WHAT CAN I DO WITH MY MAJOR IN

COMPUTER SCIENCE & SOFTWARE ENGINEERING

OVERVIEW OF MAJOR

Concordia University's Department of Computer Science and Software Engineering offers a Bachelor of/Baccalaureate in Computer Science and a BEng in Software Engineering. Co-operative education programs are available to a limited number of students. At the graduate level the University offers a Doctor of/Doctorate in Philosophy (Computer Science), Master of/ Magisteriate Science in Computer Science, Master of/ Magisteriate in Applied Computer Science, Master of/Magisteriate in Applied Science (Software Engineering), Master of/ Magisteriate in Software Engineering and a Graduate Diploma in Computer Science. For the latest information on programs, go to the Department of Computer Science & Software Engineering's website at
http://www.cse.concordia.ca

Working in Quebec normally requires registration with l'Ordre des ingénieurs du Québec (http://www.oiq.qc.ca), the professional corporation. Check with Engineers Canada at http://www.engineerscanada.ca for requirements in other provinces.

EXAMPLES OF JOBS ACQUIRED BY CONCORDIA GRADUATES

The following job titles are representative of the types of entry-level positions for which Concordia University students are qualified upon graduation. Note that the numbers following each job title refer to Canada's National Occupational Classification (NOC) code. For details on these titles go to http://www5.hrsdc.gc.ca/NOC/

- Assistant Web Master (2175)
- Computer Programmer (2174)
- Computer Systems Analyst (2171)
- Data Analyst (2172)
- Database Administrator (2172)
- Flash Programmer
- Game Programmer (2174)
- Graphic Designer (5241)
- Information Manager (0213)
- Information Systems Analyst (2171)
- IT Analyst (2171)
- Java Developer (2174)
- Junior Application Programmer (2174)
- Junior Programmer/ Developer (2174)
- Junior Software Developer (2174)
- Multimedia Programmer (2174)
- Network Administrator (2281)
- PHP Developer
- Programmer Analyst (2174)
- Quality Assurance Analyst (2171)
- Software Designer (2173)
- Software Engineer (2173)
- System Administrator (2281)
- Systems Analyst (2171)
- Systems Integration Engineer (2173)
- Systems Programmer (2174)
- Teacher (4131)
- Technical Support Specialist (6221)
- Technical Writer (5121)
- Test Engineer (2173)
- Web Developer (2175)
- Web Editor
- Web Programmer (2174)
- Web Site Designer (2175)

CELEBRATED MAJORS IN COMPUTER SCIENCE & SOFTWARE ENGINEERING

Mary Ellen Randall. Founder of Ascot Technologies.

Rasmus Lerdorf. Canadian Programmer. Author of PHP.

Bjarne Stroustrup. Developer of C++ Programming Language.

Nestor Burtnyk. Canadian Animator. Key-frame Animation Author.

James Arthur Gosling. Canadian Software Developer. Author of Java.

Alfred Vaino Aho. Canadian Computer Scientist. Co-Author of AWK PL

MORE JOB TITLES

The titles below are not meant to be exhaustive but are representative of fields which majors in Computer Science and Software Engineering pursue. Keep in mind that some occupations require further education (e.g., a higher degree, second degree, diploma). Note that the numbers following each job title refer to Canada's National Occupational Classification (NOC) code. For details on these titles go to http://www5.hrsdc.gc.ca/NOC/

- Accountant (1111)
- Application Developer (2174)
- Audio Programmer (5225)
- Auditor (1111)
- Bookkeeper (1231)
- Computer Operator (2281)
- Computer Scientist
- Content Creator
- Digital Artist (5241)
- Embedded Software Engineer (2173)
- Entrepreneur
- Information Systems Scientist
- Internet/Intranet Technologies
- Manager (0213)
- Media Developer (2174)
- Project Manager (0213)
- Purchasing Agent/ Vendor (6623, 1125)
- Records Clerk (1413)
- Researcher
- Software Developer (2174)
- Special Effects Programmer (2174)
- Theorist
- University Professor (4121)
- Webmaster (2175)

POTENTIAL WORK SETTINGS

Computer Science professionals typically work for software manufacturers, information technology consulting firms, information technology research and development firms and in information technology units in private and public sectors. To research specific employers who hire those in the field, there are many resources available in such locations as the Career Resource Centre, the Webster Library, Vanier Library and the Internet.

- Aerospace Industry
- Airports
- Banks
- City Planning Firms
- Commercial Houses
- Computer System Design Industry
- Corporations
- Data Warehouses
- Education
- Electronics Industry
- Engineering Industry
- Entertainment and Media
- Factories and Plants
- Film Industry
- Financial Institutes
- Government Offices
- Graphic Studios
- Hospitals
- Industrial Research Centers
- Insurance Companies
- Media
- Medicine
- Meteorological Centers
- Military
- Multimedia Studios
- Newspapers/ Magazines
- Non-profit Organizations
- Private For-profit Sector
- Production Houses
- Research Organizations
- Scientific Laboratories
- Software Houses
- Stores/ Shopping Malls
- Telecommunications Industry
- Television Industry

SKILLS AND CHARACTERISTICS

Computer Science professionals require strong computer science, mathematical, problem solving and analytical skills; they should have good communication and team playing skills. In addition, students will find the following skills, interests, values and other characteristics valuable for succeeding in the field.

- Ability to Work Independently
- Active Learning
- Critical Thinking
- Decision Making
- Good Observation
- Instructing/ Teaching Skills
- Interpersonal Skills
- Logical Thinking
- Memorization
- Near Vision
- Negotiation
- Oral Comprehension
- Organizational Skills
- Patience
- Perseverance
- Persuasion
- Responsibility
- Self-confidence
- Service Orientation
- Social Perceptiveness
- Speed of Closure
- Technology Know-how
- Time Management Ability
- Troubleshooting
- Wrist-finger Speed

PROFESSIONAL ASSOCIATION AND OTHER LINKS

Making wise career decisions requires exploring your field. A multitude of Internet sites and other resources will help you do this to the best of your ability. Professional association sites, in particular, are very useful for their career descriptions and job hunting tips. Moreover, these authoritative sites frequently provide links to Internet sites which announce job openings and list potential employers. A few recommended sites are included below.

CANADIAN

Engineers Canada
http://www.engineerscanada.ca
Provides links to engineering organizations worldwide. Click on Quick Links to uncover Roadmap to Engineering which includes Immigrate to Canada.

Canadian Information Processing Society (CIPS)
http://www.cips.ca
Click IT Jobs Board at top for positions advertised in your field. Click Provinces & Sections under About CIPS for Quebec division activities and help with your career planning.

Information Technology Association of Canada
http://itac.ca
Explore trends in your field by clicking on News/Media.

INTERNATIONAL
Association for Computing Machinery
http://www.acm.org
Association aims to advance computing as a profession. Try Career and Job Center to connect with potential employers and learn more about job hunting.

National Society of Professional Engineers
http://www.nspe.org/
Try Career Center for the following sections: Job Board, Salary Info, Mentoring Programs and Resume Services.

CREATE YOUR AMAZING CAREER – CAREER RESROUCE CENTRE TITLES

For those who need more help with their career and educational planning, the Career Resource Centre (CRC) offers books, pamphlets, DVDs and recommended Internet sites. It is located in the Hall Building, H-440, at 1455 de Maisonneuve Blvd. West. The following titles are just a few of the titles available in the CRC.

- Ace the IT Interview
- Ace the Programming Interview
- Being Geek: The Software Developer's Career Handbook
- Career Opportunities in Computers and Cyberspace
- Career Opportunities in the Internet, Video Games, and
- Multimedia
- Career Success in Engineering
- Careers in Engineering and IT
- Careers in the Gaming Industry (DVD format)
- Computer Science Resumes and Job-finding Guide
- Consulting Careers in Engineering and IT (DVD format)
- Fast-Tracking Your Career: Soft Skills for Engineering and IT
- Professionals
- Get in the Game! Careers in the Game Industry

CON'T. – CREATE YOUR AMAZING CAREER
CAREER RESROUCE CENTRE TITLES

- Great Jobs for Computer Science Majors
- Great Jobs for Engineering Majors
- Land the Tech Job You Love
- Les Carrières du jeu électronique
- Making It Big in Software
- The Nomadic Developer
- The Passionate Programmer
- Programming Interviews Exposed
- Ready for Takeoff! A Winning Process for Launching Your
- Engineering Career
- Real Resumes for Computer Jobs
- Real Resumes for Engineering Jobs
- So You Want to Be an Engineer?
- 21 Things Every Future Engineer Should know