**McMaster University**

**W Booth School of Engineering Practice and Technology**

**MASTER OF ENGINEERING & PUBLIC POLICY**

Graduate Student Course Selection

2023 - 2024

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Program: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student ID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Supervisor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course Name** | **Course CODE** | **Term** | **Units** | **Add (A) or**  **Drop (D)?** |
| **MANDATORY COURSES (18 units)** | | | | |
| Academic Research Integrity and Ethics | SGS 101 | Fall | 0 | A |
| Accessibility for Ontarians with Disabilities Act (AODA) | SGS 201 | Fall | 0 | A |
| [Theory and Practice of Policy Analysis: Frameworks and Models](http://academiccalendars.romcmaster.ca/preview_program.php?catoid=16&poid=10733) | SEP 701 | Fall | 3 | A |
| Systems Engineering and Public Policy | SEP 702 | Winter | 3 | A |
| [Emerging Issues, Technology and Public Policy](http://academiccalendars.romcmaster.ca/preview_program.php?catoid=16&poid=10733) | SEP 709 | Fall | 3 | A |
| Leadership for Innovation | SEP 773 | Fall | 3 | A |
| [Public Policy Research Project](https://academiccalendars.romcmaster.ca/preview_program.php?catoid=39&poid=21144&returnto=8187), Part I | SEP 704 | Winter | 3 | A |
| [Public Policy Research Project](https://academiccalendars.romcmaster.ca/preview_program.php?catoid=39&poid=21144&returnto=8187), Part II | SEP 704 | Spring | 3 | A |
| W Booth SEPT Practitioner’s forum, Part I (full time students) | SEP 771 | Fall | 0 | A |
| W Booth SEPT Practitioner’s forum, part II (full time students) | SEP 771 | Winter | 0 | A |
| **FOCUS ELECTIVE COURSES**  **Three half- courses (9 Units) are required for electives** | | | | |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| **CROSS-DISCIPLINARY ELECTIVE COURSES**  **One half course (3 units) selected form approved cross-disciplinary elective list** | | | | |
|  |  |  |  |  |
| **“PLACEHOLDER” COURSE**  **Add the course below if you are not taking any other courses during a term (i.e. taking a break from studies)** | | | | |
| Research/Writing | SGS 711 |  | 0 |  |
| **TOTAL UNITS**  **Sum up the total units you have added (do if you are taking the Project Pathway, the two project courses.)  30 units are required to graduate. You can take more, but that will increase your tuition.** | | |  |

\*SGS 711 must be added when the student is not enrolled in any courses for the term.

Graduate students must register for courses online via Mosaic. **Students must consult with a Program Advisor regarding course selection**. It is the responsibility of the student to ensure that the courses meet the program requirements, and that their course selections are recorded correctly on Mosaic. Any addition or deletion of courses should be approved by the faculty member. Once an agreement is reached with the Program Advisor, **students must upload this document to** [**this link**](https://macdrive.mcmaster.ca/u/d/415818fecaef4bc2a90a/) and department staff will gather the faculty member’s signature.

I approve these course selections

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Program Advisor Date

**MASTER OF ENGINEERING AND PUBLIC POLICY**

**Curriculum**

The curriculum has the following main components:

1. Core courses that provide the content and methodological skills necessary for understanding and analyzing societal issues for which engineering and science can contribute to public policy solutions;

2. Focus elective courses that allow students to deepen their knowledge of a range of engineering, science and social science applications;

3. The completion of a substantive research paper on a problem at the interface of engineering, science and public policy

**Research Project - Inquiry/Thesis in Engineering and Public Policy**

Students select a research topic at the interface of engineering, science and public policy which is of interest to them and carries out inquiry-driven research; completes a formal research paper and prepares to publish their results for broad dissemination.

Candidates for the MEPP degree will follow a program consisting of the following:

1. Required Courses

Six half-courses **(18 units):**

**\*701** / Theory and Practice of Policy Analysis: Frameworks and Models (3 units)

**\*702** / Systems Engineering and Public Policy (3 units)

**\*709 /** Emerging Issues, Technology and Public Policy (3 units)

**\*773/** Leadership for Innovation (3 units)

**\*704/** Public Policy Research Project, Part I (3 units)

**\*704/** Public Policy Research Project, Part II (3 units)

**In addition students are required to take:**

SEP 771 / W Booth School of Engineering Practice and Technology Practitioner's Forum Part I (0 units - full-time students only)

SEP 771 / W Booth School of Engineering Practice and Technology Practitioner's Forum Part II (0 units - full-time students only)

2. Focus Elective Courses

Three half-courses **(9 units)** are required for electives. Students may select from the following options:

**\*6I03 /** Sustainable Manufacturing Processes

**\*6X03/** Livable Cities, The Built and Natural Environment

**\*705** / Green Engineering, Sustainability and Public Policy

**\*706** / Energy and Public Policy

**\*708 /** Special Topics in Engineering and Public Policy

**\*710 /** International Governance and Environmental Sustainability

**\*778** / Circular Economy – Engineering Perspectives and Application

**Pol Sci \*784 /** [Quantitative Political and Policy Analysis](http://academiccalendars.romcmaster.ca/preview_program.php?catoid=20&poid=12476&returnto=3597)

**Pol Sci \*785 /** Public Sector Management

**Pol Sci\* 790 /** The Politics ofEconomic Policy in Market Economics

3. Cross- Disciplinary Elective Courses

Required to take one half-course (3 units) which should be selected from the following cross-disciplinary elective list:

**\*770 /** Total Sustainability Management

**\*790/** Emerging Technologies for Engineering Enterprise Innovation

**\*760** / Design Thinking

**\*777** / Cyber-Physical Systems and Industry 4.0

* Up to two graduate engineering half courses from departments within the Faculty of Engineering
* Other courses in other departments and Faculties with approval of the Associate Director of the Graduate Studies in SEPT.

**2.6.5 Required Course for All Graduate Students**

All graduate students, including part-time students, must complete the course SGS 101- Academic Research Integrity and Ethics and SGS 201-, AODA within the first month after their admission to graduate studies at McMaster. A graduate student may not obtain a graduate degree at McMaster without having passed these courses. In the event that a student fails these courses, they must retake it at the earliest opportunity. The course description for SGS 101 and SGS 201 may be found in the School of Graduate Studies Calendar.