

COMPUTER SCIENCE

Experience Map



PROMISE
@ uwindsor.ca



University
of Windsor

COMPUTER SCIENCE **CO-OP**
AVAILABLE

COMPUTER SCIENCE (APPLIED COMPUTING) **CO-OP**
AVAILABLE

COMPUTER SCIENCE (COMPUTER INFORMATION SYSTEMS) **CO-OP**
AVAILABLE

COMPUTER SCIENCE (SOFTWARE ENGINEERING) **CO-OP**
AVAILABLE

OTHER COMBINED PROGRAMS

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COMPUTER SCIENCE

SKILLS AND KNOWLEDGE OF COMPUTER SCIENCE GRADUATES

PROGRAM HIGHLIGHTS

Software development, network and system analysis continue to be the top jobs with steady growth projected to grow through 2024, much faster than the average for all occupations. Our programs will ready you to take your place in the technology industry or in research and academia.

Computer Science (Co-op available) - You'll learn in-depth, advanced theory in this four-year degree program, and gain practice in one of the following specializations: Artificial Intelligence; Game Development; Multimedia; Networks and Security

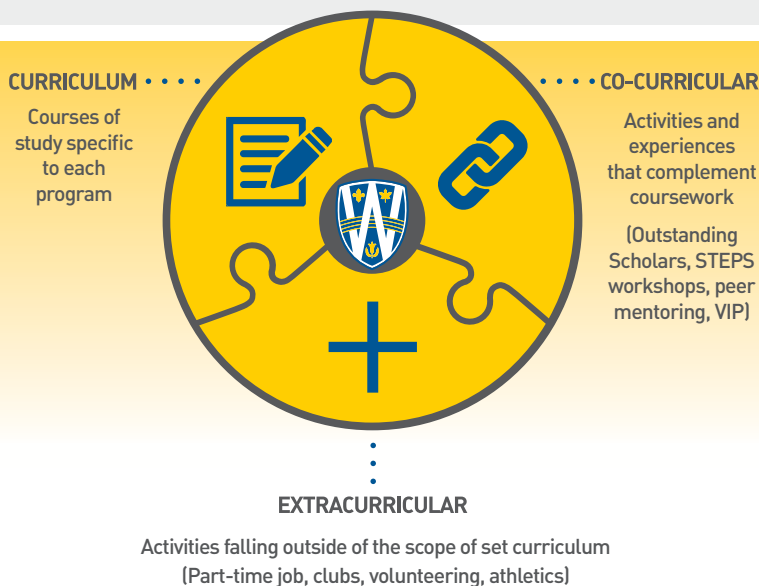
Computer Science (Applied Computing) (Co-op available)
Acquire progressive, innovative tools and technology in computing, practical experience in developing software systems and the IT skills valued by industry.

Computer Science (Software Engineering Specialization) (Co-op available) - You'll learn about specification design, coding and the testing of software.

Computer Information Systems (Co-op available) - Focus on the application of computer technology in industry and commerce.

FUNCTIONAL KNOWLEDGE

- Using existing computer programming languages to create content and solutions to problems
- Designing, adapting, and modifying computer programming languages, simulations, and systems analyses to address specific needs
- Thoroughly understanding the complex ways in which modern digital technologies store, transmit, and process information across networks
- Writing, debugging, and testing software programs
- Asking carefully selected, probing questions to troubleshoot confusing situations when presented with technical problems
- Concentrate acutely on detailed, context-specific textual information; maintaining focus and identifying discrepancies



BUILD YOUR SKILLS AND EXPERIENCE

Your UWindsor experience is more than attending classes. It is a combination of academics, co-curricular activities, and extracurricular involvement. By making the most of all three elements of your university experience, you will maximize your opportunities to build your skills, broaden your personal network, and clarify your long term academic and career goals.

CAREER PLANNING GUIDE

Intentional career planning will help you prepare for your next step after graduation. It is a fluid, dynamic, and continuous process, meaning you can move on or return to an earlier stage at any time. You can even work through simultaneous cycles, like one for your long-term dream job and another for a summer job.



Experience Map

HOW TO USE THIS GUIDE

This guide is meant to help you explore various opportunities throughout the course of your UWindsor experience. It is intended to help you link academics, co-curricular, extra-curricular and career planning activities by suggesting some of the options available to you. This is to help you see what you can do, rather than what you are required to do!

Academics



First Year

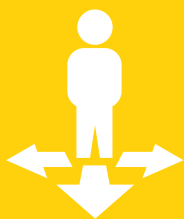
- Take required courses including Introduction to Algorithms and Programming I and II
- Review degree course requirements for all years of study
- Participate in our PASS program during UWindsor Welcome Week to be provided with the skills necessary to be successful as a Faculty of Science student
- Meet with a Computer Science academic advisor by e-mailing the department (csinfo@uwindsor.ca) for an appointment
- Meet with an upper-year Computer Science tutor <http://tutor.cs.uwindsor.ca/> for specific course help
- Receive peer mentorship from an upper-year MySci advisor

Experience



- Begin the process of becoming a LEAD Medallion Scholar and participate in credit and volunteer activities that provide you skills in **Leadership, Engagement, Application and Discovery** *
- Apply for a co-curricular experience such as the Volunteer Internship Program (VIP)*
- Be **Engaged** by volunteering in a lab to help with research for professors and graduate students*
- Participate in such local and regional programming competitions as the ACM-ICPC Regional Programming Competition and other various hackathons and online competitions
- **Discover** through research opportunities as part of the NSERC-USRA Awards and Outstanding Scholars program*
- Research student exchange and study abroad opportunities for middle years to gain a Global Perspective of Science (GPS)*
- Join such clubs as the Computer Science Society, Science Society, Students Offering Support or create your own Computer Science group

Career



- Create a list of things that you enjoy, areas in which you excel, and skills you have
- Meet with Career & Employment Services (CES) to develop a plan for your future years
- Consider taking an interest assessment to help you identify possible career paths
- Attend a CES workshop to learn how to find a summer or part-time job
- Become familiar with the mySuccess online job search tool
- Attend a CES resumé and cover letter workshop to get your resumé critiqued
- Begin creating your technical portfolio and Github

Middle Years

- Take required courses and check in with academic advisor to make sure you are on the right path
- Look into completing an undergraduate research project in final year★
- Begin taking courses to specialize in Artificial Intelligence, Game Development, Multimedia, or Networks and Security
- Consider applying for co-op option★
- Seek out internships and courses that offer field experience★
- Start taking courses required as pre-requisites for graduate/professional school
- Consider declaring a minor and/or specialization

- Join a professional association in your field such as the Canadian Association of Computer Science
- **Apply** your knowledge through a teaching assistant or tutor position within the School of Computer Science★
- Participate in UWill Discover undergraduate research conference★
- Earn while you learn by participating in the co-op program and work terms★
- Gain a Global Perspective of Science (GPS) through an international exchange or by studying abroad★
- Expand your skills by taking on a summer, part-time or volunteer position
- Gain valuable **Leadership** skills through roles within a club or society

- Research career fields and occupations that are of interest to you
- Explore opportunities and meet employers through a job fair or employer information session
- Attend the Graduate and Professional Schools Fair to explore further educational opportunities
- Analyze the requirements for graduate or professional schools of interest
- Make an appointment with Career & Employment Services to explore career options
- Create a LinkedIn profile and have it critiqued
- Apply for summer jobs and internships
- Take part in informational interviews through sources such as Ten Thousand Coffees

Final Year

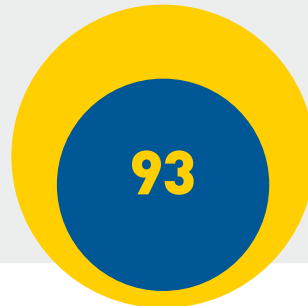
- Meet with faculty and academic advisor to go over degree requirements
- Complete all required courses in order to fulfill degree audit
- Apply to graduate through MyUWindsor Portal
- Undertake an undergraduate research project with faculty member★
- Complete courses in accordance with Certificate in Applied Information Technology
- **Apply** your knowledge through a field work, internship, or practicum course to culminate your senior experience★

- Complete final co-op work term in the field of Computer Science*
- Conduct field research with faculty member*
- **Discover** through summer internships at such companies as Google, Microsoft and Amazon
- Be **Engaged** through Service Learning opportunities with Let's Talk Science and Science Rendezvous*
- Become a tutor for Students Offering Support (SOS) or the School of Computer Science
- Become a MySci Advisor to provide academic support and mentorship for first-year students
- Complete LEAD Medallion Scholars in two areas for Bronze, three areas for Silver, four areas for Gold in accordance with **Leadership, Engagement, Application, Discover***
- Become a Computer Science tutor to help students with course material

- Apply to graduate or professional school
- Meet with Career & Employment Services to prepare application documents such as resume, cover letter, CV or personal statement
- Meet with Career & Employment Services to prepare such application documents as resumé, cover letter, CV or personal statement
- Set up a mock interview for professional school or job applications
- Book a one-on-one meeting with a career advisor to develop academic and career plan
- Meet employers and learn about local and global companies at our January Job Fair
- Compose a portfolio of relevant academic/work experience

LIFE AFTER GRADUATION

2016



Number of University of Windsor graduates from Computer Science in 2016.



COMMON INDUSTRIES FOR COMPUTER SCIENCE GRADUATES

- Academia
- Business: Technical sales, analysis
- Education: Teaching, coaching, training
- Information technology
- Research
- Software
- Telecommunications
- Web and eCommerce

CAREER TRACKS*

App developer	Development consultant	Policy analyst	Systems engineer
Budget analyst	Field service technician	Professor	Teacher
Computer programmer	Information specialist	Project lead	Technical analyst
Computing consultant	IT manager	Quality assurance engineer	Technical support
Data base administrator	Lawyer	Research and development	Video game developer
Design specialist	Marketing manager	Security technician	Visual technologist
Development analyst	Network administrator	Software developer	Web developer

* Additional education and/or training required for some of the above careers.

CAREER-READINESS COMPETENCIES



Critical Thinking and Problem Solving: Using strategic and creative thinking to make decisions and evaluate solutions

- Critically analyzing problems, thinking creatively, and making appropriate and technical sound decisions
- Applying prior knowledge/methodology to novel situations
- Adapting and modifying projects to deal with new information and/or unexpected circumstances



Teamwork and Collaboration: Working as a productive member of a group and collaborating with others to achieve set goals

- Leading and interacting with colleagues who reflect different backgrounds, learning styles, and approaches
- Overseeing contributions to a project; determining outcomes, planning details, delegating, and completing tasks
- Identifying one's ideal role and contributing to the team through leading, guiding, and motivating others



Professionalism and Work Ethic: Demonstrating personal management practices and a high level of integrity and ethical behaviour

- Working independently; self-motivating
- Working effectively in a high-pressure environment
- Identifying priorities and preferable courses of action to execute necessary tasks



Communication: Appropriate and effective articulation of ideas and information to a range of audiences

- Articulating and explaining technical information to others
- Summarizing, condensing, and organizing information
- Utilizing technical writing to convey the message of a broader piece of work



CAMPUS RESOURCES

- Visit **Leddy Library** and the **Writing Support Desk** on the main floor for help with academic assignments
- Improve study skills through the **Skills To Enhance Personal Success (STEPS)** program
- Discover ways to get involved on campus through the **Student Success and Leadership Centre**
- Explore mentorship opportunities through the **Connecting4Success (C4S)** and **Bounce Back** programs
- Apply to the **Volunteer Internship Program (VIP)** to get involved in the community
- Look into the **Work Study** program for on-campus employment opportunities
- Broaden your cultural awareness through the **International Student Centre** and **Student Exchange Office**
- Get assistance developing your career plan and job search skills from **Career & Employment Services**
- Consult with the **EPICentre** if you are interested in starting your own business
- Seek out assistance with academic accommodation from **Student Accessibility Services**
- Tend to your health and wellness with support from **Student Health Services, Lancer Recreation** and the **Student Counselling Centre**

Recruitment Office

Phone: 519-973-7014
Toll-Free: 1-800-864-2860
Email: info@uwindsor.ca

School of Computer Science

Phone: 519-253-3000, Ext. 2991
Email: csinfo@uwindsor.ca

Career and Employment Services

Phone: 519-253-3000, Ext. 3895
Email: careerservices@uwindsor.ca
experience.uwindsor.ca



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