ~~CEE 3369A/B,~~ **CEE 4401A/B, CEE 4412A/B,** DS 3000A/B, AISE 3010A/B, **Writing 2130F/G,** Earth Sciences 2281A/B, 1.0 non-technical electives.

Note: CEE 3324A (Surveying). This course is available each summer (10 days) and must be completed before a student may graduate from a Civil Engineering program.

Fourth Year Program

CEE 3321A/B, CEE 3322A/B, ~~CEE 3348A/B,~~ CEE 3355A/B, CEE 3362A/B, **CEE 3369A/B,** CEE 3386A/B, ~~CEE 4401A/B, CEE 4412A/B,~~ CEE 4476A/B, CBE 4409A/B, AISE 4010A/B**, AISE 4430A/B (or the former SE 4430A/B),** Earth Sciences 3340A/B, **one 0.5 non-technical elective**.

Fifth Year Program

AISE 3020A/B, AISE 4020A/B or CEE 4420A/B, AISE 4050 **or CEE 4442**, AISE 4450A/B (or the former ECE 4450A/B), CEE 4426A/B, CEE 4463A/B, CEE 4465A/B, CEE 4478A/B, **CEE 4414A/B,** CEE 4416A/B, ELI 4110F/G~~, 0.5 technical elective~~.

*Selection of the non-technical elective must be approved by the department to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies and thought processes of the humanities and social sciences. More information about approved non-technical electives can be found on the Engineering website.

Environmental Engineering Technical Electives:
CEE 4418A/B, CEE 4428A/B, CEE 4429A/B, CEE 4438A/B, CEE 4440, CEE 4458A/B, CEE 4479A/B, CEE 4480A/B, CEE 4485A/B, CBE 4405A/B, CBE 4463A/B.

AISE Technical Electives:
CEE 4414A/B, CEE 4417A/B, **ECE 4445A/B, ECE 4438A/B, Computer Science 3340A/B,** Computer Science 4417A/B, **SE 4455A/B,** Statistical Sciences 4861A/B.

Some technical electives may not be offered in a given academic year.

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

Course Revision – Effective September 1, 2024, the following change(s) be made:

ARTIFICIAL INTELLIGENCE SYSTEMS ENGINEERING 4430A/B INTRODUCTION TO COMPUTER NETWORKING, SECURITY & IOT SYSTEMS
Principles of computer networking architecture/layers and protocols, IoT network systems, protocols, security, and connections to cloud services with an emphasis on the ability to interface and collect data from things and move them securely through the internet to process in public and private data centers.

Antirequisite(s): **Computer Science 3357A/B,** ECE 4436A/B, the former SE 4430A/B.
Prerequisite(s): AISE 2205A/B (or SE 2205A/B if taken prior to 2024-25), Engineering Science 1036A/B.
Extra Information: 3 lecture hours, 3 laboratory hours.
Course Weight: 0.50

Program Revision – Effective September 1, 2024, the following change(s) be made:

A. ELECTRICAL ENGINEERING PROGRAM

Module/Program Information

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B, Computer Science 1027A/B, ECE 2205A/B, ECE 2231A/B, ECE 2233A/B, ECE 2236A/B, ECE 2240A/B, ECE 2242A/B, ECE 2277A/B, MME 2234A/B, Writing 2130F/G.

Third Year Program

Numerical and Mathematical Methods 3415A/B, ECE 3330A/B, ECE 3331A/B, ECE 3332A/B, ECE 3333A/B, ECE 3336A/B, ECE 3337A/B, ECE 3399A/B, ECE 3370A/B, ECE 3375A/B, Statistical Sciences 2141A/B, 0.5 non-technical elective.

Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with

central issues, methodologies, and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website.

Fourth Year Program

ECE 4416, ECE 4429A/B, ECE 4437A/B, ELI 4110F/G or the former ES 4498F/G, Five 0.5 technical electives, 1.0 non-technical elective*.

~~Students who entered before September 2016 are required to take Business Administration 2299E.~~

*Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website.

Technical Electives: Electrical Engineering

ECE 3349A/B, ECE 3380A/B, ECE 4430A/B, ECE 4431A/B, ECE 4432A/B, ECE 4433A/B, ECE 4436A/B, ECE 4438A/B, ECE 4439A/B, ECE 4445A/B, ECE 4451A/B, ECE 4455A/B, ECE 4456A/B, ECE 4457A/B, ECE 4460A/B, ECE 4464A/B, ECE 4468A/B, ECE 4469A/B, MME 4452A/B, MME 4473A/B, MME 4482A/B, MME 4487A/B, the former ECE 4470A/B, the former ECE 4489A/B.

*Up to two MME half courses from the approved list may be used as technical electives.

Some technical electives may not be offered in a given academic year.

For students registered in a concurrent degree program in Computer Science up to two computer science half courses at the 3000 level or higher may be used as technical electives.

Program Revision – Effective September 1, 2024, the following change(s) be made:

D. ELECTRICAL ENGINEERING/LAW

Module/Program Information

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods

1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B.

(Three of the half courses are taken in each term as scheduled)

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B, Computer Science 1027A/B, ECE 2205A/B, ECE 2277A/B, ECE 2231A/B, ECE 2233A/B, ECE 2236A/B, ECE 2240A/B, ECE 2241A/B, MME 2234A/B, Writing 2130F/G.

Third Year Program
Numerical and Mathematical Methods 3415A/B, ECE 3330A/B, ECE 3331A/B, ECE 3332A/B, ECE 3333A/B, ECE 3336A/B, ECE 3337A/B, ECE 3370A/B, ECE 3375A/B, ECE 3399A/B, Statistical Sciences 2141A/B, 0.5 non-technical elective.

Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies, and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website.

Fourth Year Program

First year Law curriculum. No courses outside Law may be taken during this year.

Fifth and Sixth Year Programs

ECE 4416, ECE 4437A/B, the former ECE 4470A/B.

In years five and six, students must take courses in Law totaling 45 credit hours. These courses must include the **four** ~~three~~ compulsory upper-year courses and courses that satisfy the Faculty of Law writing requirements. They must also include one of the courses listed below under “Economics” and one listed under “Impact of Technology on Society”.

Notes: Fulfillment of the Faculty of Engineering requirement of courses that expose students to economics, ethical issues, and the impact of technology on society must be taken as follows:

Economics: One of Law 5220 Income Taxation, **Law 5550 Competition Law,** Law 5555 Corporate Finance, or **another Law course approved by the Associate Dean (Academic)** ~~an approved Law Selected Topics course~~.
~~Ethical Issues: Law 5150 Legal Ethics and Professionalism.~~

Impact of Technology on Society: One of **Law 5814 Disruptive technologies and the Law,** Law 5615 Biotechnology Law, Law 5605 Advanced Issues in Technology Law, Law 5350 Media Law, Law 5600 Advanced Intellectual Property, Law 5620 Information Law, Law 5625 Intellectual Property, Law 5630 International Protection of Intellectual Property, Law 5610 Advanced Patent Law, or **another Law course approved by the Associate Dean (Academic)** ~~an approved Law Selected Topics course~~.

Program Revision – Effective September 1, 2024, the following change(s) be made:

M. ELECTRICAL ENGINEERING AND ARTIFICIAL INTELLIGENCE SYSTEMS ENGINEERING OPTION

Admission Requirements

The *Electrical Engineering and Artificial Intelligence Systems Engineering (option M)* is a limited-enrollment program. Upon completion, students will receive two degrees: a BESc in Electrical Engineering and a BESc in Artificial Intelligence Systems Engineering (non-accredited). Admission to Option M is competitive; meeting the minimum requirements does not guarantee admission. Students apply to Option M while in first-year through the Intent-to-Register process. To be eligible for Option M, all of the requirements of the first-year curriculum in the Faculty of Engineering must be completed with a minimum year-weighted average (YWA) of 75%.

Module/Program Information

Students who entered the Engineering Program in September 2021 will continue to follow their original AISE program progression.

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B.

Second Year Program

AISE 2205A/B (or SE 2205A/B if taken prior to 2024-25), AISE 2251A/B (or the former SE 2251A/B), Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B, ECE 2205A/B, ECE 2233A/B, ECE

2236A/B, ECE 2240A/B, ECE 2277A/B, ~~Statistical Sciences 2141A/B~~ **Statistical Sciences 2143A/B**, Writing 2130F/G.

Third Year Program

AISE 3010A/B, AISE 3309A/B (or SE 3309A/B if taken prior to 2024-25), AISE 3350A/B (or the former ECE 3350A/B), AISE 3351A/B (or the former ECE 3351A/B), ECE 2231A/B, ECE 2242A/B, ECE 3330A/B, ECE 3332A/B, ECE 3333A/B, ECE 3375A/B, DS 3000A/B, Numerical and Mathematical Methods 3415A/B.

Fourth Year Program

~~AISE 3020A/B,~~ AISE 4010A/B, AISE 4020A/B, AISE 4430A/B (or the former SE 4430A/B), ECE 3336A/B, ECE 3337A/B, ECE 3370A/B, ECE 3399A/B, MME 2234A/B, **one** 0.5 non-technical elective, **one** 0.5 AISE technical elective, **two** 0.5 technical elective.

Fifth Year Program

AISE 3020A/B, AISE 4050, AISE 4450A/B (or the former ECE 4450A/B), ELI 4110F/G, ECE 4437A/B, Four 0.5 technical electives, **one** ~~1.0~~ **0.5** non-technical electives, **one** 0.5 AISE technical elective.

*Selection of the non-technical elective must be approved by the department to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies and thought processes of the humanities and social sciences. More information about approved non-technical electives can be found on the Engineering website.

Technical Electives:
ECE 3349A/B, ECE 3380A/B, ECE 4430A/B, ECE 4431A/B, ECE 4432A/B, ECE 4433A/B, ECE 4436A/B, ECE 4438A/B, ECE 4439A/B, ECE 4445A/B, ECE 4451A/B, ECE 4455A/B, ECE 4456A/B, ECE 4457A/B, ECE 4460A/B, ECE 4464A/B, ECE 4468A/B, ECE 4469A/B, MME 4452A/B, MME 4473A/B, MME 4482A/B, MME 4487A/B, the former ECE 4470A/B, the former ECE 4489A/B.

AISE Technical Electives:
Computer Science 3340A/B, Computer Science 4417A/B, **ECE 4445A/B, ECE 4438A/B, SE 4455A/B,** Statistical Sciences 4861A/B.

*Up to two MME half courses from the approved list may be used as technical electives.

Some technical electives may not be offered in a given academic year.

Program Revision – Effective September 1, 2024, the following change(s) be made:

ARTIFICIAL INTELLIGENCE SYSTEMS ENGINEERING PROGRAM

The Artificial Intelligence Systems Engineering program is offered and administered by the Department of Electrical and Computer Engineering in the Faculty of Engineering. The objective of the program is to educate students in the fundamentals of Artificial Intelligence, deep learning, online learning, algorithms and data structure to solve engineering problems.

Students in the Artificial Intelligence Systems Engineering program follow the same curriculum for the first year as other engineering students.

Admission Requirements

Students entering the Artificial Intelligence Systems Engineering program must have completed the entire first-year program in Engineering, with no outstanding credits to be taken, and have a Year Weighted Average (YWA) of at least 75%. First consideration will be given to applicants with a minimum grade of 60% in each course of the first-year engineering program.

Module/Program Information

Students who entered the Engineering Program in September 2021 will continue to follow their original AISE program progression. MSE students who entered their progression in September 2022 will also have to follow their original AISE program progression.

Second Year Program

AISE 2205A/B (or SE 2205A/B if taken prior to 2024-25), AISE 2251A/B (or the former SE 2251A/B), Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B or Numerical and Mathematical Methods 2277A/B, Statistical Sciences 2141A/B **or Statistical Sciences 2143A/B**, Writing 2130F/G, up to 3.0 credits from the student's core engineering discipline*.

Third Year Program

Data Science 3000A/B ~~or SE 4460A/B~~, AISE 3010A/B, AISE 3309A/B (or SE 3309A/B if taken prior to 2024-25), AISE 3350A/B (or the former ECE 3350A/B), AISE 3351A/B (or the former ECE 3351A/B), up to 3.5 credits from the student's core engineering discipline*.

Fourth Year Program

~~AISE 3020A/B,~~ AISE 4010A/B, AISE 4020A/B, AISE 4430A/B (or the former SE 4430A/B), up to **4.0** ~~3.5~~ credits from the student's core engineering discipline*, 0.5 credit from AISE technical electives**

Fifth Year Program

AISE 3020A/B, AISE 4050, AISE 4450A/B (or the former ECE 4450A/B), ~~ECE 4450A/B, AISE 4050, ES 4498G/F~~ **ELI 4110F/G**, up to 3.5 credits from the student's core engineering discipline*, 0.5 credit from AISE technical electives**

AISE Technical Electives:
Computer Science 3340A/B, Computer Science 4417A/B, ECE 4438A/B, ECE 4445A/B, SE 4455A/B, Statistical Sciences 4861A/B.

Some technical electives may not be offered in a given academic year.

* The 'core engineering discipline' refers to the accredited engineering degree being taken concurrently with the AISE degree program. Required technical and non-technical core courses, as well as approved technical and non-technical electives are listed under the AISE dual degree option for each engineering discipline.

** AISE technical electives refer to a list of AI-based technical courses approved by the AISE program committee. The list consists of AI-based courses offered by the Faculty of Engineering and Faculty of Science at Western. The list will be updated every year.

Program Revision – Effective September 1, 2024, the following change(s) be made:

SOFTWARE ENGINEERING PROGRAM

Module/Program Information

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B, ECE 2277A/B, ECE 2238A/B, SE 2202A/B, SE 2203A/B, SE 2205A/B, SE 2250A/B, Mathematics 2151A/B, Statistical Sciences 2141A/B, Writing 2130F/G, one 0.5 non-technical elective from the approved list.

Third Year Program

ECE 3375A/B, ECE 4436A/B, SE 3309A/B, SE 3310A/B, SE 3313A/B, SE 3314A/B, SE 3316A/B, SE 3350A/B, SE 3351A/B, SE 3352A/B, SE 3353A/B.

Fourth Year Program

SE 4450, SE 4452A/B, SE 4455A/B, SE 4472A/B, ELI 4110F/G or the former ES 4498F/G, four 0.5 technical electives from the list below, 1.0 non-technical elective*.
~~Students who entered before September 2016 are required to take Business Administration 2299E.~~

*Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies, and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website.

Technical Electives: Software Engineering

Data Science 3000A/B, Electrical and Computer Engineering 3389A/B, Electrical and Computer Engineering 3390A/B, Electrical and Computer Engineering 4460A/B, Software Engineering 4470A/B, Software Engineering 4471A/B, Computer Science 3342A/B, Computer Science 3346A/B, Computer Science 3388A/B, Computer Science 4442A/B, Computer Science 4482A/B, Computer Science 4483A/B.

Some technical electives may not be offered in a given academic year.

Program Revision – Effective September 1, 2024, the following change(s) be made:

C. SOFTWARE ENGINEERING/LAW

Module/Program Information

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course**:** Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B.

(Three of the half courses are taken in each term as scheduled)

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B, ECE 2277A/B, ECE 2238A/B, SE 2202A/B, SE 2203A/B, SE 2205A/B, SE 2250A/B, Mathematics 2151A/B, Statistical Sciences 2141A/B, Writing 2130F/G, one 0.5 non-technical elective from the approved list.

Third Year Program

ECE 3375A/B, ECE 4436A/B, SE 3309A/B, SE 3310A/B, SE 3313A/B, SE 3314A/B, SE 3316A/B, SE 3350A/B, SE 3351A/B, SE 3352A/B, SE 3353A/B.

Fourth Year Program

First year Law curriculum. No courses outside Law may be taken during this year.

Fifth and Sixth Year Programs

SE 4450, SE 4452A/B, SE 4455A/B, SE 4472A/B.

In years five and six, students must take courses in Law totaling 45 credit hours. These courses must include the **four** ~~three~~ compulsory upper-year courses and courses that satisfy the Faculty of Law writing requirements. They must also include one of the courses listed below under “Economics” and one listed under “Impact of Technology on Society”.

Notes: Fulfillment of the Faculty of Engineering requirement of courses that expose students to economics, ethical issues, the impact of technology on society, and the thought processes in the Humanities and Social Sciences must be taken as follows:

Economics: One of Law 5220 Income Taxation, **Law 5550 Competition Law,** Law 5555 Corporate Finance, or **another Law course approved by the Associate Dean (Academic)** ~~an approved Law Selected Topics course~~.
~~Ethical Issues: Law 5150 Legal Ethics and Professionalism.~~
Impact of Technology on Society: One of **Law 5814 Disruptive technologies and the Law,** Law 5615 Biotechnology Law, Law 5605 Advanced Issues in Technology Law, Law 5350 Media Law, Law 5600 Advanced Intellectual Property, Law 5620 Information Law, Law 5625 Intellectual Property, Law 5630 International Protection of Intellectual Property, Law 5610 Advanced Patent Law, or **another Law course approved by the Associate Dean (Academic)** ~~an approved Law Selected Topics course~~.

~~Thought Processes of the Humanities and Social Sciences: Law 5110 Constitutional Law, Law 5115 Contracts, Law 5120 Criminal Law, Law 5140 Property, Law 5145 Torts.~~

DEPARTMENT OF MECHANICAL AND MATERIALS ENGINEERING PROGRAM

Program Revision – Effective September 1, 2024, the following change(s) be made:

B. MECHANICAL ENGINEERING/LAW

Module/Program Information

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B.

(Three of the half courses are taken in each term as scheduled)

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B, MME 2200Q/R/S/T, MME 2202A/B, MME 2204A/B, MME 2213A/B, MME 2221A/B, MME 2259A/B, MME 2260A/B, MME 2273A/B, MME 2285A/B, Statistical Sciences 2143A/B, Writing 2130F/G.

Third Year Program

MME 3303A/B, MME 3307A/B, MME 3325A/B, MME 3334A/B, MME 3348A/B, MME 3350A/B, MME 3360A/B, MME 3374A/B, MME 3380A/B, MME 3381A/B.

Fourth Year Program

First year Law curriculum. No courses outside Law may be taken during this year.

Fifth and Sixth Year Programs

MME 4499, two 0.5 Technical electives approved by the MME program.

In years five and six, students must take courses in Law totaling 45 credit hours. These courses must include the **four** ~~three~~ compulsory upper-year courses and courses that satisfy the Faculty of Law writing requirements. They must also include one of the courses listed below under "Economics" and one listed under "Impact of Technology on Society".

Notes: Fulfillment of the Faculty of Engineering requirement of courses that expose students to economics, ethical issues, and the impact of technology on society must be taken as follows:

Economics: One of Law 5220 Income Taxation, **Law 5550 Competition Law,** Law 5555 Corporate Finance, or **another Law course approved by the Associate Dean (Academic)** ~~an approved Law Selected Topics course~~.
~~Ethical Issues: Law 5150 Legal Ethics and Professionalism.~~
Impact of Technology on Society: One of **Law 5814 Disruptive technologies and the Law,** Law 5615 Biotechnology Law, Law 5605 Advanced Issues in Technology Law, Law 5350 Media Law, Law 5600 Advanced Intellectual Property, Law 5620 Information Law, Law 5625 Intellectual Property, Law 5630 International Protection of Intellectual Property, Law 5610 Advanced Patent Law, or **another Law course approved by the Associate Dean (Academic)** ~~an approved Law Selected Topics course~~.
~~Thought Processes of the Humanities and Social Sciences: Law 5110 Constitutional Law, Law 5115 Contracts, Law 5120 Criminal Law, Law 5140 Property, Law 5145 Torts.~~

Program Revision – Effective September 1, 2024, the following change(s) be made:

H. MECHANICAL ENGINEERING – MECHANICAL ENGINEERING AND ARTIFICIAL INTELLIGENCE SYSTEMS ENGINEERING OPTION

Admission Requirements

The *Mechanical Engineering and Artificial Intelligence Systems Engineering (option H)* is a limited-enrollment program. Upon completion, students will receive two degrees: a BESc in Mechanical Engineering and a BESc in Artificial Intelligence Systems Engineering (non-accredited). Admission to Option H is competitive; meeting the minimum requirements does not guarantee admission. Students apply to Option H while in first-year through the Intent-to-Register process. To be eligible for Option H, all of the requirements of the first-year curriculum in the Faculty of Engineering must be completed with a minimum year-weighted average (YWA) of 75%.

Module/Program Information

Students who entered the Engineering Program in September 2021 will continue to follow their original AISE program progression.

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B. (Three of the half courses are taken in each term as scheduled.)

Second Year Program

AISE 2205A/B (or SE 2205A/B if taken prior to 2024-25), AISE 2251A/B (or the former SE 2251A/B), Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B, MME 2200Q/R/S/T, MME 2202A/B, MME 2204A/B, MME 2259A/B, MME 2260A/B, MME 2273A/B, MME 2285A/B, Statistical Sciences 2143A/B.

Third Year Program

Writing 2130F/G, MME 2221A/B, MME 2213A/B, MME 3348A/B, MME 3374A/B, Data Science 3000A/B, AISE 3010A/B, AISE 3309A/B (or SE 3309A/B if taken prior to 2024-25), AISE 3350A/B (or the former ECE 3350A/B), AISE 3351A/B (or the former ECE 3351A/B), ~~AISE 4430A/B (or the former SE 4430A/B),~~ **one** 0.5 non-technical elective.

Fourth Year Program

MME 3325A/B, MME 3381A/B, MME 3303A/B, MME 3334A/B, MME 3350A/B, MME 3307A/B, MME 3360A/B, MME 3380A/B, ~~AISE 3020A/B,~~ AISE 4010A/B, AISE 4020A/B, **AISE 4430A/B (or the former SE 4430A/B), one** 0.5 AISE technical elective.

Fifth Year Program

AISE 3020A/B, AISE 4050, AISE 4450A/B (or the former ECE 4450A/B), ELI 4110F/G, 1.5 MME technical electives, 0.5 AISE technical elective, 1.0 non-technical electives*.

*Selection of the non-technical elective must be approved by the department to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies and thought processes of the humanities and social sciences. More information about approved non-technical electives can be found on the Engineering website.

Technical Electives:
MME 3379A/B, MME 4410, MME 4423A/B, MME 4424A/B, MME 4427A/B, MME 4428A/B, MME 4429A/B, MME 4435A/B, MME 4437A/B, MME 4450A/B, MME 4452A/B, MME 4453A/B, MME 4459A/B, MME 4460A/B, MME 4469A/B, MME 4470A/B, MME 4473A/B, MME 4474A/B, MME 4475A/B, MME 4480A/B, MME 4482A/B, MME 4483A/B, MME 4485A/B, MME 4487A/B, MME 4490A/B, MME 4492A/B.

AISE Technical Electives:
Computer Science 3340A/B, Computer Science 4417A/B, **ECE 4445A/B, ECE 4438A/B, SE 4455A/B,** Statistical Sciences 4861A/B.

Some technical electives may not be offered in a given academic year.

JOHN M. THOMPSON CENTRE OF ENGINEERING LEADERSHIP AND INNOVATION

Course Introduction – Effective September 1, 2024, the following course be introduced:

ENGINEERING LEADERSHIP AND INNOVATION 3100A/B
PLANNING AND PROJECT MANAGEMENT
(Short title: Planning & Project Management)
The course is intended to reveal and develop project management best practices. The student will learn the industrially accepted techniques associated with the management of time, cost, and scope in order to achieve total project stakeholder satisfaction. The expected outcome will be to prepare students when pursuing the designation PMP.

Antirequisite(s): CEE 3348A/B.
Prerequisite(s): Completion of second year in any Engineering program.
Extra Information: 3 lecture hours.
Course Weight: 0.50

Course Introduction – Effective September 1, 2024, the following course be introduced:

ENGINEERING LEADERSHIP AND INNOVATION 4300A/B
RISK ASSESSMENT AND MANAGEMENT
This course introduces the concepts and general principles of risk analysis assessment and management in engineering systems. The course discusses the qualitative risk identification methods and the quantitative risk assessment methods and techniques. All this through the lens of different Engineering fields. This will be a case-based learning course.

Antirequisite(s): CEE 4458A/B.
Prerequisite(s): Statistical Sciences 2141A/B or Statistical Sciences 2143A/B, and completion of third year in any Engineering program.
Extra Information: 3 lecture hours.
Course Weight: 0.50

Course Introduction – Effective September 1, 2024, the following course be introduced:

INTEGRATED ENGINEERING 2298
INTEGRATED SYSTEM ENGINEERING AND DESIGN
(Short title: Integrated System Eng & Design)
Introduction to classical system engineering and associated methods, tools and practices, with application experienced through team-based, interdisciplinary design projects. Students will gain knowledge across topics that include the System Engineering V-model, human-centered design, modeling and optimization, Design for X, sustainability, risk management and human decision making.

Antirequisite(s): MME 2259A/B, the former Integrated Engineering 2297A/B.
Prerequisite(s): Registration in Integrated Engineering.
Extra Information: 4 lecture hours. Accreditation units Engineering Science = 25%, Engineering Design = 75%.
Course Weight: 1.0

Course Withdrawal – Effective September 1, 2024, the following course be withdrawn:

INTEGRATED ENGINEERING 2297A/B
INTEGRATED SYSTEM ENGINEERING AND DESIGN
Introduction to classical system engineering and associated methods, tools and practices, with application experienced through team-based, interdisciplinary design projects. Students build life-long learning skills while working in self-directed teams to gain knowledge across topics that include the System

Engineering V-model, human-centered design, modeling and optimization, Design for X, sustainability, risk management and human decision making.

Antirequisite(s): MME 2259A/B or the former Engineering Science 2297A/B.
Prerequisite(s): Registration in Integrated Engineering.
Extra Information: 4 lecture hours per week. Accreditation units Engineering Science = 25%, Engineering Design = 75%.
Course Weight**:** 0.50

Program Revision – Effective September 1, 2024, the following change(s) be made:

INTEGRATED ENGINEERING PROGRAM

Admission Requirements

Students entering the Integrated Engineering program must have completed the entire first year program in Engineering, with no outstanding credits to be taken, and have a Year Weighted Average (YWA) of at least 60%. First consideration will be given to applicants with a minimum grade of 60% in each of the following courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Physics 1401A/B, Physics 1402A/B and Engineering Science 1022A/B/Y.

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B.

(Three of the half courses are taken in each term as scheduled)

Module/Program Information

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B, **CBE 2220A/B,** CBE 2221A/B, ~~CBE 2291A/B,~~ CEE 2220A/B, ~~ECE 2238A/B,~~ ECE 2277A/B, **IE 2298** ~~IE 2297A/B or the former ES 2297A/B~~, **MME 2285A/B,** MSE 2214A/B, Statistical Sciences 2143A/B, ~~1.0~~ **0.5** non-technical elective*****.

*Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website. **The progression sequence of non-technical and technical electives may be changed to fulfill the pre-requisite requirements of desired technical electives, upon approval by the Program Director.**

Third Year Program

~~CBE 2220A/B,~~ **CBE 2291A/B,** CBE 3322A/B, CEE 2202A/B, CEE 2221A/B, MME 3374A/B **or ECE 2238A/B**, ELI 3000A/B or the former ES 3331A/B, **ELI 3100A/B or** ELI 3200A/B or the former ES 3330A/B, ~~ELI 4110F/G or the former ES 4498F/G, MME 2285A/B,~~ MSE 2213A/B, MSE 3301A/B **or MME 3379A/B**, MSE 3360A/B**, 0.5 non-technical elective*, 0.5 technical elective**.**

Fourth Year Program

ELI 4100A/B or the former ES 4480A/B, **ELI 4300A/B or** ELI 4200A/B or the former ES 4481A/B, IE 4499 or the former ES 4499, **ELI 4110F/G or the former ES 4498F/G,** ~~six~~ **five** 0.5 technical electives**.

**The following are recommended technical electives from each department. Other courses may be taken if prerequisite requirements are satisfied. Students may elect to substitute up to two 0.5 courses from the Faculty of Science as technical electives. These technical electives must be approved by the Integrated Engineering Curriculum Committee.

Chemical and Biochemical Engineering:
CBE 2290A/B, CBE 3310A/B, CBE 3324A/B, CBE 4421A/B, CBE 4409A/B.

Civil and Environmental Engineering:
CEE 3348A/B, CEE 3362A/B, CEE 4405A/B, CEE 4418A/B, CEE 4458A/B, CEE 4465A/B, CEE 4477A/B.

Electrical and Computer Engineering:
ECE 3349A/B, ECE 3375A/B, ECE 4436A/B, ECE 4468A/B, SE 3314A/B.

Mechanical and Materials Engineering:
MME 3381A/B, MME 4452A/B, MME 4473A/B, MME 4487A/B, MME 4492A/B**, MME 3348A/B**.

Additional Technical Electives: IE 4990A/B, IE 4491A/B.

Program Revision – Effective September 1, 2024, the following change(s) be made:

B. INTEGRATED ENGINEERING/HBA

Admission Requirements

Normally, students apply to the HBA program during their second year in Engineering by the published deadline. Application for the combined program is made during the first year in the HBA program. Students applying to the Ivey Business School's Advanced Entry Opportunity (AEO) are also eligible to be considered for the combined program. Admission to the program is competitive and limited. Upon completion of the program students will receive two degrees: a BA in Honours Business Administration and a BESc degree.

To be eligible for the combined program, all students, including those admitted via the AEO route, must have completed all the requirements of the first year curriculum in the Faculty of Engineering and the second year program in Option B of the Integrated Engineering program. Students must obtain a weighted average (YWA) of 78% in each year.

During the second year of the program students are required to complete Business Administration 2257 with a minimum grade of 70%. Integrated Engineering students may take Business Administration 2257 during Intersession either after their first or second year. Demonstrated participation in extra curricular and/or community activities, leadership and work experience are also admission criteria.

Module/Program Information

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B.

(Three of the half courses are taken in each term as scheduled)

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B, CBE 2221A/B, ~~CBE 2291A/B, CEE 2202A/B, ECE 2238A/B,~~ **CEE 2220A/B,** ECE 2277A/B, **IE 2298** ~~IE 2297A/B or the former ES~~

~~2297A/B~~, MSE 2214A/B, **MME 2285A/B,** Statistical Sciences 2143A/B, Business Administration 2257.

Third Year Program

The third year of the undergraduate program in Business Administration consists of an integrated set of courses (7.5 courses) designed to give a basic understanding of the functions and the interrelationships of the major areas of management, as well as to develop problem-solving and action-planning skills.

All students will take: Business Administration 3300K, Business Administration 3301K, Business Administration 3302K, Business Administration 3303K, Business Administration 3304K, Business Administration 3311K, Business Administration 3316K, Business Administration 3321K, Business Administration 3322K, Business Administration 3323K.

Fourth Year Program

CBE 2220A/B, **CBE 2291A/B,** CBE 3322A/B, ~~CEE 2220A/B~~ **CEE 2202A/B**, MME 3374A/B, ELI 3000A/B or the former ES 3331A/B, **ELI 3100A/B or** ELI 3200A/B or the former ES 3330A/B, ELI 4110F/G or the former ES 4498F/G, ~~MME 2285A/B,~~ MSE 2213A/B, MSE 3360A/B.

Applied Project Requirement: Business Administration 4569.

Fifth Year Program

ELI 4100A/B or the former ES 4480A/B, IE 4499 or the former ES 4499, three 0.5 technical electives (see list below).

3.0 Business Administration courses:

- **0.5 course**: International Perspective Requirement: Business Administration 4505A/B.
- **0.5 course:** Corporations and Society Perspective Requirement: At least one 0.5 course from Business Administration - Corporations and Society designated electives offered during the academic year (Business Administration 4538A/B, Business Administration 4539A/B, Business Administration 4588A/B, Business Administration 4625A/B) or other business elective as determined and approved by the HBA Program Director to satisfy this requirement.
- **0.5 course:** Managerial Accounting Requirement: Business Administration 4624A/B.
- **1.5 elective courses** chosen from 4000 level Business courses.

Chemical and Biochemical Engineering:
CBE 2290A/B, CBE 3310A/B, CBE 3324A/B, CBE 4421A/B, CBE 4409A/B.

Civil and Environmental Engineering:
CEE 3348A/B, CEE 3362A/B, CEE 4405A/B, CEE 4418A/B, CEE 4458A/B, CEE 4465A/B, CEE 4477A/B.

Electrical and Computer Engineering:
ECE 3349A/B, ECE 3375A/B, ECE 4436A/B, ECE 4468A/B, SE 3314A/B.

Mechanical and Materials Engineering:
MME 3348A/B, MME 3379A/B, MME 3381A/B, MME 4452A/B, MME 4473A/B, MME 4487A/B, MME 4492A/B.

Additional Technical Electives: IE 4990A/B, IE 4491A/B.

Program Revision – Effective September 1, 2024, the following change(s) be made:

D. INTEGRATED ENGINEERING/LAW

Admission Requirements

Before entering the combined BESc/JD degree program, a student must have completed the first three years of the Integrated Engineering program at Western (or equivalent). In addition to applying for the combined degree program through the Office of the Associate Dean - Academic of the Faculty of Engineering, a student must also make a separate application to the Faculty of Law for admission into the JD program by the published deadline, May 1. The application to Law must indicate that the student is applying to the combined BESc/JD program.

Admission Criteria

To be eligible for the combined degree program, students must have completed all the requirements of the first year curriculum in the Faculty of Engineering, and the second and third year program, Option D, of the Integrated Engineering program with either a minimum cumulative weighted average (CWA) of 80% or stand in the top 10% of the class. In addition, the applicant must meet the minimum LSAT requirement established by the Law School Admission Committee for all combined degree programs.

Entrance into the combined degree program is competitive and limited. Meeting the minimum requirements does not guarantee a position in the combined program.

Module/Program Information

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B.

(Three of the half courses are taken in each term as scheduled)

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B, **CBE 2220A/B,** CBE 2221A/B, ~~CBE 2291A/B, CEE 2202A/B, ECE 2238A/B,~~ **CEE 2220A/B,** ECE 2277A/B, **IE 2298** ~~IE 2297A/B or the former ES 2297A/B~~, **MME 2285A/B,** MSE 2214A/B, Statistical Sciences 2143A/B, ~~1.0~~ **0.5** non-technical elective*.

*Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website. **The progression sequence of non-technical and technical electives may be changed to fulfill the pre-requisite requirements of desired technical electives, upon approval by the Program Director.**

Third Year Program

~~CBE 2220A/B,~~ **CBE 2291A/B,** CBE 3322A/B, **CEE 2202A/B,** CEE 2221A/B, ~~CEE 2220A/B~~, MME 3374A/B **or ECE 2238A/B**, ELI 3000A/B or the former ES 3331A/B, **ELI 3100A/B or** ELI 3200A/B or the former ES 3330A/B, ELI 4110F/G or the former ES 4498F/G, ~~MME 2285A/B,~~ MME 3379A/B **or MSE 3301A/B**, MSE 2213A/B, MSE 3360A/B, **0.5 non-technical elective***.

Fourth Year Program:

First year Law curriculum. No courses outside Law may be taken during this year.

Fifth and Sixth Year Programs:

ELI 4100A/B or the former ES 4480A/B, **ELI 4300A/B or** ELI 4200A/B or the former ES 4481A/B, IE 4499 or the former ES 4499.

In years five and six, students must take courses in Law totaling 45 credit hours. These courses must include the **four** ~~three~~ compulsory upper-year courses and courses that satisfy the Faculty of Law writing requirements. They must also include one of the courses listed below under "Economics" and one listed under "Impact of Technology on Society".

Notes: Fulfillment of the Faculty of Engineering requirement of courses that expose students to the impact of technology on society, ethical issues, economics and the thought processes in the Humanities and Social Sciences must be taken as follows:

Economics: One of Law 5220 Income Taxation, **Law 5550 Competition Law,** Law 5555 Corporate Finance, or ~~an approved Law Selected Topics~~ **another Law** course **approved by the Associate Dean (Academic)**.
~~Ethical Issues: Law 5150 Legal Ethics & Professionalism.~~
Impact of Technology on Society: One of: **Law 5814 Disruptive Technologies and the Law,** Law 5615 Biotechnology Law, Law 5605 Advanced Issues in Technology Law, Law 5350 Media Law, Law 5600 Advanced Intellectual Property, Law 5620 Information Law, Law 5625 Intellectual Property, Law 5630 International Protection of Intellectual Property, Law 5610 Advanced Patent Law, or ~~an approved Law Selected Topics~~ **another Law** course **approved by the Associate Dean (Academic)**.

MECHATRONIC SYSTEMS ENGINEERING PROGRAM

Course Introduction – Effective September 1, 2024, the following course be introduced:

MECHATRONIC SYSTEMS ENGINEERING 2221A/B
COMPUTATIONAL METHODS FOR MECHATRONIC SYSTEMS ENGINEERS
(Short title: Computational Methods)
This course introduces a variety of computational tools and numerical methods used in mechatronic systems engineering. Emphasis is placed on problem formulation, solution algorithm design, and programming using advanced mathematical software tools. Applications to engineering planning, design, and systems operation will be considered throughout.

Antirequisite(s): MME 2221A/B, CEE 2219A/B, CBE 2291A/B.
Prerequisite(s): Engineering Science 1036A/B, Numerical and Mathematical Methods 1411A/B or the former Applied Mathematics 1411A/B, Numerical and Mathematical Methods 1414A/B or the former Applied Mathematics 1414A/B.

Co-requisite(s): Numerical and Mathematical Methods 2270A/B or Numerical and Mathematical Methods 2276A/B.
Extra Information: 3 lecture hours, 2 tutorial hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

MECHATRONIC SYSTEMS ENGINEERING 2202A/B
INTRO TO MECHATRONIC DESIGN
Introduces engineering design and structured design methods from the perspective of mechatronic systems that integrate mechanical, electrical and control technologies. Topics include the mechatronic design process, simple sensors and actuators, ~~heat management~~, electronic communications and microcontroller-based software design.

Prerequisite(s): Engineering Science 1021A/B, Engineering Science 1022A/B/Y, Engineering Science 1050**, MSE 2200Q/R/S/T**.
Extra Information: 3 lecture hours, 3 laboratory/tutorial hours. Restricted to students enrolled in the Mechatronic Systems Engineering program.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

MECHATRONIC SYSTEMS ENGINEERING 3360A/B
FINITE ELEMENT METHODS FOR MECHATRONIC SYSTEMS ENGINEERING
Overview of the finite element method (FEM) and its use to solve general problems in 2-D and 3-D. Applications include structural mechanics, heat transfer, thermal stress, electromagnetism and radiation. Methods and applications of optimization in support of engineering design are also introduced.

Antirequisite(s): MME 3360A/B.
Prerequisite(s): Engineering Science 1036A/B or Computer Science 1026A/B, NMM 2270A/B or the former Applied Mathematics 2270A/B, MME 2202A/B or MSE 2212A/B or CEE 2202A/B, MME 2204A/B or MSE 2214A/B, MSE 2202A/B or MME 2259A/B or ES 2297A/B or IE 2297A/B**, MSE 2200Q/R/S/T**.
Extra Information: 3 lecture hours, 2 tutorial hours, 2 laboratory hours.
Course Weight: 0.50

Program Revision – Effective September 1, 2024, the following change(s) be made:

MECHATRONIC SYSTEMS ENGINEERING

Admission Requirements

Students entering the Mechatronic Systems Engineering program must have completed the entire first year program in Engineering, with no outstanding credits to be taken, and have a Year Weighted Average (YWA) of at least 70%. First consideration will be given to applicants with a minimum grade of 60% in each of the following courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Engineering Science 1022A/B/Y, Engineering Science 1036A/B, Engineering Science 1050, Physics 1401A/B and Physics 1402A/B.

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B.
(Three of the half courses are taken in each term as scheduled)

Module/Program Information

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B, Computer Science 1037A/B, ECE 2205A/B, MSE 2200Q/R/S/T, MSE 2201A/B, MSE 2202A/B, MSE 2212A/B, MSE 2213A/B, MSE 2214A/B, **MSE 2221A/B,** MSE 2233A/B, MSE 2273A/B~~, Writing 2130F/G~~.

Third Year Program

~~Numerical and Mathematical Methods 3415A/B,~~ ECE 2277A/B, ECE 3330A/B, ECE 3331A/B, ECE 3375A/B, MSE 3301A/B, MSE 3302A/B, MSE 3310A/B, MSE 3360A/B, MSE 3380A/B, MSE 3381A/B, **Writing 2130F/G,** 0.5 non-technical elective*.

Fourth Year Program

MSE 4401A/B, MSE 4499, ECE 4460A/B, ECE 4469A/B, ELI 4110F/G or the former ES 4498F/G, Statistical Sciences 2141A/B, 1.0 non-technical elective, three 0.5 technical electives**.

~~Students who entered before September 2016 are required to take Business Administration 2299E.~~

*Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies, and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website.

** **Mechatronic Systems Engineering technical electives**
Technical electives not chosen from this list require special permission:

ECE 3380A/B, ECE 4429A/B, ECE 4438A/B, ECE 4445A/B, ECE 4455A/B, ECE 4468A/B, MME 4424A/B, MME 4425A/B, MME 4459A/B, MME 4469A/B, MME 4470A/B, MME 4473A/B, MME 4480A/B, MME 4482A/B, MME 4492A/B, the former ECE 4470A/B.

Program Revision – Effective September 1, 2024, the following change(s) be made:

B. MECHATRONIC SYSTEMS ENGINEERING/HBA

Admission Requirements

Normally, students apply to the HBA program during their second year in Engineering by the published deadline. Application for the combined program is made during the first year in the HBA program. Students applying to the Ivey Business School's Advanced Entry Opportunity (AEO) are also eligible to be considered for the combined program. Admission to the program is competitive and limited. Upon completion of the program students will receive two degrees: a BA in Honours Business Administration and a BESc degree.

To be eligible for the combined program, all students, including those admitted via the AEO route, must have completed all the requirements of the first year curriculum in the Faculty of Engineering and the second year program in Option A of the Mechatronic Systems Engineering Program. Students must obtain a weighted average (YWA) of 78% in each year.

During the second year of the Engineering program students are required to complete Business Administration 2257 with a minimum grade of 70%. Mechatronic Systems Engineering students may take Business Administration

2257 during Intersession either after their first or second year. Demonstrated participation in extra-curricular and/or community activities, leadership and work experience are also admission criteria.

Module/Program Information

Engineering Common First Year Program

Full-year courses**:** Engineering Science 1050, Business Administration 1299E.
Full-year half course**:** Engineering Science 1022A/B/Y.
Half-year courses**:** Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B.

(Three of the half courses are taken in each term as scheduled)

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B, Computer Science 1037A/B, ECE 2205A/B, MSE 2200Q/R/S/T, MSE 2201A/B, MSE 2202A/B, MSE 2212A/B, MSE 2213A/B, MSE 2214A/B, MSE 2233A/B, MSE 2273A/B, Business Administration 2257.

Third Year Program

The third year of the undergraduate program in Business Administration consists of an integrated set of courses (7.5 courses) designed to give a basic understanding of the functions and the interrelationships of the major areas of management, as well as to develop problem-solving and action-planning skills.

All students will take: Business Administration 3300K, Business Administration 3301K, Business Administration 3302K, Business Administration 3303K, Business Administration 3304K, Business Administration 3311K, Business Administration 3316K, Business Administration 3321K, Business Administration 3322K, Business Administration 3323K.

Fourth Year Program

~~Numerical and Mathematical Methods 3415A/B,~~ ECE 2277A/B, ECE 3330A/B, ECE 3331A/B, ECE 3375A/B, **MSE 2221A/B,** MSE 3301A/B, MSE 3302A/B, MSE 3310A/B, MSE 3360A/B, MSE 3380A/B, MSE 3381A/B.

Applied Project Requirement: Business Administration 4569

Fifth Year Program

MSE 4499, MSE 4401A/B, ELI 4110F/G or the former ES 4498F/G, Statistical Sciences 2141A/B, two 0.5 TE from the approved list.

3.0 Business Administration courses:

- 0.5 course**:** International Perspective Requirement: Business Administration 4505A/B.
- 0.5 course**:** Corporations and Society Perspective Requirement: At least one 0.5 course from Business Administration - Corporations and Society designated electives offered during the academic year (Business Administration 4538A/B, Business Administration 4539A/B, Business Administration 4588A/B, Business Administration 4625A/B) or other business elective as determined and approved by the HBA Program Director to satisfy this requirement.
- 0.5 course: Managerial Accounting Requirement: Business Administration 4624A/B.
- 1.5 elective courses chosen from 4000 level Business courses.

Approved Technical Electives: ECE 4455A/B, ECE 4460A/B, ECE 4469A/B

Program Revision – Effective September 1, 2024, the following change(s) be made:

MECHATRONIC SYSTEMS ENGINEERING/LAW

Admission Requirements

Before entering the combined BESc/JD degree program, a student must have completed the first three years of the Mechatronic Systems Engineering program at Western (or equivalent). In addition to applying for the combined degree program through the Office of the Associate Dean - Academic of the Faculty of Engineering, a student must also make a separate application to the Faculty of Law for admission into the JD program by the published deadline, May 1. The application to Law must indicate that the student is applying to the combined BESc/JD program.

Admission Criteria

To be eligible for the combined degree program, students must have completed all the requirements of the first-year curriculum in the Faculty of Engineering, and the second and third-year program, Option C of the Mechatronic Systems Engineering Program, with either a minimum cumulative weighted average (CWA) of 80% or stand in the top 10% of the class. In addition, the applicant must meet the minimum LSAT requirement established by the Law School

Admissions Committee for all combined degree programs.

Entrance into the combined degree program is competitive and limited. Meeting the minimum requirements does not guarantee a position in the combined program.

Module/Program Information

Engineering Common First Year Program

Full-year courses**:** Engineering Science 1050, Business Administration 1299E.
Full-year half course**:** Engineering Science 1022A/B/Y.
Half-year courses**:** Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B.

(Three of the half courses are taken in each term as scheduled)

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B, Computer Science 1037A/B, ECE 2205A/B, MSE 2200Q/R/S/T, MSE 2201A/B, MSE 2202A/B, MSE 2212A/B, MME 2213A/B, MSE 2214A/B, **MSE 2221A/B,** MSE 2233A/B, MSE 2273A/B~~, Writing 2130F/G~~.

Third-Year Program

~~Numerical and Mathematical Methods 3415A/B~~, ECE 2277A/B, ECE 3330A/B, ECE 3331A/B, ECE 3375A/B, MSE 3301A/B, MSE 3302A/B, MSE 3310A/B, MSE 3360A/B, MSE 3380A/B, MSE 3381A/B, **Writing 2130F/G,** 0.5 non-technical elective*.

Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies, and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website.

Fourth-Year Program

First year Law curriculum. No courses outside Law may be taken during this year.

Fifth and Sixth-Year Programs

MSE 4499, MSE 4401A/B, Statistical Sciences 2141A/B or Statistical Sciences 2143A/B, one of ECE 4460A/B or ECE 4469A/B.

In years five and six, students must take courses in Law totaling 45 credit hours. These courses must include the ~~three~~ **four** compulsory upper-year courses and courses that satisfy the Faculty of Law writing requirements. They must also include one of the courses listed below under "Economics" and one listed under "Impact of Technology on Society".

Notes: Fulfillment of the Faculty of Engineering requirement of courses that expose students to the impact of technology on society, ethical issues, economics and the thought processes in the Humanities and Social Sciences must be taken as follows:

Economics**:** One of Law 5220 Income Taxation, **Law 5550 Competition Law,** Law 5555 Corporate Finance, or ~~an approved Law Selected Topics~~ **another Law** course **approved by the Associate Dean (Academic)**.
~~**Ethical Issues:** Law 5150 Legal Ethics & Professionalism.~~
Impact of Technology on Society**:** One of: **Law 5814 Disruptive Technologies and the Law,** Law 5615 Biotechnology Law, Law 5605 Advanced Issues in Technology Law, Law 5350 Media Law, Law 5600 Advanced Intellectual Property, Law 5620 Information Law, Law 5625 Intellectual Property, Law 5630 International Protection of Intellectual Property, Law 5610 Advanced Patent Law, or ~~an approved Law Selected Topics~~ **another Law** course **approved by the Associate Dean (Academic)**.

Program Revision – Effective September 1, 2024, the following change(s) be made:

D. MECHATRONIC SYSTEMS ENGINEERING AND BIOMEDICAL ENGINEERING OPTION

Admission Requirements

The Mechatronic Systems Engineering and Biomedical Engineering Option (Option D) is a limited-enrollment program. Upon completion, students will receive two degrees: a BESc in Mechatronic Systems Engineering and a BESc in Biomedical Engineering (non-accredited). Admission to Option D is competitive; meeting the minimum requirements does not guarantee admission.

Students apply to Option D while in first year through the Intent-to-Register process. The Mechatronic Systems Engineering Program, in collaboration with the Director of Biomedical Engineering, will accept students into Option D. To be eligible for Option D, all of the requirements of the first-year curriculum in the

Faculty of Engineering must be completed with a minimum year-weighted average (YWA) of 70%.

Acceptance into Option D does not guarantee acceptance into the concurrent degree program. Students apply to the concurrent degree program during their second year in Engineering by the published deadline. To be eligible for the concurrent degree program, students must complete all of the requirements of the second-year program in Option D of the Mechatronic Systems Engineering Program, obtaining a minimum year-weighted average (YWA) of 70% and a minimum grade of 70% in Biomedical Engineering 3201A/B.

Students who are not accepted into the concurrent degree program after second year will still be eligible to complete a BESc in Mechatronic Systems Engineering provided that they meet the requirements for progression in Engineering. In this case, the BME 3201A/B course may count as a 0.5 technical elective in the program.

Module/Program Information

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B.
(Three of the half courses are taken in each term as scheduled.)

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B, BME 3201A/B, Computer Science 1037A/B, ECE 2205A/B, MSE 2200Q/R/S/T, MSE 2201A/B, MSE 2202A/B, MSE 2212A/B, MSE 2213A/B, MSE 2214A/B, MSE 2233A/B, MSE 2273A/B.

Third Year Program

~~Numerical and Mathematical Methods 3415A/B,~~ Biology 1001A, Biology 1002B, ECE 2277A/B, ECE 3330A/B, ECE 3331A/B, ECE 3375A/B, **MSE 2221A/B,** MSE 3301A/B, MSE 3302A/B, MSE 3310A/B, MSE 3360A/B, MSE 3380A/B, MSE 3381A/B.

Fourth Year Program

Biochemistry 2280A, BME 3301A/B, BME 3303A/B, ECE 4455A/B, MME 4469A/B, Physiology 2130, Statistical Sciences 2141A/B, 1.5 biomedical sciences electives, 1.0 healthcare non-technical electives.

Fifth Year Program

BME 4400, ECE 4445A/B, ELI 3200A/B or the former ES 3330A/B, ELI 4110F/G or the former ES 4498F/G, MSE 4401A/B, MSE 4499, 1.0 BME technical electives, 0.5 MSE technical elective, 0.5 non-technical elective.

Biomedical Sciences Electives (Courses that do not appear on this list require special permission):
Biochemistry 3385A, Biochemistry 3386B, Biology 2382A/B, Biology 2581A/B, Chemistry 2213A/B, Chemistry 2223B, Communication Sciences and Disorders 4417A/B, Health Sciences 2300A/B, Health Sciences 3300A/B, Medical Sciences 4931F/G, Physiology 3140A, Psychology 2220A/B.

Biomedical Engineering (BME) Technical Electives (Courses that do not appear on this list require special permission):
CBE 4421A/B, ECE 4438A/B, Medical Biophysics 3507G, Medical Biophysics 3645A/B, Medical Biophysics 4475A/B, Medical Biophysics 4535A/B.

Non-technical Electives:
Selection of the non-technical electives must be approved by the Director of the School of Biomedical Engineering to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies, and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website. In addition, 1.0 courses must focus on topics related to health care and the health-care system and its effects on individuals and society.

Healthcare Non-technical Electives:
Anthropology 2240A/B, Anthropology 2290A/B or the former Anthropology 2290F/G, Economics 2169F/G, GSWS 2244, History 2195A/B (King's), Law 3101A/B, Philosophy 2272F/G (King's) or the former Philosophy 2072F/G, Philosophy 2715F/G, Political Science 2276F/G (Brescia), Religious Studies 2239F/G (King's), Sociology 2179A/B, Sociology 2180A/B, Writing 3222F/G, the former Philosophy 2071E.

Program Revision – Effective September 1, 2024, the following change(s) be made:

E. MECHATRONIC SYSTEMS ENGINEERING AND ARTIFICIAL INTELLIGENCE SYSTEMS ENGINEERING OPTION

Admission Requirements

The *Mechatronic Systems Engineering and Artificial Intelligence Systems Engineering (option E)* is a limited-enrollment program. Upon completion, students will receive two degrees: a BESc in Mechatronic Systems Engineering and a BESc in Artificial Intelligence Systems Engineering (non-accredited). Admission to Option E is competitive; meeting the minimum requirements does not guarantee admission. Students apply to Option E while in first-year through the Intent-to-Register process. To be eligible for Option E, all of the requirements of the first-year curriculum in the Faculty of Engineering must be completed with a minimum year weighted average (YWA) of 75%.

Module/Program Information

Students who entered the Engineering Program in September 2021 will continue to follow their original AISE program progression. MSE students who entered their progression in September 2022 will also have to follow their original AISE program progression.

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B.

Second Year Program

AISE 2205A/B (or SE 2205A/B if taken prior to 2024-25), AISE 2251A/B (or the former SE 2251A/B), Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B, MSE 2212A/B, MSE 2213A/B, MSE 2214A/B, **MSE 2221A/B,** MSE 2273A/B, MSE 2200Q/R**/S/T**, Statistical Sciences 2141A/B, ~~Writing 2130F/G,~~ two 0.5 non-technical electives.

Third Year Program

AISE 3010A/B, AISE 3309A/B (or SE 3309A/B if taken prior to 2024-25), AISE 3350A/B (or the former ECE 3350A/B), AISE 3351A/B (or the former ECE

3351A/B), ECE 2205A/B, MSE 2201A/B, MSE 2202A/B, MSE 2233A/B, MSE 3360A/B, ~~MSE 3380A/B,~~ DS 3000A/B, ~~Numerical and Mathematical Methods 3415A/B,~~ **Writing 2130F/G, one 0.5 non-technical elective**.

Fourth Year Program

AISE 4010A/B, AISE 4020A/B, AISE 4430A/B (or the former SE 4430A/B), ECE 2277A/B, ECE 3330A/B, ECE 3375A/B, ECE 4469A/B, MSE 3302A/B, MSE 3310A/B, **MSE 3380A/B,** MSE 3381A/B, ~~0.5 nontechnical elective,~~ **one** 0.5 AISE technical elective.

Fifth Year Program

AISE 3020A/B, AISE 4050, AISE 4450A/B (or the former ECE 4450A/B), ELI 4110F/G, ECE 4460A/B, MSE 3301A/B, MSE 4401A/B, Three 0.5 technical electives, **one** 0.5 AISE technical elective.

*Selection of the non-technical elective must be approved by the department to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies and thought processes of the humanities and social sciences. More information about approved non-technical electives can be found on the Engineering website.

Technical Electives:
ECE 3380A/B, ECE 4429A/B, ECE 4438A/B, ECE 4445A/B, ECE 4455A/B, ECE 4468A/B, MME 4424A/B, MME 4425A/B, MME 4459A/B, MME 4469A/B, MME 4470A/B, MME 4473A/B, MME 4480A/B, MME 4482A/B, MME 4492A/B.

AISE Technical Electives:
Computer Science 3340A/B, Computer Science 4417A/B, **ECE 4438A/B, ECE 4445A/B, SE 4455A/B,** Statistical Sciences 4861A/B.

Some technical electives may not be offered in a given academic year.

FACULTY OF LAW

Program Revision – Effective September 1, 2024, the following change(s) be made:

LAW/MECHATRONIC SYSTEMS ENGINEERING

Admission Requirements

Before entering the combined BESc/JD degree program, a student must have completed the first three years of the Mechatronic Systems Engineering program at Western (or equivalent). In addition to applying for the combined degree program through the Office of the Associate Dean - Academic of the Faculty of Engineering, a student must also make a separate application to the Faculty of Law for admission into the JD program by the published deadline, May 1. The application to Law must indicate that the student is applying to the combined BESc/JD program.

Admission Criteria

To be eligible for the combined degree program, students must have completed all the requirements of the first-year curriculum in the Faculty of Engineering, and the second and third-year program, Option C of the Mechatronic Systems Engineering Program, with either a minimum cumulative weighted average (CWA) of 80% or stand in the top 10% of the class. In addition, the applicant must meet the minimum LSAT requirement established by the Law School Admissions Committee for all combined degree programs.

Entrance into the combined degree program is competitive and limited. Meeting the minimum requirements does not guarantee a position in the combined program.

Module/Program Information

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B.

(Three of the half courses are taken in each term as scheduled)

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B, Computer Science 1037A/B, ECE 2205A/B, MSE 2200Q/R/S/T, MSE 2201A/B, MSE 2202A/B, MSE 2212A/B, MME 2213A/B, MSE 2214A/B, **MSE 2221A/B,** MSE 2233A/B, MSE 2273A/B~~, Writing 2130F/G~~.

Third-Year Program

~~Numerical and Mathematical Methods 3415A/B~~, ECE 2277A/B, ECE 3330A/B, ECE 3331A/B, ECE 3375A/B, MSE 3301A/B, MSE 3302A/B, MSE 3310A/B, MSE 3360A/B, MSE 3380A/B, MSE 3381A/B, **Writing 2130F/G,** 0.5 non-technical elective*.

Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies, and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website.

Fourth-Year Program

First year Law curriculum. No courses outside Law may be taken during this year.

Fifth and Sixth-Year Programs

MSE 4499, MSE 4401A/B, Statistical Sciences 2141A/B or Statistical Sciences 2143A/B, one of ECE 4460A/B or ECE 4469A/B.

In years five and six, students must take courses in Law totaling 45 credit hours. These courses must include the ~~three~~ **four** compulsory upper-year courses and courses that satisfy the Faculty of Law writing requirements. They must also include one of the courses listed below under “Economics” and one listed under “Impact of Technology on Society”.

Notes: Fulfillment of the Faculty of Engineering requirement of courses that expose students to the impact of technology on society, ethical issues, economics and the thought processes in the Humanities and Social Sciences must be taken as follows:

Economics: One of Law 5220 Income Taxation, **Law 5550 Competition Law,** Law 5555 Corporate Finance, or ~~an approved Law Selected Topics~~ **another Law** course **approved by the Associate Dean (Academic)**.
~~**Ethical Issues:** Law 5150 Legal Ethics & Professionalism.~~
Impact of Technology on Society: One of: **Law 5814 Disruptive Technologies and the Law,** Law 5615 Biotechnology Law, Law 5605 Advanced Issues in

Technology Law, Law 5350 Media Law, Law 5600 Advanced Intellectual Property, Law 5620 Information Law, Law 5625 Intellectual Property, Law 5630 International Protection of Intellectual Property, Law 5610 Advanced Patent Law, or ~~an approved Law Selected Topics~~ **another Law** course **approved by the Associate Dean (Academic)**.

Program Revision – Effective September 1, 2024, the following change(s) be made:

LAW/INTEGRATED ENGINEERING

Admission Requirements

Before entering the combined BESc/JD degree program, a student must have completed the first three years of the Integrated Engineering program at Western (or equivalent). In addition to applying for the combined degree program through the Office of the Associate Dean - Academic of the Faculty of Engineering, a student must also make a separate application to the Faculty of Law for admission into the JD program by the published deadline, May 1. The application to Law must indicate that the student is applying to the combined BESc/JD program.

Admission Criteria

To be eligible for the combined degree program, students must have completed all the requirements of the first year curriculum in the Faculty of Engineering, and the second and third year program, Option D, of the Integrated Engineering program with either a minimum cumulative weighted average (CWA) of 80% or stand in the top 10% of the class. In addition, the applicant must meet the minimum LSAT requirement established by the Law School Admission Committee for all combined degree programs.

Entrance into the combined degree program is competitive and limited. Meeting the minimum requirements does not guarantee a position in the combined program.

Module/Program Information

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B.

(Three of the half courses are taken in each term as scheduled)

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B, **CBE 2220A/B,** CBE 2221A/B, ~~CBE 2291A/B, CEE 2202A/B, ECE 2238A/B,~~ **CEE 2220A/B,** ECE 2277A/B, **IE 2298** ~~IE 2297A/B or the former ES 2297A/B~~, **MME 2285A/B,** MSE 2214A/B, Statistical Sciences 2143A/B, ~~1.0~~ **0.5** non-technical elective*****.

*Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website. **The progression sequence of non-technical and technical electives may be changed to fulfill the pre-requisite requirements of desired technical electives, upon approval by the Program Director.**

Third Year Program

~~CBE 2220A/B,~~ **CBE 2291A/B,** CBE 3322A/B, **CEE 2202A/B,** CEE 2221A/B, ~~CEE 2220A/B~~, MME 3374A/B **or ECE 2238A/B**, ELI 3000A/B or the former ES 3331A/B, **ELI 3100A/B or** ELI 3200A/B or the former ES 3330A/B, ELI 4110F/G or the former ES 4498F/G, ~~MME 2285A/B,~~ MME 3379A/B **or MSE 3301A/B**, MSE 2213A/B, MSE 3360A/B, **0.5 non-technical elective***.

Fourth Year Program:

First year Law curriculum. No courses outside Law may be taken during this year.

Fifth and Sixth Year Programs:

ELI 4100A/B or the former ES 4480A/B, **ELI 4300A/B or** ELI 4200A/B or the former ES 4481A/B, IE 4499 or the former ES 4499.

In years five and six, students must take courses in Law totaling 45 credit hours. These courses must include the **four** ~~three~~ compulsory upper-year courses and courses that satisfy the Faculty of Law writing requirements. They must also include one of the courses listed below under “Economics” and one listed under “Impact of Technology on Society”.

Notes: Fulfillment of the Faculty of Engineering requirement of courses that expose students to the impact of technology on society, ethical issues,

economics and the thought processes in the Humanities and Social Sciences must be taken as follows:

Economics: One of Law 5220 Income Taxation, **Law 5550 Competition Law,** Law 5555 Corporate Finance, or ~~an approved Law Selected Topics~~ **another Law** course **approved by the Associate Dean (Academic)**.
~~Ethical Issues: Law 5150 Legal Ethics & Professionalism.~~
Impact of Technology on Society: One of: **Law 5814 Disruptive Technologies and the Law,** Law 5615 Biotechnology Law, Law 5605 Advanced Issues in Technology Law, Law 5350 Media Law, Law 5600 Advanced Intellectual Property, Law 5620 Information Law, Law 5625 Intellectual Property, Law 5630 International Protection of Intellectual Property, Law 5610 Advanced Patent Law, or ~~an approved Law Selected Topics~~ **another Law** course **approved by the Associate Dean (Academic)**.

Program Revision – Effective September 1, 2024, the following change(s) be made:

LAW/CHEMICAL ENGINEERING

Module/Program Information

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B.

(Three of the half courses are taken in each term as scheduled)

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2277A/B, CBE 2206A/B, CBE 2207A/B, CBE 2214A/B, CBE 2220A/B, CBE 2221A/B, CBE 2224A/B, CBE 2290A/B, CBE 2291A/B, Statistical Sciences 2143A/B, Writing 2130F/G.

Third Year Program

CBE 3307A/B, CBE 3310A/B, CBE 3315A/B, CBE 3316A/B, CBE 3318A/B, CBE 3319A/B, CBE 3322A/B, CBE 3323A/B, CBE 3324A/B, CBE 3395Y, two 0.5 technical electives***

Fourth Year Program

First year Law curriculum. No courses outside Law may be taken during this year.

Fifth and Sixth Year Programs

CBE 4497, two 0.5 Technical electives approved by the CBE program.

In years five and six, students must take courses in Law totaling 45 credit hours. These courses must include the **four** ~~three~~ compulsory upper-year courses and courses that satisfy the Faculty of Law writing requirements. They must also include one of the courses listed below under "Economics" and one listed under "Impact of Technology on Society".

Notes: Fulfillment of the Faculty of Engineering requirement of courses that expose students to the impact of technology on society, ethical issues, economics and the thought processes in the Humanities and Social Sciences must be taken as follows:

Economics: One of Law 5220 Income Taxation, **Law 5550 Competition Law,** Law 5555 Corporate Finance, or **another Law course approved by the Associate Dean (Academic)** ~~an approved Law Selected Topics course~~.
~~Ethical Issues: Law 5150 Legal Ethics and Professionalism.~~
Impact of Technology on Society: One of **Law 5814 Disruptive technologies and the Law,** Law 5615 Biotechnology Law, Law 5605 Advanced Issues in Technology Law, Law 5350 Media Law, Law 5600 Advanced Intellectual Property, Law 5620 Information Law, Law 5625 Intellectual Property, Law 5630 International Protection of Intellectual Property, Law 5610 Advanced Patent Law, or **another Law course approved by the Associate Dean (Academic)** ~~an approved Law Selected Topics course~~.
~~Thought Processes of the Humanities and Social Sciences: Law 5110 Constitutional Law, Law 5115 Contracts, Law 5120 Criminal Law, Law 5140 Property, Law 5145 Torts.~~

Program Revision – Effective September 1, 2024, the following change(s) be made:

LAW/CIVIL ENGINEERING

Module/Program Information

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.

Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B.

(Three of the half courses are taken in each term as scheduled)

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2277A/B, CEE 2202A/B, CEE 2217A/B, CEE 2219A/B, CEE 2220A/B, CEE 2221A/B, CEE 2224, Earth Sciences 2281A/B, Statistical Sciences 2141A/B*, Writing 2130F/G.

* Note: A student may, with the permission of the department counsellor, substitute Statistical Sciences 2143A/B for Statistical Sciences 2141A/B.

Note: CEE 3324A/B (Surveying). This course is available each summer (15 days) and must be completed before a student may graduate from the Civil Engineering program.

Third Year Program

CEE 3321A/B, CEE 3322A/B, CEE 3340A/B, CEE 3343A/B, CEE 3344A/B, CEE 3346A/B, CEE 3347A/B, CEE 3348A/B, CEE 3358A/B, CEE 3369A/B, 0.5 non-technical elective.

Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies, and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website.

Fourth Year Program

First year Law curriculum. No courses outside Law may be taken during this year.

Fifth and Sixth Year Programs

CEE 4424A/B, CEE 4426A/B, CEE 4441, CEE 4465A/B.

In years five and six, students must take courses in Law totaling 45 credit hours. These courses must include the **four** ~~three~~ compulsory upper-year courses and courses that satisfy the Faculty of Law writing requirements. They must also include one of the courses listed below under “Economics” and one listed under “Impact of Technology on Society”.

Notes: Fulfillment of the Faculty of Engineering requirement of courses that expose students to the impact of technology on society, ethical issues, and economics must be taken as follows:

Economics: One of Law 5220 Income Taxation, **Law 5550 Competition Law,** Law 5555 Corporate Finance, or **another Law course approved by the Associate Dean (Academic)** ~~an approved Law Selected Topics course~~.
~~Ethical Issues: Law 5150 Legal Ethics and Professionalism.~~
Impact of Technology on Society: One of **Law 5814 Disruptive technologies and the Law,** Law 5615 Biotechnology Law, Law 5605 Advanced Issues in Technology Law, Law 5350 Media Law, Law 5600 Advanced Intellectual Property, Law 5620 Information Law, Law 5625 Intellectual Property, Law 5630 International Protection of Intellectual Property, Law 5610 Advanced Patent Law, or **another Law course approved by the Associate Dean (Academic)** ~~an approved Law Selected Topics course~~.

Program Revision – Effective September 1, 2024, the following change(s) be made:

LAW/ELECTRICAL ENGINEERING

Module/Program Information

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B.

(Three of the half courses are taken in each term as scheduled)

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B, Computer Science 1027A/B, ECE 2205A/B, ECE 2277A/B, ECE 2231A/B, ECE 2233A/B, ECE 2236A/B, ECE 2240A/B, ECE 2241A/B, MME 2234A/B, Writing 2130F/G.

Third Year Program
Numerical and Mathematical Methods 3415A/B, ECE 3330A/B, ECE 3331A/B, ECE 3332A/B, ECE 3333A/B, ECE 3336A/B, ECE 3337A/B, ECE 3370A/B, ECE 3375A/B, ECE 3399A/B, Statistical Sciences 2141A/B, 0.5 non-technical elective.

Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies, and thought processes of the humanities and social sciences. An approved list can be found on the Engineering website.

Fourth Year Program

First year Law curriculum. No courses outside Law may be taken during this year.

Fifth and Sixth Year Programs

ECE 4416, ECE 4437A/B, the former ECE 4470A/B.

In years five and six, students must take courses in Law totaling 45 credit hours. These courses must include the **four** ~~three~~ compulsory upper-year courses and courses that satisfy the Faculty of Law writing requirements. They must also include one of the courses listed below under “Economics” and one listed under “Impact of Technology on Society”.

Notes: Fulfillment of the Faculty of Engineering requirement of courses that expose students to economics, ethical issues, and the impact of technology on society must be taken as follows:

Economics: One of Law 5220 Income Taxation, **Law 5550 Competition Law,** Law 5555 Corporate Finance, or **another Law course approved by the Associate Dean (Academic)** ~~an approved Law Selected Topics course~~.
~~Ethical Issues: Law 5150 Legal Ethics and Professionalism.~~
Impact of Technology on Society: One of **Law 5814 Disruptive technologies and the Law,** Law 5615 Biotechnology Law, Law 5605 Advanced Issues in Technology Law, Law 5350 Media Law, Law 5600 Advanced Intellectual Property, Law 5620 Information Law, Law 5625 Intellectual Property, Law 5630 International Protection of Intellectual Property, Law 5610 Advanced Patent Law, or **another Law course approved by the Associate Dean (Academic)** ~~an approved Law Selected Topics course~~.

Program Revision – Effective September 1, 2024, the following change(s) be made:

LAW/MECHANICAL ENGINEERING

Module/Program Information

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B.

(Three of the half courses are taken in each term as scheduled)

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B, MME 2200Q/R/S/T, MME 2202A/B, MME 2204A/B, MME 2213A/B, MME 2221A/B, MME 2259A/B, MME 2260A/B, MME 2273A/B, MME 2285A/B, Statistical Sciences 2143A/B, Writing 2130F/G.

Third Year Program

MME 3303A/B, MME 3307A/B, MME 3325A/B, MME 3334A/B, MME 3348A/B, MME 3350A/B, MME 3360A/B, MME 3374A/B, MME 3380A/B, MME 3381A/B.

Fourth Year Program

First year Law curriculum. No courses outside Law may be taken during this year.

Fifth and Sixth Year Programs

MME 4499, two 0.5 Technical electives approved by the MME program.

In years five and six, students must take courses in Law totaling 45 credit hours. These courses must include the **four** ~~three~~ compulsory upper-year courses and courses that satisfy the Faculty of Law writing requirements. They must also include one of the courses listed below under “Economics” and one listed under “Impact of Technology on Society”.

Notes: Fulfillment of the Faculty of Engineering requirement of courses that expose students to economics, ethical issues, and the impact of technology on society must be taken as follows:

Economics: One of Law 5220 Income Taxation, **Law 5550 Competition Law,** Law 5555 Corporate Finance, or **another Law course approved by the Associate Dean (Academic)** ~~an approved Law Selected Topics course~~.
~~Ethical Issues: Law 5150 Legal Ethics and Professionalism.~~
Impact of Technology on Society: One of **Law 5814 Disruptive technologies and the Law,** Law 5615 Biotechnology Law, Law 5605 Advanced Issues in Technology Law, Law 5350 Media Law, Law 5600 Advanced Intellectual Property, Law 5620 Information Law, Law 5625 Intellectual Property, Law 5630 International Protection of Intellectual Property, Law 5610 Advanced Patent Law, or **another Law course approved by the Associate Dean (Academic)** ~~an approved Law Selected Topics course~~.
~~**Thought Processes of the Humanities and Social Sciences:** Law 5110 Constitutional Law, Law 5115 Contracts, Law 5120 Criminal Law, Law 5140 Property, Law 5145 Torts.~~

Program Revision – Effective September 1, 2024, the following change(s) be made:

LAW/SOFTWARE ENGINEERING

Module/Program Information

Engineering Common First Year Program

Full-year courses: Engineering Science 1050, Business Administration 1299E.
Full-year half course: Engineering Science 1022A/B/Y.
Half-year courses: Numerical and Mathematical Methods 1411A/B, Numerical and Mathematical Methods 1412A/B, Numerical and Mathematical Methods 1414A/B, Chemistry 1302A/B, Engineering Science 1021A/B, Engineering Science 1036A/B, Physics 1401A/B and Physics 1402A/B.

(Three of the half courses are taken in each term as scheduled)

Second Year Program

Numerical and Mathematical Methods 2270A/B, Numerical and Mathematical Methods 2276A/B, ECE 2277A/B, ECE 2238A/B, SE 2202A/B, SE 2203A/B, SE 2205A/B, SE 2250A/B, Mathematics 2151A/B, Statistical Sciences 2141A/B, Writing 2130F/G, one 0.5 non-technical elective from the approved list.

Third Year Program

ECE 3375A/B, ECE 4436A/B, SE 3309A/B, SE 3310A/B, SE 3313A/B, SE 3314A/B, SE 3316A/B, SE 3350A/B, SE 3351A/B, SE 3352A/B, SE 3353A/B.

Fourth Year Program

First year Law curriculum. No courses outside Law may be taken during this year.

Fifth and Sixth Year Programs

SE 4450, SE 4452A/B, SE 4455A/B, SE 4472A/B.

In years five and six, students must take courses in Law totaling 45 credit hours. These courses must include the **four** ~~three~~ compulsory upper-year courses and courses that satisfy the Faculty of Law writing requirements. They must also include one of the courses listed below under "Economics" and one listed under "Impact of Technology on Society".

Notes: Fulfillment of the Faculty of Engineering requirement of courses that expose students to economics, ethical issues, the impact of technology on society, and the thought processes in the Humanities and Social Sciences must be taken as follows:

Economics: One of Law 5220 Income Taxation, **Law 5550 Competition Law,** Law 5555 Corporate Finance, or **another Law course approved by the Associate Dean (Academic)** ~~an approved Law Selected Topics course~~.
~~Ethical Issues: Law 5150 Legal Ethics and Professionalism.~~
Impact of Technology on Society: One of **Law 5814 Disruptive technologies and the Law,** Law 5615 Biotechnology Law, Law 5605 Advanced Issues in Technology Law, Law 5350 Media Law, Law 5600 Advanced Intellectual Property, Law 5620 Information Law, Law 5625 Intellectual Property, Law 5630 International Protection of Intellectual Property, Law 5610 Advanced Patent Law, or **another Law course approved by the Associate Dean (Academic)** ~~an approved Law Selected Topics course~~.
~~Thought Processes of the Humanities and Social Sciences: Law 5110 Constitutional Law, Law 5115 Contracts, Law 5120 Criminal Law, Law 5140 Property, Law 5145 Torts.~~

DON WRIGHT FACULTY OF MUSIC

DEPARTMENT OF MUSIC EDUCATION

Course Revision – Effective September 1, 2024, the following change(s) be made:

MUSIC 4860A/B/Y
SPECIAL TOPICS IN MUSIC EDUCATION
Special topics in the study of music education, to be arranged.

Prerequisite(s): **Music 1802A/B** ~~Permission of the Department of Music Education~~.
Extra information: 3 hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

MUSIC 4861A/B/Y
SPECIAL TOPICS IN MUSIC EDUCATION
Special topics in the study of music education, to be arranged.

Prerequisite(s): **Music 1802A/B** ~~Permission of the Department of Music Education~~.
Extra information: 3 hours.
Course Weight: 0.50

FACULTY OF SCIENCE

DEPARTMENT OF STATISTICAL AND ACTUARIAL SCIENCES

Program Revision – Effective September 1, 2024, the following change(s) be made:

CERTIFICATE IN DATA SCIENCE

Admission Requirements

Completion of the first-year requirements of any Major or Honours Specialization module, including 1.0 courses from Mathematics, Calculus, or Applied Mathematics at the 1000-level (with a minimum grade of 60%). Data Science 1000A/B or the former Statistical Sciences 1024A/B (either with a minimum grade of 60%) can be used to fulfil 0.5 of these requirements. The Certificate cannot be combined with a Minor, Major, Specialization, or Honours Specialization in Statistics, Actuarial Science, Computer Science, or Data Science.

Program
3.0 courses:

0.5 courses from the Introductory Statistics Course List.
0.5 or 1.0 course~~s~~ from Data Science 2000A/B, ~~Statistical Science 2864A/B, Computer Science 2120A/B, Digital Humanities 2220A/B,~~ Data Science 2100A.
0.5 course: Data Science 3000A/B (or former Computer Science 4414A/B, the former Statistical Sciences 3850F/G, the former Software Engineering 4460A/B).
1.0 or 1.5 courses from: **Computer Science 3120A/B,** Computer Science 3121A/B, ~~Computer Science 3346A/B, Computer Science 4415A/B,~~ Computer Science 4417A/B, ~~Computer Science 4417A/B, Computer Science 4442A/B, Statistical Sciences 3660A/B, Statistical Sciences 4850F/G, Statistical Sciences 4864A/B,~~ **Statistical Sciences 2864A/B, Statistical Sciences 3869A/B, Statistical Sciences 4861A/B, Psychology 3801F/G, one of (Geography 3211A/B or Geography 3226A/B),** or equivalent courses subject to the approval of the Department.

FACULTY OF SOCIAL SCIENCE

DEPARTMENT OF ANTHROPOLOGY

Course Introduction – Effective September 1, 2024, the following course be introduced:

ANTHROPOLOGY 2288A/B
CLIMATE, SCIENCE, AND THE CHANGING WORLD
(Short title: Climate, Science, Change)
The world is changing in more ways than one. Global temperatures are rising, and social and political upheavals are reshaping the way we respond to environmental change. This course examines the role of science in these processes and how scientists and scientific institutions are adapting to a changing world.

Extra Information: 2 hours.
Course Weight: 0.50

DEPARTMENT OF HISTORY

Course Introduction – Effective September 1, 2024, the following course be introduced:

HISTORY 4818F/G
INDIGENOUS PEOPLES AND PUBLIC HISTORY
(Short title: Indigenous Public History)
This course examines public history as it relates to Indigenous peoples, including statues and monuments, representation in mass media, recognition of cultural landscapes, and the repatriation of ancestral remains. Indigenous responses, including protest and criticisms of the “nature” and “culture” divide, provide a theoretical foundation for future analysis.

Antirequisite(s): History 4296G if taken in 2021-22, Indigenous Studies 4001G if taken in 2021-22, Indigenous Studies 4818F/G.
Prerequisite(s): Registration in third or fourth year Indigenous Studies with a minimum average of 70%, or 1.0 History courses at the 2200-level or above.
Extra Information: 2 seminar hours. Cross-listed with Indigenous Studies 4818F/G.
Course Weight: 0.50

INDIGENOUS STUDIES PROGRAM

Course Introduction – Effective September 1, 2024, the following course be introduced:

INDIGENOUS STUDIES 4818F/G
INDIGENOUS PEOPLES AND PUBLIC HISTORY
(Short title: Indigenous Public History)
This course examines public history as it relates to Indigenous peoples, including statues and monuments, representation in mass media, recognition of cultural landscapes, and the repatriation of ancestral remains. Indigenous responses, including protest and criticisms of the “nature” and “culture” divide, provide a theoretical foundation for future analysis.

Antirequisite(s): History 4296G if taken in 2021-22, History 4818F/G, Indigenous Studies 4001G if taken in 2021-22.
Prerequisite(s): Registration in third or fourth year Indigenous Studies with a minimum average of 70%, or 1.0 History courses at the 2200-level or above.
Extra Information: 2 seminar hours. Cross-listed with History 4818F/G.
Course Weight: 0.50

HURON UNIVERSITY COLLEGE

CENTRE FOR GLOBAL STUDIES – FACULTY OF ARTS AND SOCIAL SCIENCE

Course Revision – Effective September 1, 2024, the following change(s) be made:

CENTRE FOR GLOBAL STUDIES 4010F/G
HONOURS SEMINAR: POVERTY
Examinations of social, environmental and political sources of structural economic inequality. For core themes and cases in the current session, please see the Centre for Global Studies.

Prerequisite(s): 0.5 course from Centre for Global Studies 3001F/G**,** ~~– 3005F/G~~ **Centre for Global Studies 3005F/G, or Centre for Global Studies 3006F/G;** or permission of the Centre for Global Studies.
Extra Information: 3 hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

CENTRE FOR GLOBAL STUDIES 4011F/G
HONOURS SEMINAR: IDENTITY/DIFFERENCE
Examinations of the construction of identity in individuals, groups, societies, cultures, and nations as it occurs through processes of differentiation and othering. For core themes in the current session, please see the Centre for Global Studies.

Prerequisite(s): 0.5 course from Centre for Global Studies 3001F/G**,** ~~– 3005F/G~~ **Centre for Global Studies 3005F/G, or Centre for Global Studies 3006F/G;** or permission of the Centre for Global Studies.
Extra Information: 3 hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

CENTRE FOR GLOBAL STUDIES 4012F/G
HONOURS SEMINAR: ETHICS AND RIGHTS
Examinations of the grounds on which persons and groups may claim rights and freedoms, the moral or ethical claims that they may appropriately make of one another, and the degrees to which responsibility underscores relationships between humans in the world. For core themes in the current session, please see the Centre for Global Studies.

Prerequisite(s): 0.5 course from Centre for Global Studies 3001F/G, ~~3005F/G~~ **Centre for Global Studies 3005F/G, or Centre for Global Studies 3006F/G;** or permission of the Centre for Global Studies.
Extra Information: 3 hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

CENTRE FOR GLOBAL STUDIES 4013F/G
HONOURS SEMINAR: PLACE AND MOVEMENT
Examinations of the relationships between and problems regarding geography, human territories, change, and human movement. For core themes in the current session, please see the Centre for Global Studies.

Prerequisite(s): 0.5 course from Centre for Global Studies 3001F/G, ~~3005F/G~~ **Centre for Global Studies 3005F/G, or Centre for Global Studies 3006F/G;** or permission of the Centre for Global Studies.
Extra Information: 3 hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

CENTRE FOR GLOBAL STUDIES 4014F/G
HONOURS SEMINAR: GENDER
Examinations of the pervasiveness of gender and gender–specific experiences in social encounters, interrelations and communal structures in the world. For core themes in the current session, please see the Centre for Global Studies.

Prerequisite(s): 0.5 course from Centre for Global Studies 3001F/G, ~~3005F/G~~ **Centre for Global Studies 3005F/G, or Centre for Global Studies 3006F/G;** or permission of the Centre for Global Studies.
Extra Information: 3 hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

CENTRE FOR GLOBAL STUDIES 4015F/G
HONOURS SEMINAR: POWER AND RESISTANCE
Examination of the relations of power and resistance, including studies of forms of oppression, hegemonic structures, and forms of organizing. For core themes in the current session, please see the Centre for Global Studies.

Prerequisite(s): 0.5 course from Centre for Global Studies 3001F/G, ~~3005F/G~~ **Centre for Global Studies 3005F/G, or Centre for Global Studies 3006F/G;** or permission of the Centre for Global Studies.
Extra Information: 3 hours.

Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

CENTRE FOR GLOBAL STUDIES 4016F/G
HONOURS SEMINAR: GLOBALIZATION
An examination of key trends attributed to globalization, with particular emphasis on their effects on the production of social and cultural diversity, communications, environment, social movements, economic change, human security and self–determination. For core themes in the current session, please see the Centre for Global Studies.

Prerequisite(s): 0.5 course from Centre for Global Studies 3001F/G**,** ~~– 3005F/G~~ **Centre for Global Studies 3005F/G, or Centre for Global Studies 3006F/G;** or permission of the Centre for Global Studies.
Extra Information: 3 hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

CENTRE FOR GLOBAL STUDIES 4017F/G
HONOURS SEMINAR: NARRATING CULTURE
Examinations of the cultural functions and roles of artistic expression, primarily through comparative example of literature and cinematic film. For core themes in the current session, see the Centre for Global Studies.

Prerequisite(s): 0.5 course from Centre for Global Studies 3001F/G**,** ~~– 3005F/G~~ **Centre for Global Studies 3005F/G, or Centre for Global Studies 3006F/G;** or permission of the Centre for Global Studies.
Extra Information: 3 hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

CENTRE FOR GLOBAL STUDIES 4018F/G
HONOURS SEMINAR: POSTCOLONIAL CRITIQUE
Examinations of advanced contemporary postcolonial theory, investigating efforts to interpret global studies from perspectives and modes of inquiry not subject to the knowing rational subject formed in colonial relations and modern universalising explanations of global affairs. For core themes in the current session, see the Centre for Global Studies.

Prerequisite(s): 0.5 course from Centre for Global Studies 3001F/G**,** ~~– 3005F/G~~ **Centre for Global Studies 3005F/G, or Centre for Global Studies 3006F/G;** or permission of the Centre for Global Studies.

Extra Information: 3 hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

CENTRE FOR GLOBAL STUDIES 4020F/G
SELECTED TOPICS IN HONOURS SEMINARS IN GLOBAL STUDIES
Advanced honours seminars in Global Studies, topics to be selected by instructor. Consult with the Centre for Global Studies for details.

Prerequisite(s): 0.5 course from Centre for Global Studies 3001F/G~~, 3005F/G~~ **Centre for Global Studies 3005F/G, or Centre for Global Studies 3006F/G;** or permission of the Centre for Global Studies.
Extra Information: 3 hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

CENTRE FOR GLOBAL STUDIES 4021F/G
SELECTED TOPICS HONOURS SEMINARS IN GLOBAL STUDIES
Advanced honours seminars in Global Studies, topics to be selected by instructor. Consult with the Centre for Global Studies for details.

Prerequisite(s): 0.5 course from Centre for Global Studies 3001F/G~~, 3005F/G~~ **Centre for Global Studies 3005F/G, or Centre for Global Studies 3006F/G;** or permission of the Centre for Global Studies.
Extra Information: 3 hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

CENTRE FOR GLOBAL STUDIES 4022F/G
SELECTED TOPICS HONOURS SEMINARS IN GLOBAL STUDIES
Advanced honours seminars in Global Studies, topics to be selected by instructor. Consult with the Centre for Global Studies for details.

Prerequisite(s): 0.5 course from Centre for Global Studies 3001F/G~~, 3005F/G~~ **Centre for Global Studies 3005F/G, or Centre for Global Studies 3006F/G;** or permission of the Centre for Global Studies.
Extra Information: 3 hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

CENTRE FOR GLOBAL STUDIES 4023F/G
SELECTED TOPICS HONOURS SEMINARS IN GLOBAL STUDIES
Advanced honours seminars in Global Studies, topics to be selected by instructor. Consult with the Centre for Global Studies for details.

Prerequisite(s): 0.5 course from Centre for Global Studies 3001F/G~~, 3005F/G~~ **Centre for Global Studies 3005F/G, or Centre for Global Studies 3006F/G;** or permission of the Centre for Global Studies.
Extra Information: 3 hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

CENTRE FOR GLOBAL STUDIES 4024F/G
SELECTED TOPICS HONOURS SEMINARS IN GLOBAL STUDIES
Advanced honours seminars in Global Studies, topics to be selected by instructor. Consult with the Centre for Global Studies for details.

Prerequisite(s): 0.5 course from Centre for Global Studies 3001F/G~~, 3005F/G~~ **Centre for Global Studies 3005F/G, or Centre for Global Studies 3006F/G;** or permission of the Centre for Global Studies.
Extra Information: 3 hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

CENTRE FOR GLOBAL STUDIES 4025F/G
SELECTED TOPICS HONOURS SEMINARS IN GLOBAL STUDIES
Advanced honours seminars in Global Studies, topics to be selected by instructor. Consult with the Centre for Global Studies for details.

Prerequisite(s): 0.5 course from Centre for Global Studies 3001F/G~~, 3005F/G~~ **Centre for Global Studies 3005F/G, or Centre for Global Studies 3006F/G;** or permission of the Centre for Global Studies.
Extra Information: 3 hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

CENTRE FOR GLOBAL STUDIES 4026F/G
SELECTED TOPICS HONOURS SEMINARS IN GLOBAL STUDIES
Advanced honours seminars in Global Studies, topics to be selected by instructor. Consult with the Centre for Global Studies for details.

Prerequisite(s): 0.5 course from Centre for Global Studies 3001F/G~~, 3005F/G~~ **Centre for Global Studies 3005F/G, or Centre for Global Studies 3006F/G;** or permission of the Centre for Global Studies.
Extra Information: 3 hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

CENTRE FOR GLOBAL STUDIES 4027F/G
SELECTED TOPICS HONOURS SEMINARS IN GLOBAL STUDIES
Advanced honours seminars in Global Studies, topics to be selected by instructor. Consult with the Centre for Global Studies for details.

Prerequisite(s): 0.5 course from Centre for Global Studies 3001F/G~~, 3005F/G~~ **Centre for Global Studies 3005F/G, or Centre for Global Studies 3006F/G;** or permission of the Centre for Global Studies.
Extra Information: 3 hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

CENTRE FOR GLOBAL STUDIES 4028F/G
SELECTED TOPICS HONOURS SEMINARS IN GLOBAL STUDIES
Advanced honours seminars in Global Studies, topics to be selected by instructor. Consult with the Centre for Global Studies for details.

Prerequisite(s): 0.5 course from Centre for Global Studies 3001F/G~~, 3005F/G~~ **Centre for Global Studies 3005F/G, or Centre for Global Studies 3006F/G;** or permission of the Centre for Global Studies.
Extra Information: 3 hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

CENTRE FOR GLOBAL STUDIES 4029F/G
SELECTED TOPICS HONOURS SEMINARS IN GLOBAL STUDIES
Advanced honours seminars in Global Studies, topics to be selected by instructor. Consult with the Centre for Global Studies for details.

Prerequisite(s): 0.5 course from Centre for Global Studies 3001F/G**,** ~~– 3005F/G~~ **Centre for Global Studies 3005F/G, or Centre for Global Studies 3006F/G;** or permission of the Centre for Global Studies.
Extra Information: 3 hours.
Course Weight: 0.50

Program Revision – Effective September 1, 2024, the following change(s) be made:

HONOURS SPECIALIZATION IN GLOBAL RIGHTS STUDIES

Admission Requirements

Completion of first–year requirements with no failures. Students must take 3.0 principal courses, achieving an average of at least 70% across them and with no final grade of less than 60% in any of them. These principal courses must include at least 1.0 course from GSWS 1021F/G, GSWS 1022F/G, GSWS 1024F/G, GSWS 1030F/G.

It is recommended that the remaining first–year courses ~~may~~ be taken from Anthropology, English, History, Human Rights Studies, Indigenous Studies, Media, Information and Technoculture, Philosophy, Political Science or Sociology. It is particularly recommended that students take both Philosophy 1250F/G and Political Science 1020E.

Module
10.0 courses:

3.5 courses: Centre for Global Studies 2003F/G, Centre for Global Studies 3005F/G, Centre for Global Studies 3006F/G, Centre for Global Studies 3512F/G, Centre for Global Studies 3523F/G, GSWS 2220E.
0.5 course from: Centre for Global Studies 3201F/G, **Centre for Global Studies 3202F/G,** Centre for Global Studies 3203F/G.
1.0 course from: Centre for Global Studies 3509F/G, Centre for Global Studies 3517F/G, Centre for Global Studies 3518F/G Centre for Global Studies 3524F/G, Centre for Global Studies 3532F/G.
1.0 course from: Centre for Global Studies 3100E, Centre for Global Studies 3101F/G, Centre for Global Studies 3204E, Centre for Global Studies 3205E,

Centre for Global Studies 3514F/G, Centre for Global Studies 3522F/G, Centre for Global Studies 3526F/G, Centre for Global Studies 3533F/G.
1.0 course from: Philosophy 2760F/G, Philosophy 2810F/G, Philosophy 2812F/G, Philosophy 2821F/G, Philosophy 3820F/G; Political Science 2219E, Political Science 2270E.
1.0 course from: Centre for Global Studies 3515F/G; **GSWS 2231F/G,** GSWS 2240F/G, GSWS 2270A/B, **GSWS 2290F/G,** GSWS 3305F/G, GSWS 3324F/G, GSWS 3350F/G**; Indigenous Studies 2807F/G**.
1.0 course from: Centre for Global Studies 4010F/G, Centre for Global Studies 4012F/G, Centre for Global Studies 4015F/G, Centre for Global Studies 4018F/G, Centre for Global Studies 4500E.
1.0 course from: Anthropology 2283A/B; Childhood and Youth Studies 2251F/G, Childhood and Youth Studies 3355F/G; Disability Studies 2201F/G, Disability Studies 3325F/G; **GSWS 2290F/G; Indigenous Studies 2807F/G,** Indigenous Studies 3722F/G; History 2709F/G, History 2813F/G, History 3313F/G; Philosophy 2800F/G, Philosophy 2801F/G; Sociology 3360F/G; Sociology 3371F/G; the former English 2264E; the former First Nations Studies 4722F/G.

Language Requirement

- 2.0 language courses with progression from one level to the next (e.g. 1030 level to 2000 level or 2000 level to 3000 level) in a language other than English, or
- 2.0 language courses in two different languages other than English at any level, or
- by demonstrating working fluency in a language other than English.

Program Revision – Effective September 1, 2024, the following change(s) be made:

SPECIALIZATION IN GLOBAL RIGHTS STUDIES

Admission Requirements

Completion of first–year requirements, including at least 1.0 course from GSWS 1021F/G, GSWS 1022F/G, GSWS 1024F/G, GSWS 1030F/G with marks of at least 60%.

It is recommended that the remaining first–year courses be taken from Anthropology, English, History, Human Rights Studies, Indigenous Studies, Media, Information, and Technoculture, Philosophy, Political Science, or Sociology. It is particularly recommended that students take both Philosophy 1250F/G and Political Science 1020E.

Module
10.0 courses:

4.0 courses: Centre for Global Studies 2003F/G, Centre for Global Studies 3005F/G, Centre for Global Studies 3006F/G, Centre for Global Studies 3512F/G, Centre for Global Studies 3515F/G, Centre for Global Studies 3523F/G, GSWS 2220E.
1.0 course from: Centre for Global Studies 3509F/G, Centre for Global Studies 3517F/G, Centre for Global Studies 3518F/G, Centre for Global Studies 3524F/G, Centre for Global Studies 3532F/G.
1.0 course from: Centre for Global Studies 3514F/G, Centre for Global Studies 3522F/G, Centre for Global Studies 3526F/G, ~~Centre for Global Studies 3532F/G~~ **Centre for Global Studies 3533F/G**.
1.5 courses from: Centre for Global Studies 4102F/G; Philosophy 2760F/G, Philosophy 2810F/G, Philosophy 2812F/G, Philosophy 2821F/G, Philosophy 3820F/G; Political Science 2219E, Political Science 2270E.
1.5 course from: **GSWS 2231F/G,** GSWS 2240F/G, GSWS 2270A/B, **GSWS 2290F/G,** GSWS 3305F/G, GSWS 3324F/G, GSWS 3350F/G**; Indigenous Studies 2807F/G**.
1.0 course from: Anthropology 2283A/B; Childhood and Youth Studies 2251F/G, Childhood and Youth Studies 3355F/G; Disability Studies 2201F/G, Disability Studies 3325F/G; **GSWS 2290F/G; Indigenous Studies 2807F/G,** Indigenous Studies 3722F/G; History 2709F/G, History 2813F/G, History 3313F/G; Philosophy 2800F/G, Philosophy 2801F/G; Sociology 3360F/G, Sociology 3371F/G~~; the former English 2264E; the former First Nations Studies 4722F/G~~.

Language Requirement

- 2.0 language courses with progression from one level to the next (e.g. 1030 level to 2000 level or 2000 level to 3000 level) in a language other than English, or
- 2.0 language courses in two different languages other than English at any level, or
- by demonstrating working fluency in a language other than English.

CHINESE, JAPANESE, AND EAST ASIAN STUDIES – FACULTY OF ARTS AND SOCIAL SCIENCE

Course Introduction – Effective September 1, 2024, the following course be introduced:

EAST ASIA STUDIES 1650F/G
PERSPECTIVES ON KOREA
A multi-disciplinary overview of Korea. Contents include territory, people, language, religion, economy, popular culture, among others. Students formulate questions, and investigate, on Korea and East Asia within today's globalized world perspective, identify their own cultural bias toward less familiar subjects, and critically evaluate diverse perspectives. Taught in English.

Extra Information: 3 hours.
Course Weight: 0.50

Course Introduction – Effective September 1, 2024, the following course be introduced:

EAST ASIA STUDIES 2601A/B
CULTURAL FOUNDATIONS OF MODERN KOREA
(Short title: Cultural Fndn. of Modern Korea)
A survey of the artistic, philosophical, and religious factors that shape modern Korea. Taught in English.

Extra Information: 3 hours.
Course Weight: 0.50

Course Introduction – Effective September 1, 2024, the following course be introduced:

KOREAN 1050
KOREAN I
An introduction to spoken and written Korean with emphasis on the development of communicative skills. Intended for students with little or no previous knowledge of Korean.

Antirequisite(s): Grade 12U Korean, Korean 1030, Korean 1035.
Extra Information: 4 hours.
Course Weight: 1.00

Course Revision – Effective September 1, 2024, the following change(s) be made:

CHINESE 4440A/B
BUSINESS TRANSLATION 1
English and Chinese translation with fundamentals of theory and practice for oral and written business-oriented communication. Reflective conversation and intensive practice sessions help students ~~obtain insights and techniques to avoid common translation pitfalls and to~~ develop the skills for more natural and accurate translations in business Chinese and English. **Professional proficiency in Chinese and English is required.**

Prerequisite(s): ~~Chinese 3340A/B or Chinese 3341A/B or permission of the department.~~
Extra Information: 3 hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

CHINESE 4441A/B
BUSINESS TRANSLATION 2
Chinese and English translation to deepen understanding of theory and to enhance language proficiency in business-oriented communication. ~~This course continues Chinese 4440A/B Business Translation 1.~~ Students build competence through analyzing texts and deploying strategies to resolve issues encountered in translating a variety of authentic and increasingly complex business documents. **Professional proficiency in Chinese and English is required.**

Prerequisite(s): ~~Chinese 4440A/B or permission of the department.~~
Extra Information: 3 hours.
Course Weight: 0.50

Program Revision – Effective September 1, 2024, the following change(s) be made:

MAJOR IN JAPANESE STUDIES

Admission Requirements

Completion of first-year requirements, including Japanese 1050 or Japanese 1036, with a mark of at least 70% each, or permission of the Program. It is strongly recommended that students take Japanese 1650F/G.

Module
6.0 courses:

~~**3.0**~~ **2.0** courses**:** Japanese 2250 or Japanese 2260, **and** Japanese

3350 ~~and Japanese 4450~~.
0.5 course in Japanese at the 2000 level.
1.0 course from: Japanese 4450 or 1.0 course in Japanese at the 3600-level or higher, Film Studies 3340F/G, Film Studies 3375F/G, History 3604F/G, History 3606F/G.
0.5 course: Japanese 3650F/G, Japanese 3651F/G, Japanese 3680F/G
1.0 course: Japanese 3750F/G and Japanese 3751F/G.
1.0 course in Japanese at 2000 or 3000 level, Film Studies 2164A/B, Film Studies 3340F/G, Film Studies 3375F/G, Film Studies 4490F/G, History 2610F/G, History 3604F/G, History 3606F/G.

ENGLISH AND CULTURAL STUDIES – FACULTY OF ARTS AND SOCIAL SCIENCE

Course Introduction – Effective September 1, 2024, the following course be introduced:

ENGLISH 3215F/G
QUEER LITERATURE
An introduction to historic and contemporary literature and cultural productions (novels, poetry, drama, film, graphic novels, etc.) by lesbian, gay, bisexual, transgender and/or gender expansive, queer and/or questioning, intersex, asexual and two-spirit Indigenous storytellers. This course will also familiarize students with relevant feminist, queer, trans-, crip/disability, racialized, and Indigenous theorists.

Prerequisite(s): At least 60% in 1.0 English courses from 1020-1999, or permission of the Department.
Extra Information: 3 hours.
Course Weight: 0.50

Course Introduction – Effective September 1, 2024, the following course be introduced:

ENGLISH 3250F/G
MADNESS AND LITERATURE
This course examines a wide range of mental illness, mental health, consumer/survivor/ex-patient (C/S/X), and/or Mad literature, film, and other cultural productions. It utilizes a Mad Studies critical framework to examine how literary and creative accounts of mental illness/disability/difference and/or Madness based on lived experience support, critique, and/or engage with psychiatry.

Prerequisite(s): At least 60% in 1.0 English courses from 1020-1999, or permission of the Department.
Extra Information: 3 hours.
Course Weight: 0.50

Course Introduction – Effective September 1, 2024, the following course be introduced:

ENGLISH 3478F/G
TOPICS IN AFRICAN AMERICAN LITERATURE
This course focuses on a period, theme, or collection of authors in African American literature (e.g., Harlem Renaissance, Afrofuturism, Black Modernisms, Black Women Writers, Hip-Hop and Literature). Specific content will vary from year to year depending on the instructor. Consult the department for current offerings.

Prerequisite(s): At least 60% in 1.0 English courses from 1020-1999, or permission of the Department.
Extra Information: 3 hours.
Course Weight: 0.50

Course Introduction – Effective September 1, 2024, the following course be introduced:

ENGLISH 3573F/G
BLACK WRITING IN CANADA
This course offers advanced study of writing by authors of the Black Diaspora in Canada. Course offerings may vary by genre, region, or period. Attentive to historical, literary historical, and other contexts, the course celebrates the aesthetics and artistry of Black writing in Canada and the knowledges it produces.

Antirequisite(s): English 3579F/G if taken in 2021-22.
Prerequisite(s): At least 60% in 1.0 English courses from 1020-1999, or permission of the Department.
Extra Information: 3 hours.
Course Weight: 0.50

Course Introduction – Effective September 1, 2024, the following course be introduced:

GLOBAL GREAT BOOKS 1003F/G
THE MEANING OF LIFE
This interdisciplinary course explores what it means to be human. Through the exclusive study of complete primary texts from around the world, including, but not limited to works of philosophy, literature, and film, students will investigate questions surrounding the idea of human nature and the purpose of human life.

Antirequisite(s): the former Global Great Books 2000F/G.
Extra Information: 3 hours.
Course Weight: 0.50

Course Introduction – Effective September 1, 2024, the following course be introduced:

GLOBAL GREAT BOOKS 2003F/G
WAR AND PEACE
This course explores the nature and causes of war as well as the circumstances required for peace and ways to achieve it through the reading of primary texts from around the world, from the ancient to the contemporary period.

Antirequisite(s): the former Global Great Books 1200F/G.
Extra Information: 3 hours.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2024, the following course be withdrawn:

GLOBAL GREAT BOOKS 1200F/G
WAR AND PEACE
This course explores the nature and causes of war as well as the circumstances required for peace and ways to achieve it through the reading of primary texts from around the world, from the ancient to the contemporary period.

Extra Information: 3 hours.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2024, the following course be withdrawn:

GLOBAL GREAT BOOKS 2000F/G
HUMAN NATURE AND THE MEANING OF LIFE

This interdisciplinary course explores what it means to be human. Through the exclusive study of complete primary texts from around the world, including, but not limited to works of philosophy, literature, and film, students will investigate questions surrounding the idea of human nature and the purpose of human life.

Extra Information: 3 hours.
Course Weight: 0.50

MANAGEMENT AND ORGANIZATIONAL STUDIES – FACULTY OF ARTS AND SOCIAL SCIENCE

Course Revision – Effective September 1, 2024, the following change(s) be made:

MANAGEMENT AND ORGANIZATIONAL STUDIES 1033A/B
INFORMATION TECHNOLOGY IN THE COMMERCIAL ENVIRONMENT
This course covers the skills and information used by business managers to become literate in the Information Technology environment without becoming an expert. Students will understand what current options and issues exist in I.T., the terminology, project management and will develop specific software skills useful to an efficient manager.

Antirequisite(s) at King's: Computer Science 1032A/B, and all Computer Science courses numbered 2200 or higher **Antirequisite(s) at** Huron: Computer Science 1032A/B.
Prerequisite(s) at Huron: Enrolment in BMOS.
Extra Information: 3 lecture hours.
Course Weight: 0.50

POLITICAL SCIENCE – FACULTY OF ARTS AND SOCIAL SCIENCE

Course Introduction – Effective September 1, 2024, the following course be introduced:

POLITICAL SCIENCE 3310F/G
CITIZENSHIP, BORDERS AND THE STATE
(Short title: Citizenship, Borders and State)
With a critical focus on conceptions of citizenship and bordering practices, this course explores how contemporary domestic and global politics relate to questions of identity, belonging, territory, and
sovereign power.

Antirequisite(s): The former Political Science 2297F/G.
Prerequisite(s): 1.0 Political Science course(s) at the 1000-level plus 1.0 course in Political Science at the 2200-level, or permission of the instructor.
Extra Information: 2 seminar hours.
Course Weight: 0.50

Course Introduction – Effective September 1, 2024, the following course be introduced:

POLITICAL SCIENCE 4430F/G
THE INTERNATIONAL CRIMINAL COURT AND GLOBAL CIVIL SOCIETY
(Short title: International Criminal Court)
The aim of this course is to engage senior undergraduate students in analytical discussions about the institutional, political and legal origins and manifestations of the world's very first permanent international criminal court, and the role members of global civil society play in supporting the ICC.

Antirequisite(s): Political Science 3395G if taken in 2023-24; Political Science 3395F if taken in 2020-21, 2021-22 or 2022-23.
Prerequisite(s): Enrolment in 3rd or 4th year Political Science, or permission of the instructor for students not registered in Political Science programs.
Extra Information: 2 seminar hours.
Course Weight: 0.50

Course Introduction – Effective September 1, 2024, the following course be introduced:

POLITICAL SCIENCE 4434F/G
ASIA-PACIFIC REGIONAL SECURITY
This is a seminar course on regional politics in the Asia-Pacific region with a focus on governance issues and security-related topics in East and Southeast Asia

Antirequisite(s): Political Science 3394G if taken in 2021-22 or 2022-23.
Prerequisite(s): Enrolment in 3rd or 4th year Political Science, or permission of the instructor for students not registered in Political Science programs.
Extra Information: 2 seminar hours.
Course Weight: 0.50

Course Introduction – Effective September 1, 2024, the following course be introduced:

POLITICAL SCIENCE 4451F/G
GENDER AND THE INTERNATIONAL
Utilizing various critical feminist approaches, this course examines the gendered effects of war and conflict, gendered constructions of political identity, and the gendered aspects and implications of international governance

Antirequisite(s): The former Political Science 3354F/G.
Prerequisite(s): Enrolment in 3rd or 4th year Political Science, or permission of the instructor for students not registered in Political Science programs.
Extra Information: 2 seminar hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

POLITICAL SCIENCE 2206E
SPECIAL TOPICS IN POLITICAL THEORY

Prerequisite(s): **1.0 Political Science course at the 1000-level** ~~Political Science 1020E~~.
Course Weight: 1.00

Course Revision – Effective September 1, 2024, the following change(s) be made:

POLITICAL SCIENCE 2207E
SPECIAL TOPICS IN CANADIAN POLITICS

Prerequisite(s): **1.0 Political Science course at the 1000-level** ~~Political Science 1020E~~.

Course Weight: 1.00

Course Revision – Effective September 1, 2024, the following change(s) be made:

POLITICAL SCIENCE 2208E
SPECIAL TOPICS IN INTERNATIONAL POLITICS

Prerequisite(s): **1.0 Political Science course at the 1000-level** ~~Political Science 1020E~~.
Course Weight: 1.00

Course Revision – Effective September 1, 2024, the following change(s) be made:

POLITICAL SCIENCE 2209E
SPECIAL TOPICS IN COMPARATIVE POLITICS

Prerequisite(s): **1.0 Political Science course at the 1000-level** ~~Political Science 1020E~~.
Course Weight: 1.00

Course Revision – Effective September 1, 2024, the following change(s) be made:

POLITICAL SCIENCE 2210E
SPECIAL TOPICS IN COMPARATIVE POLITICS: DEVELOPED COUNTRIES

Prerequisite(s): **1.0 Political Science course at the 1000-level** ~~Political Science 1020E~~.
Course Weight: 1.00

Course Revision – Effective September 1, 2024, the following change(s) be made:

POLITICAL SCIENCE 2219E
THE POLITICS OF HUMAN RIGHTS
A lecture course on the political dimensions of human rights. The course begins by examining the meaning and interpretations of human rights, and then discusses the application of the human rights discourse in real world situations both within states and at the international level.

Antirequisite(s): Political Science 3388E.
Prerequisite(s): **1.0 Political Science course at the 1000-level** ~~Political Science 1020E~~.
Extra Information: 3 lecture hours.
Course Weight: 1.00

Course Revision – Effective September 1, 2024, the following change(s) be made:

POLITICAL SCIENCE 2222E
POLITICS AND THE MEDIA IN CANADA
Examines the interrelationship between politics, government and the media in Canada. The principal themes of the course include: the political history of the media in Canada; ideology and the media; the political economy of the Canadian media; State regulation of the media; politics and the news; and the political effects of the media.

Prerequisite(s): **1.0 Political Science course at the 1000-level** ~~Political Science 1020E,~~ or permission of the Department.
Extra Information: 3 hours.
Course Weight: 1.00

Course Revision – Effective September 1, 2024, the following change(s) be made:

POLITICAL SCIENCE 2248E
WESTERN EUROPEAN POLITICAL SYSTEMS
A comparative study of government and politics in Western European democratic states.

Prerequisite(s): **1.0 Political Science course at the 1000-level** ~~Political Science 1020E~~.
Extra Information: 3 hours.
Course Weight: 1.00

Course Revision – Effective September 1, 2024, the following change(s) be made:

POLITICAL SCIENCE 2257
GLOBAL POLITICAL ECONOMY
A comprehensive survey of the principal issues, perspectives and debates in the field of global political economy. Topics include the emergence of economic globalisation and its consequences for the environment, labour, democracy, international conflict and poverty. Alternatives to contemporary economic globalisation and contending approaches to international development are also considered.

Prerequisite(s): **1.0 Political Science course at the 1000-level** ~~Political Science 1020E~~.
Extra Information: 3 lecture hours.
Course Weight: 1.00

Course Revision – Effective September 1, 2024, the following change(s) be made:

POLITICAL SCIENCE 2270E
WOMEN AND POLITICS
This course focuses on how women participate and effect political change. It examines women's subordination and the wide-range of emancipatory struggles women have undertaken to achieve equality.

Antirequisite(s): Political Science 2255F/G, Political Science 3207F/G.
Prerequisite(s): ~~Political Science 1020E~~ **1.0 Political Science course at the 1000-level** or GSWS 1020E or registration in Honours Specialization or Major modules in Social Justice and Peace Studies.
Extra Information: 3 hours.
Course Weight: 1.00

Course Revision – Effective September 1, 2024, the following change(s) be made:

POLITICAL SCIENCE 2280E
THE GOVERNMENT AND POLITICS OF CHINA
An introduction to Chinese Government and Politics with reference to the historical evolution of the political system, ideology, institutions and political processes.

Prerequisite(s): ~~Political Science 1020E~~ **1.0 Political Science course(s) at the 1000-level**, or permission of the Department.
Extra Information: 3 hours.
Course Weight: 1.00

Course Revision – Effective September 1, 2024, the following change(s) be made:

POLITICAL SCIENCE 2284F/G
INSIDE GOVERNMENTS: POLICY MAKING IN CANADA AND THE UNITED STATES
This course examines policy making and public administration in Canada and the United States. Comparing institutions, processes, and cultures, the course surveys a range of policy fields including economic development, social welfare, health care, and public security. Theoretical approaches are supplemented with insider perspectives from policy participants.

Antirequisite(s): Political Science 2246E.
Prerequisite(s): **1.0 Political Science course at the 1000-level** ~~Political Science 1020E~~.
Extra Information: 3 lecture hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

POLITICAL SCIENCE 2294F/G
SELECTED TOPICS IN POLITICAL SCIENCE

Prerequisite(s): ~~Political Science 1020E~~ **1.0 Political Science course at the 1000-level**, or permission of the Department.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

POLITICAL SCIENCE 2295F/G
SELECTED TOPICS IN POLITICAL SCIENCE

Prerequisite(s): ~~Political Science 1020E~~ **1.0 Political Science course at the 1000-level**, or permission of the Department.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

POLITICAL SCIENCE 2298F/G
SPECIAL TOPICS IN POLITICAL SCIENCE
Topic available in Department.

Prerequisite(s): **1.0 Political Science course at the 1000-level** ~~Political Science 1020E~~.
Extra Information: 2 seminar hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

POLITICAL SCIENCE 2299F/G
SPECIAL TOPICS IN POLITICAL SCIENCE
Topic available in Department.

Prerequisite(s): **1.0 Political Science course at the 1000-level** ~~Political Science 1020E~~.
Extra Information: 2 seminar hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

POLITICAL SCIENCE 3304F/G
POLITICAL IDENTITIES
The formation of political identities is explored in the context of cultures, ideologies, discourses, and narratives in a globalizing world. Investigating citizenship, political participation, engagement in social movements and political protest, the course focuses on hybrid, fragmented, and multiple identities and their political consequences, notably attempts to construct singular identities.

Prerequisite(s): ~~Political Science 1020E~~ **1.0 Political Science course at the 1000-level** plus 1.0 course in Political Science at the 2200-level, or permission of the department.

Extra Information: 2 seminar hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

POLITICAL SCIENCE 3356F/G
THE POLITICAL ECONOMY OF GLOBALISATION
This seminar course examines the main issues and theoretical debates surrounding contemporary economic globalisation. It analyses the implications of a globalising economy for environmental protection, labour, inequality, democracy, and international peace. The rise of resistance movements and proposals for alternatives to globalisation's current form are also considered.

Antirequisite(s): Political Science 3357E.
Prerequisite(s): Political Science 2231E **or permission of the instructor**.
Extra Information: 2 seminar hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

POLITICAL SCIENCE 3358F/G
THE POLITICS OF ECONOMIC DEVELOPMENT
A seminar course that examines the theoretical debates and issues surrounding economic development. It surveys the main theoretical approaches that seek to explain the causes of underdevelopment and the development strategies they advocate. Case studies include micro-credit, fair trade, foreign aid, child labour, gender and development, and foreign debt.

Antirequisite(s): Political Science 3357E and Political Science 3365F/G.
Prerequisite(s): Political Science 2231E **or permission of the instructor**.
Extra Information: 2 seminar hours.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

POLITICAL SCIENCE 3359F/G
AFRICAN POLITICS
An introduction to the politics of contemporary Africa, with emphasis on ~~the~~ legacies of colonialism and leadership and governance trends. The course uses theoretical literature on Africa's politics and development, as well as focused case studies, to explore issues including conflict, China in Africa, development aid, women in politics, and HIV/AIDS.

Antirequisite(s): Political Science 3395F/G, if taken in 2018-2019.
Pre-or Corequisite(s): Political Science 2245E or Political Science 2231E and enrolment in the Honours Specialization or Major in Political Science, or permission of the Department.
Extra Information: **3 hours** ~~2 seminar hours, 0.5 course~~.
Course Weight: 0.50

Course Revision – Effective September 1, 2024, the following change(s) be made:

POLITICAL SCIENCE 3379E
GLOBAL ENVIRONMENTAL POLITICS
A comprehensive overview of the major issues, actors, ideas, institutions, and interests that constitute the global politics of the environment. The course covers the major worldviews of global environmental politics, the relationship between the global economy and the global environment, and the various approaches to managing global environmental change.

Antirequisite(s): The former Political Science 3379F/G and Political Science 3314E.
Prerequisite(s): Political Science 2231E **or permission of the instructor**.

Extra Information: 2 hours.
Course Weight: 1.00

Course Revision – Effective September 1, 2024, the following change(s) be made:

POLITICAL SCIENCE 3389F/G
POLITICS AND POP CULTURE
This course examines the ways that political issues are addressed within popular culture as well as the impact of popular culture on politics. Studying different forms and expressions, including literature, television, film and music, students will investigate how political issues are interpreted within popular culture, and assess the implications for civic education and political change.

Antirequisite(s): Political Science 2295F/G if taken in 2019.

Prerequisite(s): ~~Political Science 1020E~~ **1.0 Political Science course at the 1000-level**, or permission of the Department.
Extra Information: 3 seminar hours.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2024, the following course be withdrawn:

POLITICAL SCIENCE 2238F/G
UNITED KINGDOM CONSTITUTION
An examination of the origins, development, and theories of the Constitution of the United Kingdom, with particular reference to its foundational laws and constitutional issues, such as nationalism and devolution, civil rights, parliamentary reform, and membership in the European Union.

Prerequisite(s): Political Science 1020E.
Extra Information: 3 lecture hours.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2024, the following course be withdrawn:

POLITICAL SCIENCE 2239F/G
AMERICAN CONSTITUTIONAL LAW
An examination of the origins, development, and theories of the Constitution of the United States of America, with particular reference to the separation and division of powers, democratic institutions, civil rights and judiciary.

Antirequisite(s): Political Science 2244E.
Prerequisite(s): Political Science 1020E, or American Studies 1020.
Extra Information: 3 lecture hours.

Course Withdrawal – Effective September 1, 2024, the following course be withdrawn:

POLITICAL SCIENCE 2297F/G
CITIZENSHIP, BORDERS AND THE STATE
With a critical focus on conceptions of citizenship and bordering practices, this course explores how contemporary domestic and global politics relate to questions of identity, belonging, territory, and sovereign power.

Antirequisite(s): Political Science 2294F/G, if taken in 2017-2018.
Pre-or Corequisite(s): 1.0 Political Science course(s) at the 1000-level or permission of the Department.
Extra Information: 3 lecture hours, 0.5 course.

Course Weight: 0.50

Course Withdrawal – Effective September 1, 2024, the following course be withdrawn:

POLITICAL SCIENCE 3354F/G
GENDER AND THE INTERNATIONAL
Utilizing various critical feminist approaches, this course examines the gendered effects of war and conflict, gendered constructions of political identity, and the gendered aspects and implications of international governance.

Antirequisite(s): Political Science 3394F/G, if taken in 2017-2018.
Pre-or Corequisite(s): Enrolment in Honours Specialization or Major in Political Science or permission of the Department.
Extra Information: 2 seminar hours, 0.5 course.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2024, the following course be withdrawn:

POLITICAL SCIENCE 3368E
CITY-REGIONS IN A GLOBAL AGE
This course examines the growing political, economic, cultural and ecological significance of city-regions. Topics include: the dynamics of globalization and localization; the resurgence of urban and regional policy analysis; effective governance structures for sprawling city-regions; and problems of social polarization and spatial segregation within metropolitan areas.

Antirequisite(s): Political Science 3363F/G, Political Science 3364F/G.
Prerequisite(s): Enrolment in 3rd or 4th year Political Science, or permission of the Department for students not registered in Political Science programs.
Extra Information: 2 seminar hours.
Course Weight: 1.00

Course Withdrawal – Effective September 1, 2024, the following course be withdrawn:

POLITICAL SCIENCE 3380E
GOVERNANCE IN THE ASIA-PACIFIC
A seminar course on comparative politics of the dynamic Asia-Pacific region. The exploration of themes such as Confucian capitalism, political economy, Asian values, the rising middle class, state/society relationships, gender and ethnic politics, and political changes will be complemented by detailed country studies that encompass Japan, South Korea, Taiwan, Hong Kong, and Singapore.

Prerequisite(s): Political Science 2231E or Political Science 2245E or Political Science 2280E.
Extra Information: 2 seminar hours.
Course Weight: 1.00

Course Withdrawal – Effective September 1, 2024, the following course be withdrawn:

POLITICAL SCIENCE 3384F/G
MEDIA AND ELECTIONS: CAMPAIGNS, CANDIDATES AND COVERAGE
An exploration of the mutual interplay among media, politicians and citizens during election campaigns. Particular attention is focused on political advertising, editorializing, the news and current affairs media, televised debates, on-line campaigning, key campaign turning points and the impact of opinion polls.

Antirequisite(s): Political Science 2222E.
Prerequisite(s): Enrolment in 3rd or 4th year Political Science or permission of the Department for students not registered in Political Science programs.
Extra Information: 2 seminar hours.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2024, the following course be withdrawn:

POLITICAL SCIENCE 3385F/G
POLITICAL COMMUNICATIONS IN CANADA: IMAGE, INFLUENCE, IMPACT
An investigation into the relationship between power and representation in Canada. Grounded in a historical orientation to the political media in Canada, the course explores influential social forces behind the creation of media images and messages as well as the degree to which such mediated ideas exert an impact on audiences.

Antirequisite(s): Political Science 2222E.
Prerequisite(s): Enrolment in 3rd or 4th year Political Science or permission of the Department for students not registered in Political Science programs.
Extra Information: 2 seminar hours.
Course Weight: 0.50

Course Withdrawal – Effective September 1, 2024, the following course be withdrawn:

POLITICAL SCIENCE 4429E
POLITICE AND THE STATE IN THE UNITED KINGDOM
A seminar devoted to the study of theoretical perspectives on the state, and to the consideration of a selection of contemporary issues within and related to the state in the United Kingdom.

Prerequisite(s): 1.0 course from: Political Science 2237E, Political Science 2248E, Political Science 3351E, or permission of the Department.
Extra Information: 2 hours.
Course Weight: 1.00

Program Revision – Effective September 1, 2024, the following change(s) be made:

HONOURS SPECIALIZATION IN POLITICAL SCIENCE

Admission Requirements

Completion of first-year requirements with no failures. Students must have an average of at least 70% in 3.0 principal courses, including Political Science 1020E, plus 2.0 additional courses, with no mark in these principal courses below 60%.

Module
9.0 courses:

4.0 courses: Political Science 2230E ~~(or Political Science 2221F/G and Political Science 2223F/G)~~, Political Science 2231E, Political Science 2237E, Political Science 2245E.
0.5 course from: Political Science 2325F/G, Political Science 3324F/G.
~~2.0~~ **3.0** courses in Political Science at the 3000 level or above.
~~3.0~~ **1.5** additional courses in Political Science at the 2200 level or above.

Note: Political Science courses numbered 2000-2199 cannot be counted towards the Honours Specialization in Political Science modular requirements.

Program Revision – Effective September 1, 2024, the following change(s) be made:

MAJOR IN POLITICAL SCIENCE

Admission Requirements

Completion of first-year requirements, including with Political Science 1020E with a mark of at least 60%.

Module
6.0 courses:

~~1.0 course: Political Science 2237E.~~

~~2.0~~ **3.0** courses **from**: Political Science 2230E ~~(or Political Science 2221F/G and Political Science 2223F/G)~~, Political Science 2231E, **Political Science 2237E,** Political Science 2245E.
0.5 course from: Political Science 2325F/G, Political Science 3324F/G.
~~2.0~~ **1.0** additional course(s) in Political Science at the 2200 level or above.
~~1.0~~ **1.5** course**s** in Political Science at the 3000 level or above.

Note: Political Science courses numbered 2000-2199 cannot be counted towards the Major in Political Science modular requirements.

PSYCHOLOGY – FACULTY OF ARTS AND SOCIAL SCIENCE

Course Introduction – Effective September 1, 2024, the following course be introduced:

PSYCHOLOGY 2620A/B
INTRODUCTION TO EDUCATIONAL PSYCHOLOGY
(Short title: Intro to Educational Psych)
Survey of psychological research and theory in terms of their implications for educational practice. Topics will include learning, motivation, development, problem-solving, individual differences, teacher effectiveness, and assessment.

Antirequisite(s): Psychology 2610F/G.
Prerequisite(s): A mark of at least 60% in 1.0 credits of Psychology at the 1000 level.
Extra Information: 3 lecture hours.
Course Weight: 0.50

Course Introduction – Effective September 1, 2024, the following course be introduced:

PSYCHOLOGY 2990A/B
APPLICATIONS OF PSYCHOLOGY
The purpose of this course is to acquaint students with some of the ways in which psychological evidence and techniques can be applied to the practice of law, business, education, the health sciences, etc.

Prerequisite(s): A mark of at least 60% in 1.0 credits of Psychology at the 1000 level.
Extra Information: 3 lecture hours.
Course Weight: 0.50

Course Introduction – Effective September 1, 2024, the following course be introduced:

PSYCHOLOGY 3215F/G
SEX DIFFERENCES AND BEHAVIOURAL NEUROSCIENCE
(Short title: Sex Diff & Behavioural Neuro)
This course examines sex differences in the brain and behaviour of both humans and non-human species. Topics may include strategies and methods for evaluating sex differences, genetic and hormonal influences, cognition, affiliative behaviour, stress, motivation, reward, energy regulation, immune functioning, pain, and disease.

Antirequisite(s): Psychology 3225A/B, Psychology 3226A/B.
Prerequisite(s): At least 60% in Psychology 2220A/B or Psychology 2221A/B.
Extra Information: 3 hours.
Course Weight: 0.50

Course Introduction – Effective September 1, 2024, the following course be introduced:

PSYCHOLOGY 3229A/B
EVOLUTION AND HUMAN BEHAVIOUR
A survey of evolutionary approaches to the study of human behavior, including evolutionary psychology.

Antirequisite(s): Psychology 3228A/B.
Prerequisite(s): At least 0.5 Psychology course in Research Methods at the 2000 level or above and registration in third or fourth year of a Major, Specialization, or Honours Specialization in Psychology module.

Extra Information: 3 lecture/discussion hours.
Course Weight: 0.50

Course Introduction – Effective September 1, 2024, the following course be introduced:

PSYCHOLOGY 3318F/G
FUNDAMENTALS OF COMMUNITY PSYCHOLOGY
(Short title: Community Psychology)
This course will examine the history, values, theories and practice of the sub-discipline of Community Psychology. Topics may include the history of Community Psychology, the interrelationships between micro, meso and macro levels of society, intersectionality, community based interventions, community mental health promotion and participatory-action research methods.

Antirequisite(s): Psychology 3317E.

Prerequisite(s): At least 0.5 Psychology course in Research Methods at the 2000 level or above and registration in third or fourth year of a Major, Specialization, or Honours Specialization in Psychology module.
Extra Information: 3 hours.
Course Weight: 0.50

Course Introduction – Effective September 1, 2024, the following course be introduced:

PSYCHOLOGY 3337F/G
MENTAL HEALTH AND PHYSICAL ACTIVITY
(Short title: Mental Hlth & Physical Activ)
A review of research and data related to how physical activity (e.g., sport, exercise) influences, and is influenced by, mental health. Topics may include depression, anxiety eating disorders, personality issues, motivation to exercise/sport participation, preventive factors, and other issues relating to mental health and wellness continua.

Prerequisite(s): Registration in third or fourth year of a Major, Specialization or Honours Specialization in Psychology, or permission of instructor/department.
Extra Information: 3 hours. Cannot be used towards completion of a Kinesiology module.
Course Weight: 0.50

Course Introduction – Effective September 1, 2024, the following course be introduced:

PSYCHOLOGY 3375F/G
INTRODUCTION TO COUNSELLING AND PSYCHOTHERAPY
(Short title: Counselling & Psychotherapy)
An overview of psychological theory that provides the basis for professional counselling and psychotherapy, as well as hands-on exercises to illustrate the core components of the helping relationship. Topics include major theoretical systems and their associated strategies; various processes and techniques of therapeutic counselling; outcome measurement and evidence based practice; ethics and professional issues.

Antirequisite(s): Psychology 3371F/G, Psychology 3991F/G taken at Brescia prior to 2020-21.
Prerequisite(s): At least 0.5 Psychology course in Research Methods at the 2000 level or above and registration in third or fourth year of a Major, Specialization, or Honours Specialization in Psychology module.
Extra Information: 3 lecture hours.
Course Weight: 0.50

KING'S UNIVERSITY COLLEGE

HISTORY

Course Revision – Effective September 1, 2024, the following change(s) be made:

HISTORY 2179
THE TWO WORLD WARS
An examination of the causes, course and consequences of the First and Second World Wars, stressing comparison of the two conflicts. Students will be asked to consider a variety of historical analyses of both wars and to study the process of interpretation as well as events.

Antirequisite(s) at Main Campus: History 2177A/B. **Antirequisite(s) at King's: History 2151A/B, History 2152A/B.**
Extra Information: 2 hours.
Course Weight: 1.00

Course Revision – Effective September 1, 2024, the following change(s) be made:

HISTORY 2403E
EUROPE AND ENGLAND IN THE 16TH AND 17TH CENTURIES
Cultural, social, economic, and political themes including the Protestant and Catholic Reformations; the rise of absolutism; the commercial revolution; heresy, witchcraft, and scepticism; plague and health problems; the origins of modern science; demographic trends; the Puritans; baroque art and music; Cromwell, Gustavus Adolphus, and the creation of the modern army.

Antirequisite(s) at Main Campus: History 2103, History 2450F/G, History 2460F/G. Antirequisite(s) at Brescia, Huron~~, King's~~: History 2103.
Antirequisite(s) at King's: History 2103, History 2431F/G, History 2432F/G.
Extra Information: 2 lecture hours, 1 tutorial hour (Main); 3 lecture hours (Brescia, Huron, King's).
Course Weight: 1.00