



Notice of Intent for New Degree/Diploma Programs

The Notice of Intent (NOI) is completed after Program Ideation once it is determined that a New Program is appropriate. The NOI provides additional detail regarding the nature and aspirations of a proposed program. Please submit the completed NOI to cige@ontariotechu.ca. The NOI will be presented to the Academic Resource Committee for evaluation and recommendation to the Provost.

Applicant Information

Faculty: [Faculty of Engineering and Applied Science](#)

Faculty Lead: [Dr. Hossam Kishawy](#) and [Dr. Scott Nokleby](#)

Program Level: ☐ Graduate ☒ Undergraduate

Program Name and Degree Designation: [BEng Honours in Civil Engineering](#)

Is this program in collaboration with another faculty? n/a

If yes, which Faculty? n/a

Modality: ☐ Online ☒ Hybrid

[Some courses will be hybrid/online same as our other engineering programs.](#)

Will this program have an experiential learning component? ☒ Yes ☐ No

If yes, please provide details of experiential learning, including potential partners and any anticipated impact on existing resources or placements in other programs.

Overview of Proposed Program

Please briefly describe the proposed program.

The proposed Civil Engineering program aims to equip graduates with the necessary skills to design and construct innovative, adaptive, and resilient infrastructure systems that support a sustainable and equitable future. The program addresses critical challenges such as aging infrastructure and climate change by integrating both traditional civil engineering fundamentals and forward-thinking approaches to infrastructure design. Students in the new Civil Engineering program will learn to optimize infrastructure systems for resilience and adaptability, incorporate green materials and lifecycle design principles, apply project management skills, and ensure resource recovery and disassembly are considered from the outset. Through collaborative and inclusive design, the program emphasizes creating infrastructure that meets the needs of all members of society.

A central focus of the program is minimizing environmental impact and protecting ecosystems while improving system functionality. Students will explore interconnected systems analysis, advanced computational techniques, environmental sensing technologies, and next-generation sustainable materials. The program will cultivate engineers who combine technical excellence with empathy for people and respect for the environment, empowering them to tackle future global challenges across both the built and natural environments.

Graduates will develop strong competencies in engineering fundamentals, problem analysis, design, and use of engineering tools, alongside essential affective skills such as self-awareness, contextual listening, and inclusive behavior. Experiential and community-engaged learning opportunities will be embedded throughout the curriculum to strengthen these skills.

Recognizing that these attributes are also key global and intercultural competencies, the program will foster success for international students and prepare all graduates to address complex issues within diverse communities locally and globally. By emphasizing environmental sustainability and interdisciplinary collaboration, the Civil Engineering program will prepare graduates to plan and deliver infrastructure that enables urban, rural, and industrial areas to thrive sustainably into the future.

The previously launched Railway Engineering Specialization will also be available to students in the Civil Engineering program. The University's rail sector partners are very keen on having Civil Engineering students be able to take the specialization.

Describe how the principles of Equity, Diversity, Inclusion, and Decolonization have been considered.

The proposed program will be listed within the Faculty of Engineering and Applied Science (FEAS). Thus, it is fully committed to Equity, Diversity, and Inclusion (EDI), including in all of its courses. For students who have accommodation needs, existing Student Accessibility Services (SAS) support will be available to students who require specific accommodations.

If this program contains any indigenous content, please provide information regarding consultation with the Indigenous Education Advisory Circle (IEAC).

For more information on how Indigenous content is defined at Ontario Tech University and how to consult with the Indigenous Education Advisory Circle (IEAC), please refer to the [Protocol for Consultation with the Indigenous Education Advisory Circle](#).

Evidence of Need

List all other Ontario universities that offer similar programs.

University	Program
Carleton University	Bachelor of Engineering (B.Eng.) in Civil Engineering
Toronto Metropolitan University	Bachelor of Engineering (BEng) in Civil Engineering
Lakehead University	Bachelor of Engineering (BEng) in Civil Engineering
McMaster University	Bachelor of Engineering in Civil Engineering
York University	Bachelor of Engineering (BEng) in Civil Engineering
University of Toronto	Bachelor of Applied Science (BASc) in Civil Engineering
University of Waterloo	Bachelor of Applied Science (BASc) in Civil Engineering
Queen's University	Bachelor of Applied Science BASc in Civil Engineering
Western University	Bachelor of Engineering Science Civil & Environmental Engineering
University of Ottawa	Bachelor of Applied Science (BASc) in Civil Engineering
University of Windsor	Bachelor of Applied Science (BASc) in Civil Engineering

What is the intended applicant pool for this program and the projected enrollment?

The projected enrolment is a yearly intake of 40-50 students.

What are the trends indicating societal need for graduates in this area. Please visit [Ontario Job Futures](#), the [Government of Canada Labour Market Trends](#) website, and the [Durham Workforce Authority](#) and Include projections for jobs in this area over the next 5 to 10 years. You may also include data from other sources, if relevant.

The Bachelor of Engineering (Honours) in Civil Engineering program is essential because it will prepare students with the technical expertise and problem-solving skills needed to design, build, and maintain the infrastructure that supports modern society from transportation systems and water resources to sustainable urban development. As Ontario continues to expand and invest in infrastructure and climate-resilient projects, graduates of this program will be in high demand to address complex environmental and societal challenges.

The demand for civil engineers in Ontario is projected to remain strong over the next 10 years. According to the Government of Canada's Canadian Occupational Projection System (COPS), approximately 21,800 civil-engineering job openings are expected across Canada between 2024 and 2033, with roughly 8,000 of those anticipated in Ontario.¹ The Government of Canada Job Bank rates employment prospects for civil engineers in Ontario as "good" for 2024–2026, driven by infrastructure growth and retirement replacement needs.² Regionally, the Durham Workforce Authority highlights ongoing residential and municipal development, transportation expansion, and green infrastructure projects as key local drivers of engineering employment. These trends indicate a consistent and growing societal need for qualified civil engineering graduates.

Resources

What human and physical resources will be required to launch and sustain the program?

A total of 5-6 faculty positions will be required for this program. In order to properly develop the program, an Associate/Full Professor in Civil Engineering should be recruited as soon as possible. This person will assist with the development of the program as well as developing the requirements/specifications for the various labs. The program will require a significant investment in terms of lab space and equipment, with the exact requirements to be determined as the program is being developed.

How will existing programs be impacted?

We are not anticipating any negative impact on our existing engineering programs.

What is the marketing pitch for this program and what outlets should be used?

There are several Civil Engineering programs across Ontario that focus on traditional programs with emphasis on construction. The proposed program will complement existing ones by emphasis on sustainability, green materials, lifecycle design, transportation infrastructure, and project management skills.

Consultation

Provide details regarding consultations with other programs and/or Faculties at Ontario Tech University, external agencies/partners, and supporting departments (e.g. the Office of the Registrar, School of Graduate and Post-Doctoral Studies), and include information about potential collaboration or possible duplication. Include an explanation of the consultation process and a summary of the feedback provided.

Initial consultations have been conducted with key internal stakeholders, including faculty members within the Faculty of Engineering and Applied Science, Department Chairs, and administrative staff. These discussions focused on the alignment of the proposed program with institutional priorities, existing program offerings, and resource considerations. Input was also sought from relevant support units such as the Registrar's Office, Institutional Research, and Student Services to assess feasibility and potential impact.

Has this NOI been approved by the Faculty Dean(s)? ☒ Yes ☐ No

Date Approved: November 3, 2025

¹ Canadian Occupational Projection System (COPS), Employment and Social Development Canada (2024–2033)

² Government of Canada Job Bank, Civil Engineer Ontario Outlook (2024–2026).