

# CIVIL ENGINEERING

Make your mark on the world. Create the infrastructure that society depends on. Waterloo's Civil Engineering program will prepare you to design and build the vital structures of the modern world: hospitals, communication towers, power plants, offshore platforms, skyscrapers, waterways, pipelines, and more. Want to take your expertise overseas? No problem! Waterloo civil engineers are in demand worldwide.

In first year courses, you'll develop a strong foundation of engineering concepts. In upper years, you'll expand on this knowledge with courses that study economics and life-cycle analysis, fluid mechanics, transportation systems, and structural analysis and design. Top it off with two years of work experience and a fourth year design project, and you'll be ready to design and build the future.

[uwaterloo.ca/cee/civil-engineering](http://uwaterloo.ca/cee/civil-engineering)

**96.2%** of Civil Engineering students found co-op jobs in 2021

**7,000+** co-op employers from around the globe

## YOUR FIRST YEAR

### FIRST TERM

- > Civil Engineering Concepts
- > Chemistry
- > Mechanics 1
- > Linear Algebra
- > Calculus 1
- > Communication in the Engineering Profession

### SECOND TERM

- > Mechanics 2
- > Computational Methods
- > Earth Engineering
- > Electrical Circuits and Instrumentation
- > Calculus 2

### KICK-START YOUR IDEAS – WARRIOR HOME

We provide the support you need to bring your ideas to life. This includes the Sedra Student Design Centre, Velocity, and vast entrepreneurial funding opportunities.

Warrior Home is a student design team that was the first in the world to partner with a Campus Chapter of Habitat for Humanity (HFH). The team redesigned a HFH home in the Waterloo Region, creating an energy-efficient, cost-effective, and market-ready solution. The redesign received tremendous recognition at the 2018 U.S. Department of Energy Race to Zero Student Design Competition, winning first place in the attached housing category.

Waterloo offers the

## WORLD'S LARGEST CO-OP PROGRAM



### CO-OP AT WATERLOO = REAL WORLD EXPERIENCE

You'll have an unrivalled opportunity to gain paid work experience before you even graduate. We'll help you navigate job applications, résumés, and interviews; you'll have the added benefit of trying out different roles and/or industries to find the one that fits you while building your work experience and reinforcing your in-class learning out in the real world. It all adds up to a competitive advantage after graduation. Civil Engineering students are part of the Stream 8 sequence.

### STREAM 8 STUDY AND CO-OP SEQUENCE

YEAR	TERM	STREAM 8
1	Fall	Study (1A)
	Winter	Study (1B)
	Spring	Work
2	Fall	Study (2A)
	Winter	Work
	Spring	Study (2B)
3	Fall	Work
	Winter	Study (3A)
	Spring	Work
4	Fall	Study (3B)
	Winter	Work
	Spring	Study (4A)
5	Fall	Work
	Winter	Study (4B)

Fall term: September to December  
Winter term: January to April  
Spring term: May to August

### BEYOND THE CLASSROOM

As a Waterloo Engineer, it's easy to get in on the action. You can join the Engineering Society, make a difference with Engineers Without Borders, or apply your studies with a student design team. If you have any questions about student life or want to shadow a current student for a day, our Engineering Ambassadors can help!

[uwaterloo.ca/engineering-student-ambassadors](http://uwaterloo.ca/engineering-student-ambassadors)

### OUT IN THE WORLD

Civil engineers are a driving force behind building and shaping the world we live in. If you bike across a bridge, drive along a road, or fill up your water bottle at a fountain, you can thank a civil engineer! Today's civil engineers have to tackle future problems like dynamic transportation, development, and infrastructure solutions for an ever-increasing population.

### EXPLORE YOUR INTERESTS

Our program lets you specialize based on your interests:

- > Engineering mechanics
- > Geotechnical Engineering
- > Construction engineering and management
- > Structural Engineering
- > Transportation Engineering
- > Urban and municipal systems

### EMPLOYMENT OPPORTUNITIES

- > Transportation engineering
- > Commercial building construction
- > Project management and technical consulting services
- > Water supply and distribution system design

### CONNECT WITH US

[UWaterlooEng](https://www.instagram.com/UWaterlooEng)

[@WaterlooENG](https://twitter.com/WaterlooENG)

[UWaterlooEngineering](https://www.facebook.com/UWaterlooEngineering)

FACULTY OF ENGINEERING

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