

## **MEng Industrial Engineering**

### **Option I: Engineering Management (45 credits)**

20 credits minimum chosen from Industrial Engineering Area Courses:

- [INDU 6121](#) Applied Optimization (4.00)
- [INDU 6151](#) Decision Models in Service Sector (4.00)
- [INDU 6211](#) Production Systems and Inventory Control (4.00) (*Prereq: [INDU 6121](#)*)
- [INDU 6241](#) Lean Manufacturing (4.00) (*Prereq: [INDU 6211](#)*)
- [INDU 6310](#) Applied Probability and Statistics for Engineers (4.00)
- [INDU 6311](#) Discrete System Simulation (4.00)
- [INDU 6321](#) Introduction to Six Sigma (4.00) (*Prereq: [INDU 6310](#)*)
- [INDU 6391](#) Reliability and Maintenance for Design and Manufacturing (4.00)
- [INSE 6230](#) Total Quality Project Management (4.00)

#### Notes:

- 1 Students who don't have industrial engineering background should seriously consider taking [INDU 6121](#), [INDU 6211](#) and [INDU 6311](#) which are all fundamental industrial engineering topics that every industrial engineering graduate should know. [INDU 6310](#) is a fundamental industrial engineering course as well.
- 2 Typical course offerings: [INDU 6121](#) – Fall and Winter, [INDU 6211](#) – Winter and Summer 2, [INDU 6311](#) – Fall and Winter, while the other courses are offered once per year. For a complete list see <https://users.encs.concordia.ca/~gouw/meng/>
- 3 If you want to take [INDU 6241](#), you need to take [INDU 6121](#) first, then [INDU 6211](#) a following term, then [INDU 6241](#) a following term
- 4 [INSE 6230](#) may not be available as priority registration is for INSE students

3 credits of Management Area Core Courses

- [MBA 640](#) On Ramp (0.00)
- [MBA 641](#) Responsible Manager (3.00)

#### Notes:

- 1 Please contact Charlene Wald or Dr. Gerard Gouw for registration in MBA courses
- 2 The course material for [MBA 640](#) is available about 1 month before the start of term and the final exam must be completed during the specified period

6 credits minimum chosen from Management Area Elective Courses

- [MBA 642](#) Financial Reporting for Responsible Decision Making (3.00)
- [MBA 643](#) Managerial Analytics (3.00)
- [MBA 645](#) Economics for Organizational Decision Making (3.00)

16 credits Industrial Stage, Project and Report

- [INDU 6991](#) Engineering Management Industrial Stage I (8.00)
- [INDU 6992](#) Engineering Management Industrial Stage II (8.00)

Industrial stages must be completed with a company, governmental organization or a non-government organization (NGO). Students are responsible for finding their projects. An industry supervisor is highly recommended. The course coordinator serves as the main academic supervisor.

## **Industrial Stages in the Engineering Management option of the MEng Industrial Engineering program**

Students in Engineering Management need to take two industrial stages as part of their program, [INDU 6991](#) and [INDU 6992](#). In order to do your industrial stages, you must be employed as a regular, full-time engineer and this employment is a requirement to be accepted for the Engineering Management option.

Internships and coop work terms are considered student placements. They cannot be used for industrial stages.

The industrial stages are not a report and presentation of the work you are doing as an engineer. Rather, in each industrial stage you need to do an 8-credit project, with the work for that equivalent to two 4-credit courses.

To be able to register for [INDU 6991](#) or [INDU 6992](#) you need to need to provide a detailed project proposal at least 1 month before the beginning of the term that you want to do the industrial stage. Project scope must include the utilization of both industrial engineering and engineering management tools. The detailed project proposal must include a signed statement of approval and support from your organization's supervisor. This project proposal will then be reviewed by the course instructor. Only after the course instructor has approved your project proposal will you be registered in [INDU 6991](#) for your first stage and [INDU 6992](#) for your second stage, keeping in mind that the project for your second stage must be different from the project for your first stage.

Most industrial stages will be carried out in the Fall or Winter term. Industrial stages done in the Summer will last the full summer period.

### **Finding what courses are offered in a given term or academic year**

A listing of INDU course offerings is given at <https://users.encs.concordia.ca/~gouw/meng/>  
MBA courses are typically offered in Fall and Winter only.

To find class rooms and instructors go to the class schedule at [https://campus.concordia.ca/psc/pscspnd/EMPLOYEE/SA/c/CU\\_EXT.CU\\_CLASS\\_SEARCH.GBL?&](https://campus.concordia.ca/psc/pscspnd/EMPLOYEE/SA/c/CU_EXT.CU_CLASS_SEARCH.GBL?&) and sign in. Select as Term Winter (or another term of the academic year), then for Select Subject enter INDU or MBA. Then for Course Level click 600, finally click Search. You now have a list of INDU or MBA 600 level courses offered in the period you specified as well as if there is space (green check named open) or if the course is full (Closed means course is full and waitlist is full, while Waitlist means course is full but there is space on the waitlist. Only when space becomes available in the course is there a possibility to be enrolled from the waitlist.).

Updated by Gerard Gouw, 2 February 2025