

Software Engineering at Trent

Software Engineering is the branch of computer science that deals with designing, developing, testing, and maintaining software applications. Software engineers apply engineering principles and knowledge of programming languages to build software solutions for end users. Because these solutions are typically large and complex, the software engineer must deal on several levels of abstraction and draw on sound methodologies and practices to produce robust, maintainable, and extensible software.

When you study Software Engineering, you will bring the technology of tomorrow to life as you design and integrate software applications for devices from supercomputers to gaming devices. This degree prepares you for a career that blends technology like databases, networks, and telecommunications with elements of ethics, law and culture in the ever-changing technology sector. These explorations take place both in the classroom and beyond – through the Software Engineering Co-op program, you can put skills to action across three paid work terms in professional settings.

Software Engineering Co-op

Co-op is an opportunity for students to gain work-integrated experiential learning that will help them get a head start on their career. The Software Engineering Co-op program assists graduating students in achieving a competitive edge while generating experience within a wide range of sectors. Specifically, co-op gives the students a chance to obtain 12 months of practical experience on the job, develop or enhance technical skills, explore career options, network with a variety of individuals and organizations, learn from mentors, enhance communication and presentation skills, and develop technical writing skills.

Software Engineering Co-op is a competitive direct-entry program with a limited number of spaces.

Program Requirements for Admittance into Co-op:

- Minimum 80% cumulative average
- Six Ontario Grade 12 4U or 4M courses including ENG4U, MHF4U, and one of MCV4U or MDM4U

To remain in the co-op, students must:

- Maintain a minimum 70% cumulative average and 75% average in COIS courses throughout their study terms
- Complete three co-op work terms (COIS 2701P, 3701P, 4701P)
- Receive satisfactory evaluations during each of their work terms

Software Engineering Co-op Work Term Schedule

	Fall	Winter	Summer
Year 1	Study Term 1	Study Term 2	Off
Year 2	Study Term 3	Study Term 4	Off
Year 3	Study Term 5	Study Term 6	Work Term 1
Year 4	Work Term 2	Work Term 3	Off
Year 5	Study Term 7	Study Term 8	Off

* Work terms may vary

All co-op students are encouraged to meet with an Academic Advisor for degree mapping and to ensure they are meeting all their program requirements. You can book an appointment on the Student Experience Portal (trentu.ca/sep) or by calling 705-748-1011 x7333.

Please Note: Co-op is meant to prepare students for the real-world job application process and as such, the co-op process is competitive and dependent upon many factors including market conditions, the student's efforts to secure a work term, and the academic performance of a student. Every effort is made to find suitable co-op work terms for students, but a work term opportunity cannot be guaranteed for every student. Co-op students will secure positions through successful participation in the co-op interview process and/or their own job search activities. It is preferred that no more than two of the three work terms are with the same employer. Withdrawal from the co-op program will not normally be approved while a student is on a work term.

Students who are unable to obtain a suitable co-op opportunity in an upcoming work term are expected to continue with their academic program on a full-time basis. A missed work term can be made up. If a co-op student is unable to complete three work terms yet otherwise fulfills degree requirements, they will be awarded an Honours Bachelor of Science in Software Engineering.

Students do not pay tuition during each work term. Instead, students are required to pay co-op fees plus ancillary fees and levies. The Co-op Assistance Program is available to support students in financial need with co-op expenses. For more information, please reach out to coop@trentu.ca.

International Students who are required to complete co-op work terms that are integral to their academic program must apply for a co-op work permit. Please reach out to internationaladvising@trentu.ca for more support.

Students with Disabilities are strongly encouraged to register with Student Accessibility Services (SAS). Please contact sas@trentu.ca for more support.

Sample Work Term Areas for Software Engineering:

- Software Development
- QA Analysis
- Software Engineering
- Cybersecurity Analysis

Potential Career Paths for a Software Engineering Graduate:

- Code Developer
- Network Engineer
- Video Game Developer
- Technical Analyst
- Software Engineer

