



Bachelor of Science (B.Sc.) in Applied Computer Science



Welcome (back) to BCIT

You have made the exciting decision to pursue your education at BCIT and we are thrilled to have you.

BCIT has many free services available for all students on all campuses to help students succeed.

Welcome to the BCIT Community!



The British Columbia Institute of Technology acknowledges that our campuses are located on the unceded traditional territories of the Coast Salish Nations of *Skwxwú7mesh* [Squamish], *səlilwətaʔ* [Tsleil-Waututh], and *xwməθkwəyəm* [Musqueam].

BScACS Contacts

Maryam Tanha

Program Head – Student Success

Burnaby Campus SW2-121

Email: mtanha@bcit.ca

Meetings by appointment via Teams. Contact Maryam for advice or help with academic issues.

Mirela Gutica

Program Head – Curriculum

Burnaby Campus SW2-127

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Michal Dziubek

Program Coordinator, CST Bachelor of Technology

Email: compbsc@bcit.ca

Contact Michal for help with administrative requests.

Delivery – BSc Full-time

Fall 2024 – In-person

- Lectures and labs will take place in-person, and you will collaborate with your classmates and engage with your instructor in real time.
- Attendance is mandatory.

Program Structure

Full-time intake: two sets every September, one set every January

Term 5: September 3, 2024 - December 13, 2024

Term 6: January 6, 2024 - April 17, 2024 (**no Spring Break**)

Term 7: September 2025 - December 2025

Exact start and end dates will be finalized later.

Term 8: January 2026 to April 2026 (**no Spring Break**)

Exact start and end dates will be finalized later.

Curriculum

- Fewer classes and less class time than CST diploma, but the technical material is much more in depth.

- Courses are organized into:
 - Core Courses (29 credits)
 - Specialized Courses (15 credits)
 - Major Project courses (6 credits)
 - Required Core General Education Courses (6 credits)
 - General Education Electives (9 credits)
 - Co-op work term courses (we will have an info session in Oct or Nov 2024)

Total of 65 credits.

Curriculum – Technical

Core Courses:

COMP 7003, COMP 7012, COMP 7035, COMP 8042,
COMP 7082, COMP 8082, COMP 8085, MATH 7908,
MATH 7808 (total of 9 courses)

Three Specializations (aka Options):

Network Security Applications Development – 5 courses

Games Development – 5 courses

Database – 5 courses

**A minimum passing grade of 60% is required for all
COMP 7000 and 8000 level courses.**

Major Project

- COMP 8800 – Major Project 1 (3 credits)
- COMP 8900 – Major Project 2 (3 credits)
- Individual project (no groups).

Curriculum – Network Security

- Network Security Applications Development
 - Option head: D’Arcy Smith (darcy_d_smith@bcit.ca)

Term	Code	Number	Course Name	Credits	Prerequisites
5	COMP	7003	Introduction to Information and Network Security	3	meet BSc entry requirements
5	COMP	7005	Computer Networks and Protocols	3	meet BSc entry requirements
5	COMP	7035	Operating Systems	3	meet BSc entry requirements
5	COMP	7082	Software Engineering	3	meet BSc entry requirements
5	MATH	7808	Calculus for Computing	4	meet BSc entry requirements
6	COMP	8003	Network Security Administration	3	COMP 7003
6	COMP	8042	Advanced Algorithms and Data Structures Design and Analysis	3	MATH 7908 [†] and MATH 7808 [†] ([†] may be taken concurrently)
6	COMP	8082	Project Management	3	COMP 7082
6	LIBS	7001	Critical Reading and Writing	3	meet BSc entry requirements
6	MATH	7908	Linear Algebra and Applications for Computing	4	meet BSc entry requirements
7	COMP	7402	Topics in Computer Programming - Cryptology	3	meet BSc entry requirements
7	COMP	8005	Network and Security Applications Development	3	COMP 7003 and COMP 7005 and COMP 8800 [†] ([†] may be taken concurrently)
7	COMP	8085	Artificial Intelligence	3	COMP 8042
7	COMP	8800	Major Project 1	3	COMP 8082 and LIBS 7001 and at least one 8000 level specialty course.
7	LIBS	7002	Applied Ethics	3	meet BSc entry requirements
8	COMP	7012	Interaction Design	3	meet BSc entry requirements
8	COMP	8505	Special Topics in Network and Security Development	3	COMP 7402 and COMP 8005
8	COMP	8900	Major Project 2	3	COMP 8800
7		XXXX	General Education Elective	3	
8		XXXX	General Education Elective	6	

Curriculum – Games Development

■ Games Development

➤ Option head: Borna Nouredin (borna_nouredin@bcit.ca)

Term	Code	Number	Course Name	Credits	Prerequisites
5	COMP	7035	Operating Systems	3	meet BSc entry requirements
5	COMP	7051	Introduction to Computer Games Development	3	meet BSc entry requirements
5	COMP	7082	Software Engineering	3	meet BSc entry requirements
5	COMP	7903	Games Design Fundamentals	3	meet BSc entry requirements
5	MATH	7808	Calculus for Computing	4	meet BSc entry requirements
6	COMP	7905	Art in Game Development	3	COMP 7051 and COMP 7903
6	COMP	8042	Advanced Algorithms and Data Structures Design and Analysis	3	MATH 7908 [†] and MATH 7808 [†] ([†] may be taken concurrently)
6	COMP	8051	Advanced Games Architecture	3	COMP 7051
6	COMP	8082	Project Management	3	COMP 7082
6	MATH	7908	Linear Algebra and Applications for Computing	4	meet BSc entry requirements
7	COMP	7003	Introduction to Information and Network Security	3	meet BSc entry requirements
7	COMP	8085	Artificial Intelligence	3	COMP 8042
7	COMP	8552	Advanced Games Programming Techniques	3	COMP 8051 and COMP 7035
7	COMP	8800	Major Project 1	3	COMP 8082 and LIBS 7001 and at least one 8000 level specialty course.
7	LIBS	7001	Critical Reading and Writing	3	meet BSc entry requirements
7	LIBS	7002	Applied Ethics	3	meet BSc entry requirements
8	COMP	7012	Interaction Design	3	meet BSc entry requirements
8	COMP	8900	Major Project 2	3	COMP 8800
8		XXXX	General Education Elective	9	

Curriculum – Database

■ Database

➤ Option head: Tejinder Randhawa (tejinder_randhawa@bcit.ca)

Term	Code	Number	Course Name	Credits	Prerequisites
5	COMP	7003	Introduction to Information and Network Security	3	meet BSc entry requirements
5	COMP	7035	Operating Systems	3	meet BSc entry requirements
5	COMP	7071	Database Design	3	meet BSc entry requirements
5	COMP	7082	Software Engineering	3	meet BSc entry requirements
5	MATH	7808	Calculus for Computing	4	meet BSc entry requirements
6	COMP	7171	Database Applications Development and Optimization	3	COMP 7071
6	COMP	8042	Advanced Algorithms and Data Structures Design and Analysis	3	MATH 7808 [†] and MATH 7908 [†] ([†] may be taken concurrently)
6	COMP	8071	Data Warehousing	3	COMP 7071
6	COMP	8082	Project Management	3	COMP 7082
6	MATH	7908	Linear Algebra and Applications for Computing	4	meet BSc entry requirements
7	COMP	8085	Artificial Intelligence	3	COMP 8042
7	COMP	8171	Database Systems Security	3	COMP 7071 and COMP 7171
7	COMP	8575	Data Mining and Analytics	3	COMP 8071, MATH 7808 and MATH 7908
7	COMP	8800	Major Project 1	3	COMP 8082 and LIBS 7001 and at least one 8000 level specialty course.
7	LIBS	7001	Critical Reading and Writing	3	meet BSc entry requirements
7	LIBS	7002	Applied Ethics	3	meet BSc entry requirements
8	COMP	7012	Interaction Design	3	meet BSc entry requirements
8	COMP	8900	Major Project 2	3	COMP 8800
8		XXXX	General Education Electives	9	

Curriculum – Non technical

Core General Education:

- LIBS7001 (Critical Reading and Writing)
- LIBS7002* (Applied Ethics)

General Education electives:

- e.g., LIBS 7008 (Logic and Practical Reasoning) and LIBS 7027 (Selected Topics)

*Students who have completed the Computer Systems Technology (CST) Diploma are exempt from taking LIBS 7002 Applied Ethics since they have already taken the equivalent course, LIBS 7102 Ethics for Computing Professionals.

Student Resources & Links



Set Reps

- the voices of their sets (*Games/Network*)
- gather issues from students or instructors and bring them to meetings with the SA
- elected by each set in the classroom.

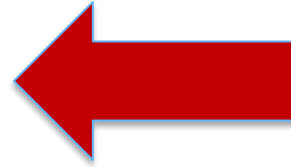


Please vote for your Set Rep.

Important Stuff

Contacting us/other BCIT depts.

- Full Name & ID & Option ***



Processes

- BCIT ♥ forms
 - e.g. course withdrawals, course credit, graduation

MyBCIT, the Learning Hub, & the BCIT website

- schedule, grades, official communication, course info

The Commons Pages

Important Stuff

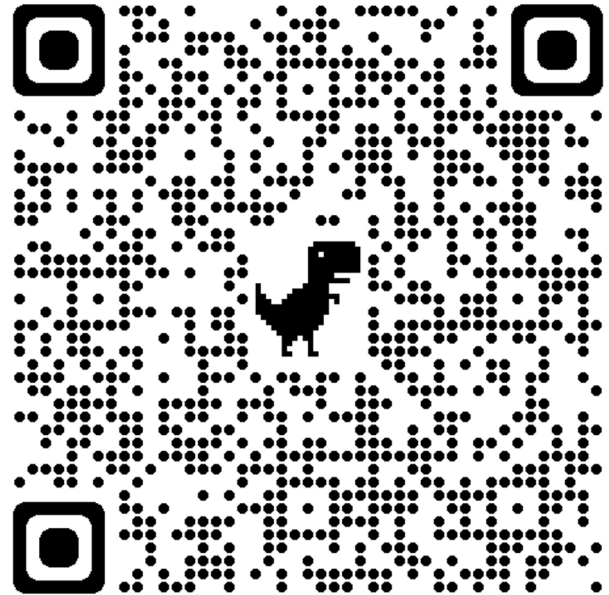
ID Card

- Can order online or in-person, but pick up in-person with ID
- Need for lab access

Dates & Deadlines

- Note important academic events and deadlines
 - e.g. course withdrawals, tuition due, midterms/finals
 - see Computing Calendar & BCIT website

QR code to BCIT's English Language Support Services



LINKS

Were you elected to be a Set Rep?

<https://www.bcitsa.ca/Leadership/>

Student Services at BCIT

<https://www.bcit.ca/student-services/support-your-own-success/student-success-hub/>

The BCIT Student Association (SA)

<https://www.bcitsa.ca/>

Alumni Perks

<https://www.bcit.ca/alumni/enjoy/bcit-alumni-card-perks/>

LINKS

The Commons ***

<https://commons.bcit.ca/computing/>

Need a Student ID Card?

<https://www.bcit.ca/card/>

U-Pass – a student transit program

<https://www.bcit.ca/u-pass/>

Academic Dates & Deadlines

<https://www.bcit.ca/academic-dates/>

QUESTIONS & ANSWERS

THANK YOU