What is Computer Science?

Computer Science is one of the Computer and Mathematical Sciences. Computer science permeates science, engineering, and many other areas of academic inquiry and technological innovation.

Students pursuing the Specialist program may choose from 4 fluid streams: Comprehensive, Software Engineering, Information Systems, and Health Informatics.

Skills of Computer Science Grads

- Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes
- Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions
- Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems
- Analyzing needs and product requirements to create a design
- Considering the relative costs and benefits of potential actions to choose appropriate ones
- Writing computer programs for various purposes using different coding languages
- Identifying measures or indicators of system performance and actions needed to improve or correct performance, relative to system goals
- Conducting tests and inspections of products, services, or processes to evaluate quality or performance

Primary Source: onetonline.org

Entry-Level Jobs for Bachelor Grads

Common employment destinations include:
- Software Engineer in Software Publishers
- Junior Associate in Consulting Firms
- IT Consultant in Financial Services
- Systems Designer in Engineering Consulting
- Analyst in Telecommunications Providers
- Product Designer in eLearning Firms
- Database Administrator in Insurance Suppliers
- Mobile App Developer in eCommerce Services
- Entrepreneur

The Career Directory: www.canadastop100.com/tcd

Graduate & Professional Studies

Popular further education opportunities include:
- Computer Science – Master of Science
- Computer Engineering – Master Applied Science
- Biomedical Engineering – Master Applied Science
- Bioinformatics – Master of Science
- Financial Engineering – Master
- Business Administration – Master
- Project Management – Post-Grad Certificate
- CompTIA Knowledge/Skill Certifications

Did you know? UTSC graduates from Computer Science are working in software development, web design and SEO.

Attend our LinkedIn workshop to learn about the Find Alumni tool for networking!

Computer Science Grads from UTSC have gone on to:
- IBM (Software Developer)
- CIBC (Consultant)
- University of Toronto (Lecturer)
- Microsoft (Software Engineer)
- Crowdlinker (Co-Founder)
Examples of Fields that ‘Fit’ the Skills of Computer Science Grads

- High Tech Manufacturers
- Software Development Firms
- Banking & Insurance
- Retail & Wholesale Products
- Consulting Firms (Technology)
- Education & Training
- Computer Web Design & Hosting
- Government (Federal, Provincial, Regional, Municipal)

Your 4-Year Career Exploration Action Plan

1. Do Your Research

The databases below provide you with details about job prospects, nature of work, educational requirements, working conditions, pay and related career paths:

- Career Cruising: Log into cln.utoronto.ca, click on Resources, and click on Career Cruising to be logged in automatically
- O*Net: online.onetcenter.org (U.S. site)

Attend our workshop Discover Your Skills and Career Options, meet with a Career Counsellor, and use our resources to get to know your skills, values, personality and interests: www.utsc.utoronto.ca/aacc/get-know-yourself

Use the advice on our tip sheets for gathering information:
www.utsc.utoronto.ca/aacc/tipsheets
- Information Interviews
- Working On-Campus
- Internships
- Volunteering

2. Explore Career Options & Get Experience

Gain exposure to your options in the world of work and make connections while you’re a student via campus events and programs listed on cln.utoronto.ca and ccr.utoronto.ca:

- Extern Job Shadowing
- In the Field
- Explore It! (course-based)
- Partners in Leadership (4th year students)
- iLead, uLead, weLead (Dep’t of Student Life)
- Employer Information Sessions
- Career & Volunteer Fairs
- Departmental Student Association Events

Apply for Work Study jobs in CLN in Fall and Spring! You might also find work via www.scsu.ca/jobs.

Find networking opportunities, internship programs and entry-level jobs via websites like www.talentegg.ca and www.charityvillage.ca.

As an upper year student (14+ credits), attend UTSC’s Get Hired Conference and participate in Jobs for Grads.

As a graduate, explore internships and other trainee programs like www.careeredge.ca

3. Build Your Network

Explore Professional Associations and get involved: volunteer for their events and conferences, and get to know people in your industry of interest. These are your future mentors, supervisors and colleagues!

- Association for Mathematical and Computer Science Students – amacss.org
- American Association for Artificial Intelligence – www.aaai.org
- Project Management Institute – www.pmi.org
- Information Technology Association of Canada – www.itac.ca
- Computing Technology Industry Association – www.comptia.org
- CanadaIT: Gateway to the Canadian IT Industry – www.canadait.com
- Information and Communications Technology Council – www.ictc.ctic.ca

Please note: This document is a starting point for your further research into career options in this field of study. For more information on this program and course requirements, please visit the departmental website at the top of the first page.