

# Master of Engineering: Smart Cities





## What is a Master of Engineering Degree?

A Master of Engineering (MEng) degree is a professional coursework-based degree offered at Western University. It can be completed in one year on a full-time basis; or in 20 months on a part-time basis for students who work full-time.

## Why Pursue a Master of Engineering Degree in Smart Cities?

- Learn state-of-the-art innovative solutions to enhance urban infrastructure
- Advance your career in rapid technological advancements, such as computing, sensing, and data analytics
- Be one of the leading professionals with specialized knowledge and skills in smart city technologies and solutions.
- Complete a post-graduate degree in as minimum as one year on a full-time basis
- Obtain Canadian credentials a crucial entry-point for international students and newcomers to Canada seeking employment opportunities in engineering.

## Why Pursue a Smart Cities Master of Engineering Degree at Western?

Western University's Civil & Environmental Engineering program, ranked one of the top civil engineering programs in Canada and worldwide by the Academic Ranking of World Universities, <a href="www.shanghairanking.com">www.shanghairanking.com</a>, is renowned for its excellence, nationally and internationally, due to its outstanding academic curricula, award-winning professors and state-of-the-art facilities. The Smart Cities Master of Engineering Degree at Western is designed to address the challenges of smart cities, such as smart infrastructure operation, efficient resource management, and data-driven decision-making. The program offers interdisciplinary courses and integrates expertise from diverse fields such as infrastructure, transportation, structural and environmental engineering with (AI), Internet of Things (IoT), data analytics, and advanced computing. The envisioned smart cities degree program aims for excellence in teaching by involving a diverse team of instructors, researchers, and industry collaborators across various faculties. Our faculty members have strong ties with industry partners, local government agencies, and research institutions, which offer students valuable internships, research projects, and networking opportunities.

### Admission Requirements

- Minimum 70 percent average in a four-year honors degree or equivalent from an accredited university (average based on the last two years of the degree), as determined by the Department
- Work experience is not mandatory but is considered an asset
- Two letters of reference (preferably academic)
- For international students: English language proficiency

#### Fees

<sup>\*</sup>Please see the posted Fee Schedule for up-to-date fees.

<sup>\*</sup>Please visit https://www.registrar.uwo.ca/student\_finances/fees\_refunds/who\_pays\_canadian\_tuition\_fees.html for residency requirements



## Course Offerings 2025-2026

Introduction to Smart Cities	Summer
Data Management and Applications in Smart Cities	Summer
MEng Project Course*	Fall
Introduction to Machine Learning for Civil Engineers	Fall
Urban Transportation Networks and Emerging Technologies	Fall
Advanced Methods in Hydroscience: Applications & Design	Fall
Application of Optimization Techniques in Civil Engineering	Fall
Intelligent Transportation Systems	Winter
Structural Health Monitoring	Winter
Building Information Modelling (BIM)	Winter
Machine Learning for Water Resources	Winter

<sup>\*</sup>Optional for Project-Based MEng Program, course offerings are subject to change,

## **Program Structure**

- Course-based: 8 technical CEE graduate courses and 2 professional ELI courses. A typical study plan consists of 2 CEE courses + 2ELI courses in the summer term, 3 CEE courses in the Fall term, and 3 CEE courses in the Winter term.
- Project-Based: The MEng project replaces 2 CEE courses, and it should be completed in 2 terms starting at the beginning of the second term.

Please visit <a href="https://www.eng.uwo.ca/tc/graduate/Grad-courses.html">https://www.eng.uwo.ca/tc/graduate/Grad-courses.html</a> to learn more about the Professional Courses offered through the John M. Thompson Centre for Engineering Leadership and Innovation.

Please visit <a href="https://www.eng.uwo.ca/tc/graduate/graduate-diploma.html">https://www.eng.uwo.ca/tc/graduate/graduate-diploma.html</a> to learn more about the Engineering Leadership and Innovation Graduate Diploma (GDip).

For more information, please contact: Civil & Environmental Engineering Graduate Office Spencer Engineering Building 3118 Western University London, ON t. 519.661.2111 x83344 e. ceeprofessionalgrad@uwo.ca