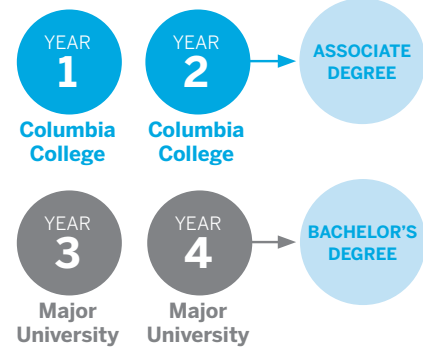# Computer Science Concentration

An Associate Degree is equivalent to the first two years of a four-year university degree. Universities in British Columbia will guarantee 60 transfer credits to holders of an Associate Degree. Students must meet the grade point average (GPA) established by each university for admission.

YEAR 1 — Columbia College
YEAR 2 — Columbia College → **ASSOCIATE DEGREE**
YEAR 3 — Major University
YEAR 4 — Major University → **BACHELOR'S DEGREE**

Program Overview

- The Associate of Science Degree in Computer Science provides students with knowledge of the principles and science that underlie computing. It also prepares students to pursue a Bachelor's degree in Computer Science or a related field.
- Students will build a solid foundation in computer systems, software engineering, foundational programming, web development and systems design.
- Graduates will acquire working knowledge of computer architecture and data science.
- Students will gain practical skills in solving computing problems of our digital age through the use of mathematics.
- Students will be taught to program and innovate software catering to modern technology and design.

Skills Gained

- Strong knowledge of designing, developing, and maintaining various software systems.
- Practical knowledge of teamwork and product development.
- Variety of employable skills ranging from web development to software engineering.
- Working knowledge of the creation of hardware architecture and data analysis.

Accelerated Associate Degree: Tri-mester system

Students benefit from the tri-mester system with intakes in January, May, and September. This means students can take more courses over a 12-month period and can complete an Associate Degree in 16 months or two years.

School System	Semester 1					Semester 2					Semester 3					Semester 4			
	Sept	Oct	Nov	Dec	3-4 week break	Jan	Feb	Mar	Apr	3-4 week break	May	Jun	Jul	Aug	3-4 week break	Sept	Oct	Nov	Dec
Trimester Fast Track: 16 months	4 COURSES					4 COURSES					4 COURSES					4 COURSES			

Students take a minimum of 3 and a maximum of 5 courses per semester.
Students who do not wish to accelerate can complete an Associate Degree in 2 years.

Columbia College
Established 1936

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Computer Science Concentration

Program Curriculum Framework

Must include: All requirements of an Associate of Science Degree

20 courses (minimum 60 credits) of 1st & 2nd year courses, to include at least 6 courses (minimum 18 credits) at the 2nd year level, taken in two or more subject areas.

1st year courses	Three 2nd year Computer Science courses
CSCI 120 Introduction to Computer Science and Programming I	CSCI 225 Data Structures and Programming
CSCI 125 Introduction to Computer Science and Programming II	CSCI 250 Introduction to Computer Architecture
CSCI 150 Introduction to Digital and Computer System Design	CSCI 275 Software Engineering
MATH 113 Calculus I	
MATH 114 Calculus II	
MATH 120 Discrete Mathematics I	

Career Possibilities

INTERACTIVE & DIGITAL MEDIA
- Web Technician
- Designer
- App Developer
- Information Systems Analyst
- Systems Security Analyst

DATA & INFORMATION PROCESSING
- Data Analyst
- Database Designer
- Data Research Specialist
- Information Resource Analyst

IT ENGINEERING & OTHER TECHNICAL SERVICES
- Software Engineer
- Cloud Engineer
- Computer Systems Analyst
- IT Analyst

INFORMATION & COMMUNICATIONS TECHNOLOGY
- Software Developer
- Application Programmer
- Computer Programmer
- Business Application Programmer

* Average estimated starting salary for underlined these listed jobs in Canada

$41,600 - $65,000

(Labour Force Survey/Statistics Canada)

Approximately **748,500** job openings in British Columbia within the next 10 years will require some form of post-secondary education.

(British Columbia Labour Market Report Outlook: 2023 Edition, p. 4)

#1 in Canada, B.C has the highest salary increase for 2023 for all industries compared to all over provinces.

(www.hrreporter.com)

Who should apply?

Students who:

- wish to develop and evolve around new age technologies.
- are determined to increase their knowledge base of Computer Science.
- have a strong interest in technology and plan on working in an ever-changing industry.

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