



# SOFTWARE ENGINEERING

## What is Software Engineering?

Software engineering is a systematic and disciplined approach to developing software. It applies computer science and engineering principles to the creation, operation, and maintenance of software systems. Software engineers specify, design, implement, and maintain innovative software systems. Western's Software Engineering program is implementing the real-world design education approach. Students engage in experiential learning opportunities and project-based courses, building software systems, ranging from apps for mobile devices to systems used by world-wide organizations.

Develop the next big thing



### OPTIONS

- Software Engineering
- Health Informatics



### CAREER POSSIBILITIES

- Systems Analysis
- Information Systems Management
- Data Modeling
- Video Game Development
- Website Design
- Network Systems Engineering

[ecedept@uwo.ca](mailto:ecedept@uwo.ca)

[eng.uwo.ca/electrical](http://eng.uwo.ca/electrical)

## GRACE BENNETT BSc. '16

Fullstack Software Developer, iQmetrix

- Summer Co-op Program

“ As one of the few universities that offered a true Software Engineering program, I believe that I couldn't have made a better choice than Western Engineering. Having the option to customize your degree with co-op or internship is an amazing benefit, because so many employers are looking to hire people with experience. Something important that is also sometimes overlooked, is that employers want to hire people that are a good cultural fit for their company - they want to hire people that they can work with every day. My experience with the Western Engineering program was a competitive yet collaborative environment, where we truly wanted our classmates to succeed with us. ”



## WESTERN'S SOFTWARE ENGINEERING

All Western Engineering students must complete a common first year. Courses include: Applied Mathematics — Calculus, Applied Mathematics — Linear Algebra, Business for Engineers, Chemistry, Computer Programming Fundamentals, Foundations of Engineering Practice, Physics, Properties of Materials and Statics. Upon completing first year, students may pursue the next three years in the Software Engineering program with an opportunity to complete an option in Health Informatics in fourth year.

### Software Engineering

Western's Software Engineering program has a core of disciplines that covers all phases of the software development life cycle. This includes the application of knowledge, processes, technical skills, tools, and managerial experience to develop software systems.

### Health Informatics Option

Health Informatics is the emerging field of collecting, storing, retrieving and presenting health related information. This option provides training on issues related to handling such information as well as issues on security, privacy and integrity.

