

The course descriptions are at the end of this document. Descriptions of the areas of academic focus can be found in the Third Year Courses Document.

FOURTH YEAR MECHANICAL ENGINEERING¹ (for students who completed third year in 2005-06)
 Fall Session-Year 4²

Stream course ³	Stream course	Stream course or Technical Elective ⁴	Capstone ⁵	Complementary Studies Elective ⁶
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Winter Session-Year 4²

Stream course ³ or Technical Elective ⁴	Stream course or Technical Elective	Capstone ⁵	Capstone	Complementary Studies Elective ⁶
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¹The Department is not able to schedule all fourth-year courses without conflict. However, students are required to select courses that allow for a conflict-free timetable.

²Students may use a capstone course to substitute for a stream course or a technical elective, however, the reverse is not true. This type of substitution is permitted in each term of 4F and 4W.

³In fourth year, students are required to take one course (indicated below) from each of the same two streams followed in 3W. As well, students are encouraged to take two more courses in 4F or 4W in order to complete a stream (a total of 4 courses from one stream).

⁴Students are permitted to take at most two technical elective substitutes in their fourth year, but are required to obtain formal Departmental approval from the Undergraduate Office.

⁵Students may choose to complete a one-term thesis in 4F or 4W, or a two-term thesis, provided they are supervised by a member of the University of Toronto teaching staff.

⁶At least two of the four (0.5 credit) Complementary Studies Electives to be taken between second and fourth year must be Humanities/Social Science courses (see pages 25-26). An equivalent 1.0 credit course is also acceptable. Students are responsible for ensuring that each elective taken is approved. Please consult the electives list available on the Engineering Office of the Registrar's website.

Stream Courses

Term	Manufacturing	Mechatronics	Solid Mechanics & Machine Design	Energy and Environment	Bioengineering
4F	MIE360H1F Systems Modelling & Simulation* MSE401H1F Materials Selection in Design II	MIE444H1F Mechatronics Principles* MIE404H1F Control Systems AER525H1F Robotics ^A	MIE440H1F Mechanical Design: Theory & Methodology	MIE411H1F Thermal Energy Conversion* MIE414H1F Applied Fluid Mechanics MIE512H1F Air Pollution: Its Formation and Control MIE515H1F Alternative Energy Systems	MIE343H1F Industrial Ergonomics and the Workplace MIE448H1F Engineering Psychology and Human Performance
4W	MIE422H1S Automated Manufacturing ^B MIE364H1S Methods of Quality Control and Improvement MIE540H1S	MIE438H1S Microprocessors and Embedded Microcontrollers ECE344H1S Operating Systems MIE443H1S Mechatronics	MIE442H1S Machine Design* MIE441H1S Computer Aided Design II AER406H1S Aircraft Design ^B	MIE418H1S Fluid Mechanics II	MIE439H1S Biomechanics

	Product Design	Systems: Design and Integration ^B			
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*This course is required for this stream.

^AStudents may take only one of MIE422H1S (Automated Manufacturing) or AER525H1F (Robotics)

^BLimited Enrolment

Capstone Courses

4F	4W
AER407H1F Space Systems Design ^B	AER406H1S Aircraft Design ^B
MIE440H1F Mechanical Design: Theory & Methodology	MIE439H1S Biomechanics
MIE444H1F Mechatronics Principles	MIE496H1S (one term) Thesis
MIE496H1F (one term)/MIE496Y1Y (two-term) Thesis	MIE540H1S Product Design
MIE515H1F Alternative Energy Systems	MIE443H1S Mechatronics Systems: Design and Integration

Technical Electives

4F	4W
AER307H1F Aerodynamics	AER336H1S Scientific Computing
AER525H1F Robotics ^A	
EDV220H1F Engineering Ecology	
EDV360H1F Environmental Impact and Risk Assessment	
MIE404H1F Control Systems I	
MIE512H1F Air Pollution: Its Formation and Control	

FOURTH YEAR MECHANICAL ENGINEERING¹ (for students who completed third year prior to 2005-06)

FALL SESSION-YEAR 4²

MIE404H1F Control Systems I	MIE414H1F Applied Fluid Mechanics	Technical Elective ³ (one of) see list below	Capstone ⁴ (one of) see list below	Humanities and Social Sciences Elective ⁵
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4F Technical Electives

AER307H1F Aerodynamics
AER525H1F Robotics ⁶
EDV220H1F Engineering Ecology
EDV360H1F Environmental Impact and Risk Assessment
MIE512H1F Air Pollution: Its Formation and Control
MIE1807H1F Principles of Measurements

4F Capstone Courses

AER407H1F Space Systems Design ⁷
MIE440H1F Mechanical Design: Theory & Methodology
MIE496H1F (one term)/MIE496Y1Y (two-term) Thesis
MIE515H1F Alternative Energy Systems

WINTER SESSION-YEAR 4²

MIE415H1S Design for the Environment	MIE442H1S Machine Design	Technical Elective ³ (one of) see list below	Capstone ⁴ (one of) see list below	Complementary Studies Elective ⁵
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4W Technical Electives

AER336H1S Scientific Computing
MIE418H1S Fluid Mechanics II
MIE422H1S Automated Manufacturing ⁷

MIE438H1S Microprocessors and Embedded Microcontrollers
MIE441H1S Computer Aided Design

4W Capstone Courses

AER406H1S Aircraft Design ⁷
MIE439H1S Biomechanics
MIE496H1S (one term) Thesis
MIE540H1S Product Design

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²Students may use a capstone course to substitute for a technical elective, however, the reverse is not true. This type of substitution is permitted in each term of 4F and 4W.

³Students are permitted to take at most two technical elective substitutes in their fourth year, but are required to obtain formal Departmental approval from the Undergraduate Office.

⁴Students may choose to complete a one-term thesis in 4F or 4W, or a two-term thesis, provided they are supervised by a member of the University of Toronto teaching staff.

⁵Students are permitted to reverse the sessions in which they take the Complementary Studies Elective and the Humanities and Social Sciences Elective. Students are responsible for ensuring that each elective taken is approved. Please consult the electives list available on the Engineering Office of the Registrar's website.

⁶Students may take only one of MIE422H1 S (Automated Manufacturing) or AER525H1 F (Robotics)

⁷Limited Enrolment

FOURTH YEAR MECHANICAL ENGINEERING MANUFACTURING OPTION¹ (for students who completed third year prior to 2005-06)

FALL SESSION-YEAR 4

MIE404H1F Control Systems I	MIE440H1F Mechanical Design: Theory & Methodology	Technical Elective ² (two of) see list below	Humanities and Social Sciences Elective ³
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4F Technical Electives

MIE496H/Y Thesis ⁴
MSE401H1F Materials Selection in Design II
MSE450H1F Plant Design for Process Industries

WINTER SESSION-YEAR 4

MIE415H1S Design for the Environment	Technical Elective A ² (one of) see list below	Technical Elective B (one of) see list below	Capstone (one of) see list below	Complementary Studies Elective ³
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4W Technical Elective A

MIE441H1S Computer Aided Design
MIE442H1S Machine Design
MIE540H1S Product Design

4W Technical Elective B

MIE422H1S Automated Manufacturing ⁵
MIE460H1S Manufacturing and Production Systems

4W Capstone Courses

MIE460H1S Manufacturing and Production Systems
MIE496H1S (one term) Thesis ⁴
MIE540H1S Product Design

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³Students are permitted to reverse the sessions in which they take the Complementary Studies Elective and the Humanities and Social

Sciences Elective. Students are responsible for ensuring that each elective taken is approved. Please consult the electives list available on the Engineering Office of the Registrar's website.

⁴Students may choose to complete a one-term thesis in 4F or 4W, or a two-term thesis, provided they are supervised by a member of the University of Toronto teaching staff.

⁵Limited Enrolment

FOURTH YEAR MECHANICAL ENGINEERING MECHATRONICS OPTION¹ (for students who completed third year prior to 2005-06)

FALL SESSION-YEAR 4²

MIE404H1F Control Systems I	MIE444H1F Mechatronics Principles	Technical Elective ³ (one of) see list below	Capstone (one of) see list below	Humanities and Social Sciences Elective ⁴
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4F Technical Electives

AER307H1F Aerodynamics
AER525H1F Robotics ⁵
ECE344H1F Operating Systems
MIE414H1F Applied Fluid Mechanics
MIE512H1F Air Pollution: Its Formation and Control
MIE1807H1F Principles of Measurements

4F Capstone Courses

AER407H1F Space Systems Design ⁶
MIE440H1F Mechanical Design: Theory & Methodology
MIE496H1F (one term)/MIE496Y1Y (two-term) Thesis ⁷
MIE515H1F Alternative Energy Systems

WINTER SESSION-YEAR 4²

MIE415H1S Design for the Environment	Technical Elective ³ (two of) see list below	Capstone (one of) see list below	Complementary Studies Elective ⁴
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4W Technical Electives

AER336H1S Scientific Computing
MIE418H1S Fluid Mechanics II
MIE422H1S Automated Manufacturing ⁶
MIE438H1S Microprocessors and Embedded Microcontrollers
MIE441H1S Computer Aided Design
MIE442H1S Machine Design

4W Capstone Courses

AER406H1S Aircraft Design ⁶
MIE439H1S Biomechanics
MIE443H1S Mechatronics Systems: Design and Integration
MIE496H1S (one term) Thesis ⁷
MIE540H1S Product Design

¹The Department is not able to schedule all fourth-year courses without conflict. However, students are required to select courses that allow for a conflict-free timetable.

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⁴Students are permitted to reverse the sessions in which they take the Complementary Studies Elective and the Humanities and Social Sciences Elective. Students are responsible for ensuring that each elective taken is approved. Please consult the electives list available on the Engineering Office of the Registrar's website.

⁵Students may take only one of MIE422H1S (Automated Manufacturing) or AER525H1F (Robotics)

⁶Limited Enrolment

⁷Students may choose to complete a one-term thesis in 4F or 4W, or a two-term thesis, provided they are supervised by a member of the University of Toronto teaching staff.

GRADUATE PROGRAM IN MECHANICAL ENGINEERING

The Department offers graduate study and research opportunities in a wide range of fields within Mechanical Engineering. These include applied mechanics, biomedical engineering, computer-aided engineering, energy studies, fluid mechanics and hydraulics, materials, manufacturing, robotics, automation and control, design, surface sciences, thermodynamics and heat transfer, plasma processing, vibration, computational fluid dynamics, microfluidics and micromechanics, environmental engineering, thermal spray coatings, finite element methods, internal combustion engines and spray-forming processes. The programs available lead to M.Eng., M.A.Sc. and Ph.D. degrees. Evening courses are offered to accommodate participants who work full-time and are interested in an M.Eng. Additional information can be obtained from the Mechanical and Industrial Engineering Graduate Studies Office, Rosebrugh Building, RS214 or online at <http://www.mie.utoronto.ca/grad>.

2006-2007 Mechanical Course Descriptions

MIE343H1 F

Industrial Ergonomics and the Workplace

III-AEINDBASC; IV-AEMEBCASC

3/3/-/0.50

The Biology of Work: anatomical and physiological factors underlying the design of equipment and work places. Biomechanical factors governing physical workload and motor performance. Circadian rhythms and shift work. Measurement and specification of heat, light, and sound with respect to design of the work environment. (Prerequisite: MIE231H1 F)

MIE360H1 F

Systems Modelling and Simulation

III-AEINDBASC, IV - AEMEBCASC; IV AEESCBASC (elective)

3/2/1/0.50

Definition of models in terms of procedural behaviours, both discrete and continuous, deterministic and stochastic, with an emphasis on stochastic, dynamic simulation models. Simulation languages and simulators, generating random variables. Verification and validation of models, analysis of input and output data. (Prerequisite: MIE231H1 F or equivalent).

MIE364H1 S

Methods of Quality Control and Improvement

III-AEESCBASC, AEINDBASC, IV AEMEBCASC

3/1/2/0.50

In manufacturing and service industries alike, quality is viewed as an important strategic tool for increasing competitiveness. Continuous quality improvement is a key factor leading to a company's success. With more emphasis on quality, the cost and the product cycle time are reduced and the communication between producer and customer is improved. The course focuses on the following topics: introduction to quality engineering, TQM, quality standards, supplier-producer relations and quality certification, costs of quality, statistical process control for long and short production runs, process capability analysis and acceptance sampling. (Prerequisite: MIE231H1 F, MIE237H1 S or equivalent)

MIE404H1 F

Control Systems I

IV-AEMEBCASC, AEMEBCASC,
AEMEBCASC

3/3/2/0.50

Modelling of dynamic systems. Analysis of stability, transient and steady state characteristics of dynamic systems. Characteristics of linear feedback systems. Design of PID control laws using frequency response methods and the root locus technique. Application of control law design tools to control pollutants in internal combustion engines.

MIE411H1 F

Thermal Energy Conversion

IV-AEMEBCASC

3/3/-/0.50

Engineering applications of thermodynamics in the analysis and design of heat engines and other thermal energy conversion processes within an environmental framework. Steam power plants, gas cycles in internal combustion engines, gas turbines and jet engines. Refrigeration, psychrometry and air conditioning. Fossil fuel combustion and advanced systems includes fuel cells. (Prerequisite: MIE210H1 S, MIE313H1 S)

MIE414H1 F

Applied Fluid Mechanics

IV-AEMEBCASC; IV-AEMEBCASC (elective)

3/3/1/0.50

Engineering applications of fluid mechanics. One dimensional gas dynamics. Flow machines. Flow transients and water hammer. Flow in pipe networks. Open channel flow. Flow measurement. (Prerequisite: MIE312H1 F)

MIE415H1 S

Design for the Environment

III-AEMEBCASC, IV-AEMEBCASC, AEMEBCASC,

AEMECBASCT; AEESCBASCM (elective)

3/-/1/0.50

(1) Industrial growth and the environment, Industrial Ecology; (2) Life Cycle Assessment, inventory and impact analysis; (3) Design for the environment, recycling, pollution prevention, energy conservation, waste treatment; (4) Pollution control of air, water and soil.

MIE418H1 S

Fluid Mechanics II

IV-AECIVBASC, AEMECBASC, AEMECBASCT (elective)

2/-/1.5/0.50

This course builds upon the material introduced in Fluid Mechanics I, and will cover some or all of the following more advanced topics: Navier-Stokes equations; viscous/creeping flow; inviscid/potential flow; boundary layer theory; lift/drag; open channel flow; blood flow; computational fluid dynamics. (Prerequisite: MIE312H1 F or equivalent).

MIE422H1 S

Automated Manufacturing

IV-AEESCBASCM, AEMECBASC, AEMECBASCF,
AEMECBASCT (elective)

2/3/-/0.50

Introduction to Computer Integrated Manufacturing. Definitions, terminology. Organization of manufacturing systems. Introduction to NC machines. Classification of NC machines. Actuation systems, transmissions. CNC programming. Introduction to robotics. Types of robot motion. Robot kinematics. Jacobians, singularities. Robot motion trajectories. Interpolation, spline fits. Robot joint control. Flexible manufacturing systems, justification. Robot cell design. Group technology. Design of group technology cell. Programmable logic controllers. (Limited enrolment. Prerequisite: MIE321H1 F, MIE404H1 F or equivalent.)

MIE438H1 S

Microprocessors and Embedded Microcontrollers

IV-AEMECBASC, AEMECBASCT,
AEINDBASC, AEINDBASCI (elective)

2/3/-/0.50

Review (number systems, CPU architecture, instruction sets and subroutines); Interfacing Memory; Interfacing Techniques; Transistors and TTL/CMOS Logic; Mechanical Switches & LED Displays; Interfacing Analog, A/D & D/A Conversions; Stepper Motors & DC Motors; RISC Technology and Embedded Processors; DAS Systems; Embedded Microcontroller System Design; CPU-based Control.

MIE439H1 S

Biomechanics

IV-AEESCBASCB, AEMECBASC, AEMECBASCT
(elective)

2/3/-/0.50

Applications of the principles of mechanical engineering - principally solid mechanics, fluid mechanics and thermodynamics - to living systems. Topics include cellular mechanics, blood rheology, respiratory and circulatory mechanics, strength of bone and muscles and locomotion. (Prerequisite: MIE100H1 S, MIE312H1 F or equivalent.)

MIE440H1 F

Mechanical Design: Theory and Methodology

IV-AEMECBASCF; AEMECBASC,
AEMECBASCT, AEESCBASCM (elective)

2/2/1/0.50

This course presents the engineering design process, with emphasis on theory and methodology related to conceptual design. Methods for enhancing creativity during conceptual design include using related and unrelated stimuli during idea generation, design by analogy, particularly biological analogies, and TRIZ/TIPS (theory of inventive problem solving). Design for assembly and design for manufacturing, with emphasis on design for injection molding, die casting and stamping, will be integrated into the various stages of design. Design for other life-cycle concerns, such as remanufacturing, and recycling will be introduced. (Pre-requisite: MIE241H1S, MIE321H1 F or equivalent).

MIE441H1 S

Computer Aided Design II

IV- AEESCBASCA, AEESCBASCM, AEMECBASC, AEMECBASCF,
AEMECBASCT (elective)

2/2/-/0.50

Problem definition and formulation for optimization, optimization models, and selected algorithms in optimization. State of the art software packages are introduced along with case studies. Emphasis is placed on gaining practical skills in solving realistic design problems by illustrating applied design examples. (Prerequisite: MIE241H1 S & MIE222H1 S or equivalents).

MIE442H1 S

Machine Design

IV-AEMECBASC; AEMECBASCF,
AEMECBASCT (elective)

3/1.5/2/0.50

Introduction to the fundamental elements of mechanical design including load determination, failure analysis under static and dynamic loads, surface failure and the selection of engineering materials and manufacturing processes. Consideration is given to the characteristics and selection of machine elements such as bearings, shafts, couplings, gears and fasteners. The laboratory provides

experience in reverse engineering and insight into the design and manufacture of common consumer products. (Prerequisite: MIE320H1 S).

MIE443H1S

Mechatronics Systems: Design and Integration

IV-AEMECCBASC

3/3/1/0.50

The course aims to raise practical design awareness, provide pertinent project engineering methodology, and generate a know-how core in integration of complex automation. This course has mainly practical content, and is integral and useful in the training and education of those students who plan to be employed in areas related to intelligent automation, as well as to the breadth of knowledge of all others. Although emphasis will be on robotic-based automation (mechatronics), the learning will be useful in all domains of system integration.

This course will introduce students to the basics of integration, methodology of design, tools, and team project work. The course will be monitored based on projects from a selected list of topics. The lectures will be in format of tutorials as preparation and discussions on project related issues. A main goal is to bring the methods, means and spirit of the industrial design world to the class room. Emphasis will be on understanding the elements of integration, methodology and approaches, and will involve numerous case studies. Specifically the course will provide a practical step-by-step approach to integration: specifications, conceptual design, analysis, modeling, synthesis, simulation and bread-boarding, prototyping, integration, verification, installation and testing. Issues of project management, market, and economics will be addressed as well. (Limited Enrolment. Prerequisite: MIE346H1 S)

MIE444H1 F

Mechatronics Principles

IV-AEMECCBASC, AEMECCBASCT

2/3/-/0.50

This course provides students with the tools to design, model, analyze and control mechatronic systems (e.g. smart systems comprising electronic, mechanical, fluid and thermal components). This is done through the synergic combination of tools from mechanical and electrical engineering, computer science and information technology to design systems with built-in intelligence. The class provides techniques for the modeling of various system components into a unified approach and tools for the simulation of the performance of these systems. The class also presents the procedures and an analysis of the various components needed to design and control a mechatronic system including sensing, actuating, and I/O interfacing components. (Prerequisite: MIE342H1 F & MIE346H1 S).

MIE448H1 F

Engineering Psychology and Human Performance

IV-AEMECCBASC; AEESCBASCM, AEINDBASC, AEINDBASCI (elective)

3/3/-/0.50

An examination of the relation between behavioural science and the design of human-machine systems, with special attention to advanced control room design. Human limitations on perception, attention, memory and decision making, and the design of displays and intelligent machines to supplement them. The human operator in process control and the supervisory control of automated and robotic systems. Laboratory exercises to introduce techniques of evaluating human performance. (Prerequisite: MIE231H1 F or equivalent; MIE237H1 S is recommended)

MIE488H1 F

Entrepreneurship and Business for Engineers

III-AEINDBASC, IV-AEMECCBASC, AEMECCBASCF, AEMECCBASCT,
AEINDBASC, AEINDBASCI (elective)

3/-/1/0.50

Complementary Studies Elective

Everyone from the media to government is talking about entrepreneurial activities as the engine of the Canadian economy. The age of enterprise has arrived and those with the entrepreneurial spirit, the drive to create wealth and the persistency required to make a difference to their own companies are the winners. Our experience shows that the most successful people in these activities will be those who have the "entrepreneurial" spirit, the drive to create wealth and the persistency required to make a difference to their own companies. Entrepreneurs are in control of their own lives, they structure their own progress and are accountable for their own success and engineers are the most capable people to prosper in the global economy. Large and medium sized corporations now search for the *intrapreneur* (an entrepreneurial individual who prefers to work inside a larger firm rather than to start or manage their own) who will lead them to success in the future.

This course is intended to give the students an understanding of small business enterprises and to introduce the skills needed to run one. We will cover how to launch a new firm, its technical, economic, legal, HR, marketing & sales and financial aspects together with case histories from industry. Visitors from industry will be joining some lectures. The session project is the preparation of a complete Business Plan by each student. The course has three hours of lectures and a Tutorial, which will be used to bring in real life entrepreneurs as visitors. There will be lots of real activities from smaller projects to the major deliverable – a genuine and complete Business Plan created for your real or imaginary company. (These are parallel course offered with essentially the same content: CHE488, CIV488, ECE488, MIE488 and MSE488 and some are offered in each term). (Exclusion: APS234H1 F & APS432H1 S)

MIE512H1 F

Air Pollution: Its Formation and Control

IV-AECHEBASCE, AECIVBASC, AECIVBASCE,
AEMECCBASC, AEMECCBASCT (elective)

3/-/-/0.50

Identification of air pollutants both gaseous and particulate. The physical and chemical mechanisms for their formation. The primary control strategies with a discussion of their implementation in practical air pollution control devices. A discussion of economic and regulatory considerations.

MIE515H1 F

Alternative Energy Systems

IV- AECHEBASC, AECHEBASCE, AEESCASC, AEMECCBASC, AEMECCBASCT (elective)

3/-/-/0.50

This course covers the basic principles and design of selected alternative energy systems. Systems discussed include solar thermal systems, solar photovoltaic, wind technology, fuel cells, and energy storage. (Prerequisites: MIE210H1 S, MIE312H1 F and some knowledge of chemistry, or equivalent courses). May be offered pending availability of instructor.

MIE540H1 S

Product Design

IV-AEESCASC, AEMECCBASC, AEMECCBASCF, AEMECCBASCT (elective)

2/-/-/0.50

Processes and approaches to creative product design involving product research. Establishment of design parameters. Experimentation. Development of conceptual alternatives. Visualisation, evaluation, revision, optimization and presentation. Projects require consideration of functional utility, marketing, human factors, use of materials and processes, costing, manufacturing feasibility, appearance, service/maintenance and other diverse aspects. (Prerequisite: MIE231H1 F or equivalent)

MIE1807H1 F

Principles of Measurements

IV-AEMECCBASC, AEMECCBASCT(elective)

2/1.5/-/0.50

This course is concerned with the statistical analysis and design of engineering experiments. The topics covered will include: Concepts of central tendency. Variability. Confidence level and ranking. Correlation, regression and variation analysis. Robust estimation. Experiments of evaluation. Experiments of comparison. Factorial experiments (analysis of variance). Experimental designs (involving randomization, replication, blocking and analysis of covariance).

Thesis Topics

Fourth-year, Mechanical students will have the option of taking a one-term thesis course in the fall (MIE496H1F) or spring (MIE496H1S), or a two-term thesis course (MIE496Y1Y). Students who choose not to take a thesis course, or who are unable to obtain a supervisor, must take a specific capstone course instead.

MIE496H1/Y1 F/S/Y

Thesis

IV-AEINDBASC, AEINDBASCI; AEMECBASC,
AEMECBASCF, AEMECBASCT (elective)

-/6/1/0.5/1.00

The purpose of the thesis course is two-fold: to allow students to pursue a technical project of interest, and to improve their communication skills. The course is optional for fourth-year Mechanical students, and can be completed as a one-term or a two-term course. The two-term thesis course is required for fourth-year Industrial students. The grade of the "Y" course which extends over two sessions will be included in the weighted average of the Winter Session only. Students may work individually or in groups, and must obtain a supervisor (a member of the University of Toronto teaching staff). The course comprises written work and oral presentations.

Students are encouraged to contact professors with whom they are interested in working to discuss possible thesis topics. This might be done via email, phone or in person. It is helpful for the professor if you provide a copy of your academic record (you can print one from ROSI, it doesn't have to be an official transcript), a resume and perhaps a summary of your research interests that they can refer to after you've contacted them.

If you don't know who you want to work with, you can:

- 1) Browse through the MIE *Academic Research Areas* available in the Undergraduate Office.
- 2) Browse through the online MIE faculty list and the faculty webpages: <http://www.mie.utoronto.ca/staff/staff.html>
- 3) Read the thesis topics that are posted on the thesis course website: <http://ccnet.utoronto.ca/20059/mie496y1y> - go to "Handouts", then "Thesis Topics 2006-07", and browse through the various files listed by professor. You may also view "A Topic Titles Summary" for a quick overview.
- 4) Search through our online thesis catalogue of previous MIE undergraduate theses by title, student name or supervisor: <http://www.mie.utoronto.ca/undergrad/info/important.htm>. You can also borrow past theses from the Undergraduate Office (RS214) to get a sense of the type of work that other students have done.

Process of obtaining a thesis topic:

- Thursday, March 16, 2006 4:30 p.m. deadline to submit the *Application 1st Round* thesis topic form to the Undergraduate Office. This form is available on the CCNET course website listed above.
- mid-March to early April, forms distributed to professors, and decisions made re acceptance
- mid-April – list of accepted students will be posted on thesis course website
- mid-April to end of July – students not accepted must approach other prospective supervisors, and have thesis topic form signed by them
- Tuesday, August 1, 2006 4:30 p.m. deadline to submit signed the *Application 2nd Round* thesis topic form to the Undergraduate Office. The early deadlines are necessary in order for us to plan for the course.