Capstone Design is a win-win opportunity for your organization and University of Toronto Engineering: You benefit by gaining a fresh design perspective; U of T Engineering students benefit by applying their newly acquired engineering skills to meet your business needs.

COURSE COORDINATOR
Professor Greg A. Jamieson, PhD, PEng
Clarice Chalmers Chair of Engineering Design

For a catalog of all previous capstone projects, visit http://mie.utoronto.ca/undergrad/thesis-catalog

For more information, visit our website http://mie.utoronto.ca/industry/capstone

or email us at capstone@mie.utoronto.ca

Cover: A production planning tool, developed by industrial engineering students in collaboration with Salesforce.com.
Above: An application developed by industrial engineering capstone students to help patients and their families navigate Toronto General Hospital.

WHAT IS "CAPSTONE DESIGN"?
Capstone Design is a final year core course in which students use engineering principles, methods, and processes to address a client’s needs, under the supervision of a faculty member. Student teams meet specific client requirements through a creative, iterative, and open-ended design process.

A Capstone project must include:
- Application of disciplinary knowledge and skills
- Demonstration of engineering decision-making
- Client interaction
- Demonstration of proof of the design concept

WHY SHOULD YOU PARTICIPATE?
- Introduce innovative concepts and improvements into your organization
- Obtain solutions to key design issues
- Address problems requiring an infusion of talented resources
- Leverage technical and theoretical engineering knowledge
- Identify potential employees for your organization
- Gain access to expertise of our faculty members
- Build longer-term relations with our professors

DISCIPLINARY KNOWLEDGE & SKILLS
Following is a list of subject areas covered in our Industrial Engineering program:
- Optimization Methods
- Information Systems
- Human Factors / Ergonomics
- Simulation
- Scheduling
- Business Process Engineering
- Quality Control
- Decision Support Systems
- Human Technology Interaction
- Project Management
- Reliability and Maintainability
- Statistical Analysis
- Inventory Management
- Production Planning
- Revenue Management
- Risk Management
- Location Analysis
- Vehicle Routing

SELECTION CRITERIA FOR PROJECTS
High Value of Project to the Client
The project should have the potential for real impact on the organization, or its clients. Capstone projects often address a problem or challenge that the organization wants to resolve, but may not have the resources or knowledge to undertake.

Right Level of Project Criticality to the Client
The project should not unduly expose the client to downside risk as a result of delays or failure to deliver, arising from the students’ inexperience.

REQUIRED RESOURCES FOR PROJECTS
Student Resources
Each project team involves 3-4 students, each working approximately 10 hours per week for about 26 weeks.

Client Resources
The client’s immediate contact is expected to spend about 1-2 hours per week to support the project. This includes timely access to data essential for the completion of the project.

HOW TO PARTICIPATE
Complete a Statement of Need (SON) to be found online: http://uoft.me/IndE-SON
- The SON defines the general nature of the problem to be solved;
- Explains the main idea or problem in one or two paragraphs, and;
- Details and scope of the project will be discussed in the first team meeting in September with the client, students, and optionally, the faculty supervisor.
- An organization may submit multiple SONs.
- Clients can request for an NDA to be signed by the students and supervisor.

Submit your Statement of Need (SON) to:
capstone@mie.utoronto.ca

NON-DISCLOSURE AGREEMENT
Some projects may require negotiation regarding non-disclosure and intellectual property. Clients may request that a non-disclosure agreement be signed by all parties involved in the project.

WHEN TO SUBMIT
We request that you submit your project proposal by mid-June. All accepted projects will be made available for students’ viewing on our course website in August. By early September, students will be assigned to a project based on their stated preferences.

ACCEPTING YOUR PROPOSAL
Acceptance notifications will be issued within a few business days after your