



Name:	TRU#
Advisor:	Date:
Major: COMPUTING SCIENCE & MATH	Minor:

Bachelor Of Science COMPUTING SCIENCE & MATHEMATICS MAJOR Checksheet (120 credits)

1000-Level CORE courses (27-30 credits)		2000-Level CORE courses (30 credits)		3000/4000-Level CORE courses (48 credits)		
COURSE	GRADE	COURSE	GRADE	3000/4000 Level COMP requirements (24 credits)		
ENGL 1100 or 1110 ¹		COMP 2160 - Mobile Application Development		COURSE	GRADE	
ENGL 1100 ,1110, 1120, 1140 or 1210 ¹		COMP 2230 – Data Structures, Algorithm Analysis		COMP 3450 – Human-Computer Interaction Design		
		COMP 2680 - Web Site Design and Development		COMP 3520 - Software Engineering		
COMP 1130 - Computer Programming 1		COMP 2920 - Software Architecture and Design		COMP 4910 - Computing Science Project		
COMP 1230 – Computer Programming 2		MATH 2110 – Calculus 3		COMP 4930 - Professional and Ethical Issues		
MATH 1140 – Calculus 1		MATH 2120 - Linear Algebra 1		3000/4000 COMP elective		
MATH 1240 – Calculus 2		MATH 2240 - Differential Equations		3000/4000 COMP elective		
MATH 1700 – Discrete Mathematics		MATH 2700 - Discrete Mathematics 2		3000/4000 COMP elective		
CHEM 1500 – Chemical Bonding & Organic Chem		STAT 2000 - Introduction to Statistics		3000/4000 COMP elective		
PHYS 1100 or 1150		CMNS 2290 or 2300 ¹		3000/4000 Level MATH requirements (24 credits)		
1 of BIOL 1110 or 1210 Or GEOL 1110 or 2050		ELECTIVES 1000-4000 level (12-15 credits)		MATH 3510 - Problem Solving & Applied Math		
		Non-science elective ²		MATH 4430 - Introduction to Graph Theory		
Notes: 1. Students with a B or better in ENGL 1100 or 1110 may proceed into CMNS 2290 or 2300 in their second year; students with less than a B in first year English must take another 3 credits of 1000-level English before their second year CMNS requirement. 2. Electives must include 9-12 credits in at least two disciplines outside of science (other than English). The remaining elective credits may be chosen from any discipline.		Non-science elective ILO ^{2, 3}		MATH Electives		
		Non-science elective ILO ^{2, 3}		Choose 4 of the following: MATH 3000 or MATH 3070 or MATH 3170 or MATH 3220 or MATH 3400 or MATH 3650		
		Elective in lieu of 2 nd ENGL ¹		MATH elective		
		Indigenous Knowledge ILO ^{2, 3}		MATH elective		
		3. Institutional Learning Outcomes (ILO) electives: <ul style="list-style-type: none"> ▪ 3 credits must be either Lifelong Learning or Social Responsibility ILO ▪ 3 credits must be either Knowledge or Critical Thinking ILO ▪ 3 credits must be Indigenous Knowledge & Ways ILO 		MATH elective		
				MATH elective		
				MATH elective		
				3000/4000 MATH or STAT		
				3000/4000 MATH or STAT		

KEEP IN MIND

Course Load: Transitioning to university can be challenging and many students choose to take a lighter course load. Please speak with Academic Advising to discuss sequencing and workload.
Resources: See the current [Academic Calendar](#) for more about the program requirements. Find more in the [Course Schedule](#) about course prerequisites, co-requisites and course times.

1st and 2nd year SCIENCE COURSE SEQUENCE

FALL SEMESTER ONLY	WINTER SEMESTER ONLY
BIOL 1110	BIOL 1210
CHEM 1500	CHEM 1510 or 1520
CHEM 2120	CHEM 2220
COMP 1130	COMP 1130
COMP 1230	COMP 1230
All 2000 level COMP	All 2000 level COMP
MATH 1140	MATH 1140
MATH 1150	MATH 1250
MATH 1240	MATH 1240
MATH 1700	MATH 1700
MATH 2110	MATH 3170
MATH 2120	MATH 2120
MATH 2700	MATH 2240
STAT 2000	
PHYS 1100 or 1150	PHYS 1200 or 1250

INSTITUTIONAL LEARNING OUTCOMES

To graduate from a TRU Bachelor degree, students may be required to satisfy 8 Institutional Learning Outcomes (ILO) plus a Capstone course. (27 credits).

To find out if these requirements apply to you, please refer to DegreeWorks (available through [myTRU](https://mytru.ca)) or contact your Program Advisor (BscAdvising@tru.ca) for more information.

If you are required to satisfy the ILO's, you must have courses that meet the following requirements:

- 1 course for each of the eight Institutional learning outcomes
- Of those 8 courses, a minimum of 4 (1 in each theme) must be outside the discipline.
- Of those 8 courses, one must also be designated as high impact.
- You must also complete the Capstone course in the final 30 credits of your study.

	Institutional Learning Outcome	Course	Inside or Outside?	High Impact?
Connection	Communication	ENGL 1100 or 1110	Outside	
	Teamwork	COMP 3520	Inside	
Engagement	Lifelong Learning			
	Social Responsibility			
Exploration	Knowledge			
	Critical Thinking			
Local-to-Global	Indigenous Knowledges & Ways		Outside	
	Intercultural Awareness	COMP 3450	Inside	
	Capstone	COMP 4910	Inside	

How do I search for an ILO course?

Visit the [course schedule](#) and select a term. On the following screen, click the Attribute box and select an ILO.