

2021-22 Integrated Mathematics & Computer Science

Year 1	CSCI 1030U – Introduction to Computer Science	CSCI 1060U – Programming Workshop I	MATH 1000U – Introductory Calculus OR MATH 1010U – Calculus I	PHY 1030U – Introductory Physics OR PHY 1010U – Physics I	Elective*
	CSCI 1061U – Programming Workshop II	MATH 1020 – Calculus II	MATH 2050U – Linear Algebra	PHY 1020 – Physics II	Elective*
Year 2	CSCI 2000U – Scientific Data Analysis	CSCI 2010U – Data Structures	CSCI 2110U/ MATH 2080U – Discrete Mathematics	MATH 2015U – Calculus III	STAT 2010U – Statistics and Probability for Physical Science
	CSCI 2020U – Software Systems Development and Integration	CSCI 2040U – Software Design and Analysis	CSCI 2072U/ MATH 2072U – Computational Science I	MATH 2055U – Adv. Linear Algebra and Applications	MATH 2060U – Differential Equations
Year 3 & 4 (60 credit hours)	CSCI 3070U – Analysis and Design of Algorithms		CSCI 4040U – Ethics, Law and the Social Impact of Computing		MATH 3060U – Complex Analysis
	IMCS 3010U – Integrated Application Project I		IMCS 3020U – Integrated Application Project II		Senior Mathematics Elective**
	Senior Mathematics Elective**		Senior Mathematics Elective**		Senior Mathematics Elective**
	Senior Computer Science Elective**		Senior Computer Science Elective**		Senior Computer Science Elective**
	Senior Computer Science Elective**		Elective*		Elective*
	Elective*		Elective*		Elective*
	IMCS 4410U – Integrated Mathematics and Computer Science Thesis Project I		IMCS 4420U – Integrated Mathematics and Computer Science Thesis Project II		

No more than 42 credit hours may be taken at the first-year level.

7 total electives*

2 Science – outside of Computer Science and Mathematics (CSCI, MATH, STAT):

- 1)
- 2)

4 Non-Science – including 1 BUSI elective and 1 COMM elective:

- 1)
- 2)
- 3)
- 4)

1 General - Science or Non-science (not CSCI or MATH):

- 1)
- 2)

2020-21 Computer Science - Comprehensive

Business Electives:

BUSI 1020U – Business Communications
BUSI 1600U – Management of the Enterprise
BUSI 1700U - Introduction to Entrepreneurship
BUSI 2000U – Collaborative Leadership

Communication Electives:

COMM 1050U – Technical Communications
COMM 1100U – Introduction to Communication Studies
COMM 2311U – Writing and Publishing in the Digital Age
COMM 1320U – Public Speaking
COMM 2620U – Interpersonal Communication

****Senior Computer Science and Senior Mathematics Electives**

Students must complete a total of **8 courses** such that the following elective requirements are satisfied:

- **4 Senior Computer Science electives** (or in Mathematics courses from the following list+).
 - +Also eligible as Senior Computer Science electives:
 - MATH 4020U – Computational Science II
 - MATH 4041U – Topics in Applied Mathematics I
 - MATH 4042U – Topics in Applied Mathematics II
 - **Only 1 MATH** may be applied toward the Senior Computer Science elective requirement, and may not be double counted toward any other elective requirement.
 - A Senior Computer Science elective is defined as a 3000- or 4000-level Computer Science course.

- **4 Senior Mathematics electives** (or in Computer Science courses from the following list ++)
 - ++Also eligible as Senior Mathematics electives:
 - CSCI 3010U – Simulation and Modelling
 - CSCI 4050U – Machine Learning, Theory and Application
 - **Only 1 CSCI** course may be applied towards the Senior Mathematic elective requirement, and may not be double counted toward any other elective requirement.
 - A Senior Mathematics elective is defined as a 3000- or 4000-level Mathematics course.