

MASTER OF ENGINEERING **INDUSTRIAL ENGINEERING PROGRAM**

Note: Web Registration is available to M.Eng. (course option) students only.
For Program Requirements see Section 2 below.

1. Advising Information for Web Registration

Go to MyConcordia Portal and select the section for Registration. Follow the instructions.

Link to School of Graduate Studies on-Line Registration

<http://www.concordia.ca/encs/mechanical-industrial/programs/graduate/mechanical-engineering-meng.html>

M.Eng. Industrial Students are permitted:

- To register for courses in the M.Eng. Industrial program curriculum ONLY
- New Students can register for a maximum of 2 courses in their first semester
- Current Students can register for more than 2 courses as long as they are in good academic standing

M.Eng. Industrial Students are NOT permitted:

- To register for Audit

Permission is required for the following:

- To register for Qualifying (QP) courses (e.g. English courses) before being permitted to register for Engineering courses
- To register for courses outside of the Department (e.g. INSE courses)
- To register for courses without the listed Pre-Requisites

Students will be blocked from registering for the following reasons:

- Academic Block – GPA is below 3.00, F grade on record, more than one C grade on record: Permission from Department is required. Go to EV 4.150.
- Accounts Restriction, outstanding balance of fees due. Go to Birks Students Service Centre, LB-185.
- Student Visa, CAQ Block, Go to International Students Office, GM 330.

For more information, please contact:

Charlene Wald, EV 4.150, Tel: 514 848-2424 ext. 3131 – cwald@encs.concordia.ca

M. Eng. in Industrial Engineering
(Choose one of the following options)

OPTION I: LEAN SYSTEMS ENGINEERING (45 credits)

Industrial Engineering - Core courses (5 courses - 25 credits)

INDU 6121 Applied Optimization
INDU 6211 Production Systems and Inventory Control
INDU 6310 Applied Probability and Statistics for Engineers
INDU 6311 Discrete System Simulation
INDU 6990 Industrial Engineering Capstone

- These courses cannot be replaced by any other course

Area Core Courses (4 courses - 16 credits)

INDU 6221 Lean Enterprise
INDU 6241 Lean Manufacturing
INDU 6251 Facilities Planning and Warehouse Operations
INDU 6321 Introduction to Six Sigma

- These courses cannot be replaced by any other course

Area Elective Courses (maximum 1 course - 4 credits)

INDU 6151 Decision Models in Service Sector
INDU 6351 System Reliability
INDU 6381 Applications of Reliability Engineering
INDU 6391 Reliability and Maintenance for Design and Manufacturing
INDU 6421 Systems Safety Engineering and Management
INDU 6411 Human Factors Engineering
INDU 6521 Quantitative Methods in Healthcare Systems

OPTION II: SUPPLY CHAIN ENGINEERING (45 credits)

Industrial Engineering - Core courses (5 courses - 25 credits)

INDU 6121 Applied Optimization
INDU 6211 Production Systems and Inventory Control
INDU 6310 Applied Probability and Statistics for Engineers
INDU 6311 Discrete System Simulation
INDU 6990 Industrial Engineering Capstone

Area Core Courses (minimum 4 courses - 16 credits)

INDU 6141 Logistics Network Models
INDU 6151 Decision Models in Service Sector
INDU 6161 Design and Operations of Supply Chain Network
INDU 6251 Facilities Planning and Warehouse Operations
INDU 6231 Scheduling Theory

Area Elective Courses (maximum 1 course - 4 credits)

INDU 6111 Theory of Operations Research
INDU 6361 Discrete Optimization
INDU 6371 Stochastic Optimization
INDU 6351 System Reliability
INDU 6391 Reliability and Maintenance for Design and Manufacturing

OPTION III: INDUSTRIAL OPTIMIZATION & SYSTEMS ANALYTICS (45 credits)

Industrial Engineering - Core Courses (5 courses - 25 credits)

INDU 6121 Applied Optimization
INDU 6211 Production Systems and Inventory Control
INDU 6310 Applied Probability and Statistics for Engineers
INDU 6311 Discrete System Simulation
INDU 6990 Industrial Engineering Capstone

Area Core Courses (minimum 4 courses - 16 credits)

INDU 6111 Theory of Operations Research
INDU 6151 Decision Models in Service Sector
INDU 6361 Discrete Optimization
INDU 6371 Stochastic Optimization
INDU 6521 Quantitative Methods in Healthcare Systems
INDU 6611 Applied Industrial Systems Analytics
COMP 6321 Machine Learning

Area Elective Courses (maximum 1 course - 4 credits)

Courses must be chosen from the Engineering and Computer Science Course section

Eligible courses to take:

- INDU 691 Topics in Industrial Engineering
- MECH courses that do not require a prerequisite
- ENCS courses (E01)

Ineligible courses to take

- INSE courses (E66, E67, E68, E69)

OPTION IV: RELIABILITY and MAINTENANCE MANAGEMENT (45 credits)

Area Core Courses (8 courses -32 credits and 1 capstone – 9 credits)

INDU 6310 Applied Probability and Statistics for Engineers
INDU 6321 Introduction to Six Sigma
INDU 6331 Advanced Quality control
INDU 6341 Advanced Concepts in Quality Improvement
INDU 6351 System Reliability
INDU 6381 Applications of Reliability Engineering
INDU 6391 Reliability and Maintenance for Design and Manufacturing
INDU 6421 Systems Safety Engineering and Management
INDU 6990 Industrial Engineering Capstone

Area Elective Courses (maximum 1 course - 4 credits)

Courses must be chosen from the Engineering and Computer Science Course Section

Eligible courses to take:

- INDU 691 Topics in Industrial Engineering
- MECH courses that do not require a prerequisite
- ENCS courses (E01)

Ineligible courses to take

- INSE courses (E66, E67, E68, E69)

OPTION V: GENERAL STREAM (no option selected)

Industrial Engineering Core courses (5 courses - 25 credits)

INDU 6121 Applied Optimization
INDU 6211 Production Systems and Inventory Control
INDU 6310 Applied Probability and Statistics for Engineers
INDU 6311 Discrete System Simulation
INDU 6990 Industrial Engineering Capstone

Area Elective Courses (minimum 4 courses - 16 credits under Topics Area E12)

Such graduate courses, marked with (), cannot be taken for credit by students who have completed the undergraduate equivalent.*

INDU 6111 Theory of Operations Research
INDU 6121 Applied Optimization
INDU 6131 Graph Theory with System Applications
INDU 6141 Logistics Network Models (*)
INDU 6151 Decision Models in Service Sector (*)
INDU 6211 Production Systems and Inventory Control
INDU 6221 Lean Enterprise

INDU 6231 Scheduling Theory
INDU 6241 Lean Manufacturing
INDU 6251 Facilities Planning and Warehouse Operations
INDU 6311 Discrete System Simulation
INDU 6321 Introduction to Six Sigma (*)
INDU 6331 Advanced Quality Control
INDU 6341 Advanced Concepts in Quality Improvement (*)
INDU 6351 System Reliability
INDU 6361 Discrete Optimization
INDU 6371 Stochastic Optimization
INDU 6381 Applications of Reliability Engineering
INDU 6391 Reliability and Maintenance for Design and Manufacturing
INDU 6411 Human Factors Engineering (*)
INDU 6421 Occupational Safety Engineering (*)

General Elective Courses (maximum 1 course - 4 credits)

Courses must be chosen from the Engineering and Computer Science Course section.

Eligible courses to take:

- INDU 691 Topics in Industrial Engineering
- MECH courses that do not require a prerequisite
- ENCS courses (E01)

Ineligible courses to take

- INSE courses (E66, E67, E68, E69)