

BCIS – Computer Information Systems 2022-23

✓	YEAR ONE - Fall	✓	YEAR ONE - Winter
	COMP 1501 - Programming I (or COMP 1631 - Introduction to Computer Science)		COMP 1502 - Programming II
	HRES 2170 – Introduction to Human Resources		COMP 2511 - Web I: Client Development
	GNEED Foundation Cluster 1: one of GNEED 1101 or GNEED 1103		MATH 1505 - Puzzling Adventures in Mathematics
	GNEED Foundation Cluster 3: one of GNEED 1301, 1303, or 1304		MGMT 3210 - Business Communication (<i>prereq is GNEED 14XX</i>) ¹
	GNEED Foundation Cluster 4: one of GNEED 1401, 1403 or GNEED 1404 ¹		MKTG 2150 - Introduction to Marketing or LSCM 2201 - Introduction to Logistics & Supply Chain Management

Many courses are prerequisites for upper year courses. Check prerequisites at <http://catalog.mtroyal.ca/>

✓	YEAR TWO - complete the following courses*
	COOP 0001 - Orientation to Cooperative Education - <i>Fall</i>
	COMP 2503 - Programming III: Data Structures
	COMP 2521 - Database I: Data Modelling & Query Languages
	COMP 2531 - Computer Architecture and Operating Systems
	COMP 2541 - Systems Analysis (<i>note prereqs</i>)
	ACCT 2121 - Financial Accounting Concepts
	MGMT 2130 - Mgmt Principles & Practices or ENTR 2301 - Innovation & Entr. Experience or SINV 2201- Intro to Social Innovation
	GNEED Foundation Cluster 2: one of GNEED 1201, 1202, or 1203
	GNEED Tier 2 Cluster 1:
	GNEED Tier 2 Cluster 2, 3, or 4: <i>no more than one from each cluster</i>
	GNEED Tier 2 any Cluster not yet taken: <i>no more than one from each cluster</i>

*The *Fall/Winter* notations indicate when you should be planning to take core courses. Core courses may have prerequisites that need to be completed in a particular sequence to avoid delays in graduation. In addition, some courses are only offered in one semester. If there is no notation, the course should be completed in year two but may be offered in either semester. It is your responsibility to plan your schedule and make sure that you are meeting necessary requirements. Consult with your advisor if you are uncertain or require clarification.

YEAR THREE - complete the following courses			
✓	CORE course requirements:	✓	General Education:
	COMP 3512 - Web II: Web Application Development		GNEED Tier 3 ²
	COMP 3532 - System Admin & Maintenance - <i>Fall</i>		GNEED Tier 3 ²
	COMP 3533 - Network Infrastructure – <i>Winter (note prereq)</i>		GNEED Tier 3 ²
	COMP 3309 – Information Technology & Society		² Take two GNEED Tier 3 courses from a minimum of two different clusters, take the third GNEED Tier 3 course from any cluster.
	Approved Senior Business Option		
	Approved Senior CS Option		
	Approved Senior CS/Business Option		

YEAR THREE - Spring/Summer*	
	COMP 3591 – Mandatory Work Experience

As you plan your courses be sure you are checking prerequisites at <http://catalog.mtroyal.ca/>

Approved Senior Options are listed on the right margin of this page

*This 4 month work term can take place after your second OR third year of study.

YEAR FOUR- complete the following courses			
✓	CORE course requirements:	✓	Electives:
	COMP 4543 - Project Management & Quality Assurance		Elective course
	Approved Senior CS Option:		Elective course
	Approved Senior CS Option:		Elective course
	Approved Senior CS Option:		Elective course
	Approved Senior CS Option:		
	Approved Senior CS/Business Option:		

To properly plan your courses, semesters and degree program please check with the departments directly for an indication of when a course is *normally* offered, some courses are only offered once per year.

PLEASE READ:

Prerequisites and course descriptions: can be found in the Academic Calendar under the 'courses' link at <https://catalog.mtroyal.ca/>

General Education: General Education courses are designed to give you a well-rounded knowledge base and are organized into 4 thematic clusters. Each Cluster has 3 levels: tier 1 (foundation), tier 2 and tier 3.

Cluster 1: Numeracy & Scientific Literacy
Cluster 2: Values, beliefs & Identity
Cluster 3: Community & Society
Cluster 4: Communication

Students must take a foundation level course from each of the four clusters, three tier 2 GNEEDs (one MUST be from Cluster 1), and three tier 3 GNEEDs from at least two clusters, for a total of 10 GNEED courses. Visit mru.ca/gned for more information and a list of GNEED courses.

Junior courses are courses at the 1000 level. Students are allowed a maximum of 16 junior courses for graduation.

BCIS students must obtain a minimum grade of C- in all COMP prefix courses used to satisfy program major requirements.

Electives are any 3-credit course that is not required in the major or GNEED components. It is advised that courses from the 2XXX+ are chosen as electives to avoid exceeding the junior limit

COOP/Work Experience: Students must complete the Orientation to Co-operative Education course (COOP 0001) prior to the mandatory work term. To be eligible for a work term students must have completed the prerequisite courses and must obtain a minimum cumulative GPA. For additional information, please contact Robin Filmer, Work Experience Coordinator at rfilmer@mtroyal.ca or 403-440-6844.

Advising Plan: This is a suggested sequence for taking the required courses for your major. This plan factors in prerequisite requirements and will allow you to complete your degree in four years, provided you complete 5 courses per semester. This is just one example of how you can complete your degree requirements; you may find that a different sequence or smaller course load works better for you. To be considered full time, a student must be enrolled in a minimum of three, 3-credit courses.

Approved Senior CS Options, choose four:
COMP 3504 - Programming IV: Software Engineering
COMP 3551 - GUI Development
COMP 3505 - Software Testing
COMP 3523 - Applied Machine Learning
COMP 3654 - Usable Privacy and Security
COMP 4513 - Web III: Advanced Web Development
COMP 4522 – Database II: Advanced Databases
COMP 4535 - Computer Security
COMP 4545 - Information Systems Organization
COMP 4555 - Games Development
COMP 5590 - Senior Project

Approved Senior Business Options, choose two:
All students must complete two (2) Approved Senior Business Options as part of their requirements. Students may choose any 3000-level or higher course offered by the Bissett School of Business.

Senior Business or CS Options, choose two:
All students must complete two (2) additional approved senior options. Students can choose from the list of approved computer science options above or from any 3000-level or higher course offered by the Bissett School of Business.

This document is only intended to be a guide for students and should be used together with the Mount Royal University Academic Calendar which states academic policies and degree requirements. Be sure to consult with your Academic Advisor to confirm graduation requirements of if you have any questions at scitechadvising@mtroyal.ca