



GUIDELINES FOR BACHELOR OF SCIENCE COMPUTING SCIENCE MAJOR

HIGH SCHOOL PREREQUISITES

ENGLISH			
IF YOU TOOK	YOUR GRADE		CHOOSE
English Studies 12 or English First Peoples 12 or	73% or higher	→	ENGL 1100 (recommended) or ENGL 1110 or ENGL 1120 or ENGL 1140 or 1150 or ENGL 1210
ESAL 0570 and 0580 or	65% or higher		
ENGL 0600 or ENGL 0620	65% or higher		
English Studies 12 or English First Peoples 12	Below 73%	→	ACCUPLACER Assessment or ENGL 0600 or 0620
BIOLOGY			
IF YOU TOOK	YOUR GRADE		CHOOSE
Life Sciences 11 or Biology 11 or Anatomy & Physiology 12 or Biology 12 AND Chemistry 11	67% or higher	→	BIOL 1110 AND 1210
Life Sciences 11 or Biology 11	Below 67%	→	BIOL 0500
IF YOU NEED			
Life Sciences 11 or Biology 11		→	BIOL 0500
Chemistry 11		→	CHEM 0500
CHEMISTRY			
IF YOU TOOK	YOUR GRADE		CHOOSE
Chemistry 11 AND Pre-Calculus 12	67% or higher (recommended)	→	CHEM 1500 AND 1510
Chemistry 12 AND Pre-Calculus 12	73% or higher (recommended)	→	CHEM 1500 AND 1520
IF YOU NEED			
Chemistry 11		→	CHEM 0500
Chemistry 12		→	CHEM 0600
Pre-Calculus 12		→	SEE MATH SECTION BELOW
PHYSICS			
IF YOU TOOK	YOUR GRADE		CHOOSE
Physics 11 AND Pre-Calculus 12	67% or higher	→	PHYS 1100 AND 1200
Physics 12 AND Pre-Calculus 12	67% or higher	→	PHYS 1150 AND 1250
Physics 11	Below 67%	→	PHYS 0500
IF YOU NEED			
Physics 11		→	PHYS 0500
Physics 12		→	PHYS 0600
Pre-Calculus 12		→	SEE MATH SECTION BELOW

MATH – EVERY SCIENCE MAJOR REQUIRES 6 CREDITS OF FIRST-YEAR CALCULUS

IF YOU TOOK	YOUR GRADE		CHOOSE
Pre-Calculus 12	67% or higher (within the last 2 years)	➡	One of the following streams: MATH 1140 AND 1240 MATH 1150 AND 1250
Pre-Calculus 12	Below 67% (within the last 2 years)	➡	MATH 1000 or 0630 or 0600 + 0610
Foundations 12	All grades	➡	MATH 0510 + MATH 0600 + MATH 0610

MATH 1140/1240 is recommended for all Science Majors
MATH 1150/1250 is recommended for all Biology Majors

PLEASE NOTE: For all high school courses with no required grade listed, 67% or higher is highly recommended.

For best chances of academic success, completion of the grade 12 level of the subject area of your intended major is recommended. (e.g. for a Physics major, you should have Grade 12 Physics). High school equivalent courses can be taken or repeated at TRU.

SUGGESTED FIRST- AND SECOND-YEAR PLAN

YEAR 1

FALL SEMESTER	WINTER SEMESTER
ENGL 1100 or 1110	ENGL 1100 or 1110 or 1120 or 1140 or 1210
COMP 1130	COMP 1230
CHEM 1500	MATH 1700 (or 1220)
MATH 1140	MATH 1240
PHYS 1100 or 1150	BIOL 1110 or GEOL 1110 (see important notes)

YEAR 2

FALL SEMESTER	WINTER SEMESTER
COMP 2130	COMP 2210
COMP 2160	COMP 2230
COMP 2680	COMP 2920
MATH 2120	STAT 2000
Non-Science Elective	CMNS 2300 or 2290

IMPORTANT NOTES

- ❖ 3 credits must be taken from the following: BIOL 1110 **or** BIOL 1210 **or** GEOL 1110 **or** GEOL 2050.
- ❖ For each semester in Year 2, students can take any of the second-year COMP courses once prerequisites are completed.

COURSE OFFERINGS – 1000/2000 level

Note: Many science and math courses are offered in Fall **or** Winter semester only.

FALL SEMESTER ONLY	WINTER SEMESTER ONLY
CHEM 1500 PHYS 1150 BIOL 1210	BIOL 1110 CMNS 2300 MATH 1220

Bachelor Of Science COMPUTING SCIENCE MAJOR Checksheet (120 credits)

1000-Level CORE courses (27-30 credits)			2000-Level CORE courses (27 credits)			3000/4000-Level CORE courses (30 credits)		
COURSE	GRADE	COURSE	GRADE	COURSE	GRADE			
ENGL 1100 or 1110 ¹	_____	COMP 2130 - Introduction to Computer Systems	_____	COMP 3260 - Computer Network Security	_____			
ENGL 1100, 1110, 1120, 1210 ¹	_____	COMP 2160 - Mobile Application Development	_____	COMP 3270 - Computer Networks	_____			
COMP 1130 - Computer Programming 1	_____	COMP 2210 - Programming Methods	_____	COMP 3410 - Operating Systems	_____			
COMP 1230 – Computer Programming 2	_____	COMP 2230 – Data Structures, Algorithm Analysis	_____	COMP 3450 - Human-Computer Interaction Des.	_____			
MATH 1140 – Calculus 1	_____	COMP 2680 - Web Site Design and Development	_____	COMP 3540 – Adv. Web Design & Programming	_____			
MATH 1240 – Calculus 2	_____	COMP 2920 - Software Architecture and Design	_____	COMP 3610 - Database Systems	_____			
MATH 1700	_____	MATH 2120 - Linear Algebra 1	_____	COMP 3710 - Applied Artificial Intelligence	_____			
CHEM 1500 – Chemical bonding & organic	_____	STAT 2000 - Introduction to Statistics	_____	COMP 3520 - Software Engineering	_____			
PHYS 1100 or 1150	_____	CMNS 2290 or 2300 ¹	_____	COMP 4910 - Computing Science Project	_____			
1 of BIOL 1110 or 1210 Or GEOL 1110 or 2050	_____	ELECTIVES 1000-4000 level (15-18 credits)			COMP 4930 - Professional and Ethical Issues	_____		
Notes: 1. Students with a B or better in ENGL 1100 or 1110 may proceed into CMNS 2290 or 2300 in their second year without completing an additional 3 credits in ENGL. These students will be required to take an additional 3 credit non-science elective. 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; 6 of these must be in courses numbered 3000 or higher.	3000/4000 Level Computing Electives (12 credits)							
	Non-science elective ^{2,3}	_____	_____	3000/4000 level COMP elective	_____	_____		
	Non-science elective ^{2,3}	_____	_____	3000/4000 level COMP elective	_____	_____		
	Non-science elective ^{2,3}	_____	_____	3000/4000 level COMP elective	_____	_____		
	Elective in lieu of 2 nd ENGL ¹	_____	_____	3000/4000 level COMP elective	_____	_____		
	General elective (1000-4000 level)	_____	_____	3000/4000 level COMP elective	_____	_____		
	General elective (1000-4000 level)	_____	_____	3000/4000 Level Electives (6 credits)				
	Electives:			3000/4000 General elective	_____	_____		
	Institutional Learning Outcomes (ILOs) may be required to graduate. Refer to the Degree Works website for more information.			3000/4000 General elective	_____	_____		

*NEW Institutional Learning Outcomes (ILO) Requirements – your [Degree Works Program Plan](#) is available through [myTRU](#)

KEEP IN MIND

This form is meant to be used as a guideline in conjunction with the [TRU Academic Calendar](#) and [Course Schedule](#). Please see these resources for more about course prerequisites and co-requisites.

KEEP IN MIND

Institutional Learning Outcomes (ILOs):

May be required for your program. Using the **Degree Works** planning tool will help you identify which courses apply.

Degree Works Planning Tool:

More information is available through the Degree Works website at: tru.ca/current/academic-supports/degreeworks

BACHELOR OF SCIENCE – FIRST- AND SECOND-YEAR NON-SCIENCE ELECTIVES

Anthropology (ANTH)	All	Linguistics (LING)	All
Archaeology (ARCH)	All	Management (MNGT)	1710
Accounting (ACCT)	2210, 2250	Marketing (MKTG)	2430
Business Law (BLAW)	2910	Modern Languages (MLAN)	All
Chinese (CHIN)	1110, 1210	Music (MUSI)	All
Communications (CMNS)	All	Organizational Behaviour (ORGB)	2810
Creative Writing (CRWR)	All	Philosophy (PHIL)	All
Economics (ECON)	All	Physical Education (PHED) non-Activity	1000, 1230, 2110, 2130, 2140, 2210
French (FRAN)	All	Political Studies (POLI)	All
Film (FILM)	All	Psychology (PSYC)	All
Finance (FNCE)	2120	Service & Community Learning (SRCL)	1000
First Nation Language (FNLG)	All	Sociology (SOCL)	All
Geography (GEOG) (non-physical)	1010, 1100, 1110, 2110, 2120, 2220, 2230 (excluded: GEOG 1000, 2020)	Spanish (SPAN)	All
German (GERM)	All	Speech (SPEE)	1500, 2500
History (HIST)	All 1000 level & 2000 level	Student Success (STSS)	1010, 1020
Human Resource Management (HRMN)	2820	Theatre (THTR)	All
Indigenous Studies (INDG)	2100	Visual Arts (VISA) (Theory)	All
Japanese (JAPA)	All	Visual Arts (VISA) (Studio)	All
Journalism (JOUR)	2010		