SOFTWARE ENGINEERING

Lead tomorrow's software development. All around the world, people interact with software daily, meaning the impact that software engineers have on society is monumental. At Waterloo, you'll apply engineering practices to computer science and learn to develop complex software systems. You'll analyze software architecture, apply algorithms, and design human-computer interfaces. By graduation, you'll have the technical skills you need to lead major programming projects.

In first year you'll develop a strong foundation in mathematics, programming, and computer circuits, while also studying natural sciences. In upper years, you'll learn about user interface design, operating systems, databases, networks, compilers, and feedback control systems. Our project-intensive curriculum will develop practical teamwork skills for your career. Top it all off with hand-on labs, two years of work experience, and a final year design project, and your résumé will be packed with experience by the time you graduate.

uwaterloo.ca/software-engineering

99.2%
of Software Engineering students found co-op jobs in 2021

YOUR FIRST YEAR

FIRST TERM

› Methods of Software Engineering
› Programming Principles
› Calculus 1
› Linear Algebra
› Algebra for Honours Mathematics (Algebraic Proofs)
› Classical Mechanics

SECOND TERM

› Data Abstraction and Implementation
› Digital Circuits and Systems
› Linear (Analog) Circuits
› Calculus 2
› Electricity and Magnetism

KICK-START YOUR IDEAS – UBIQ

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.

Software Engineering students were part of the team that founded Ubiq, a revolutionary presentation tool. Using wireless technology, Ubiq can transfer any kind of content between devices. With help from the Velocity Fund, Ubiq won the financial resources to take their business to the next level. They also participated in the prestigious Y Combinator program!

UNIVERSITY OF WATERLOO

CO-OP

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; plus, professional development is built right into your first-year courses. It all adds up to a competitive advantage after graduation. Software 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. As a Software Engineering student, you'll also be part of the Faculty of Mathematics; take advantage of MathSoc's games collection or help edit MathNEWS! If you have any questions about student life or want to shadow a current student for a day, our ambassadors can help!

uwaterloo.ca/engineering-student-ambassadors

OUT IN THE WORLD

Complex software systems have become a necessity in today's technology-driven society – they impact how we communicate, work, and ultimately live our day-to-day lives. The work of software engineers has been a driving force in the creation of everything from social networks to life-saving medical tools and critical advancements in artificial intelligence.

YOU NAME IT, SOFTWARE ENGINEERS DEVELOP IT

Our grads have created impressive things:
› Online retail software for multimillion-dollar businesses
› Sophisticated smartphone interfaces
› Software for Internet of Things (IoT) devices
› Next-generation telecommunication systems

TOP LOCATIONS FOR CO-OP

› Greater Toronto Area
› Vancouver
› Seattle
› San Francisco Bay Area

CONNECT WITH US

UWaterlooEng
@WaterlooENG
UWaterlooEngineering

FACULTY OF ENGINEERING
enginfo@uwaterloo.ca | uwaterloo.ca/engineering

200 UNIVERSITY AVE. W., WATERLOO, ON, CANADA N2L 3G1

uwaterloo.ca/future-students