The University of Windsor, Faculty of Engineering

Department of Mechanical, Automotive, and Materials Engineering

Industrial Engineering Program

**INDE-4000. Capstone Design Project**

**Capstone Project Proposal**

**Submit a project proposal**

Have a potential project topic for our students?

Submit a brief description by mid August for timely recruit of the teams and a September 2021 start.

**Welcome to UWindsor Industrial Engineering student innovation!**

[uwindsor.ca/engineering/capstone](https://www.uwindsor.ca/engineering/771/capstone-design)

Capstone projects challenge fourth-year engineering students to apply the formal knowledge they’ve gained during their undergraduate studies to solve real-world problems. Students combine the technical skills and hands-on experience they acquired to design a project related to their chosen discipline.

Undergraduate capstone projects present an opportunity for companies to solve engineering problems and recruit top talent. If your organization is interested in participating or would like more information about sponsoring a student project, contact 2021-22 capstone co-ordinator Waguih ElMaraghy.

**Information and privacy:** questions regarding the Industrial Engineering Capstone Project and information on this form can be directed to [wem@uwindsor.ca](mailto:wem@uwindsor.ca)

**INDE-4000. Capstone Industrial Design Projects.** (Calendar description)

Student teams, supervised by faculty, undertake a significant design project, which integrates mathematics, basic sciences, engineering sciences and complementary studies in making informed, thoughtful and creative decisions in devising a product, system, component, or process to meet specified needs. It is a creative open-ended and generative activity often iterative and multidisciplinary, subject to constraints which may be governed by corporate standards or applicable legislation to varying degrees depending upon the project. These constraints may relate to economic, health, safety, environmental, social or other pertinent factors. Course requirements include seminars, group meetings, oral presentations, and written reports. Faculty advisors and industrial preceptors will advise project groups and evaluate the progress and results of the design projects. (2 lecture hours and 4 laboratory hours a week.) (2 semester course.)

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**Prof. Waguih ElMaraghy,** Ph.D., P.Eng., OOH, FEC, FCAE, FCSME, FASME, FCIRP, FSME

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Director, Intelligent Manufacturing Systems Centre (IMSC)

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<https://www.uwindsor.ca/engineering/mame/> <http://www.uwindsor.ca/imsc/>

**Project Proposal – Submission of a potential INDE-4000 project topic**

**Date:**

**Top of Form**

**Company** (You full company name):

**Company website:**

**Contact name:**

**Contact position at company:**

**Contact email:**

**Contact phone number:**

**Project topic proposal:**

**Details of project proposal** (Use more pages as needed)**:**

**Benefits to Industry (and the IE Program)?**

Collaborating with Industry on the Capstone projects challenges fourth-year engineering students to apply the formal knowledge they’ve gained during their undergraduate studies to solve real-world problems. Equally, the capstone projects present an opportunity for companies to solve engineering problems, recruit top talent, get a fresh perspective on finding an innovative solution to your problem, and use the services of a small consulting team and the supervising faculty expertise.

**What is the required involvement from Industry?**

Participating in the capstone design project will involve a limited level of time commitment on behalf of the organisation. In addition, the client should be invested in the proposed topic to provide mutual benefits to all parties involved.

*Companies should specify their ability to share information and whether or not a non-disclosure agreement would be required.*