

## Bachelor of Science (GENERAL SCIENCE) Checklist

### HIGH SCHOOL PREREQUISITES FOR FIRST YEAR SCIENCE

Subject	First Year Courses at TRU	Prerequisites	Other High School Courses & Lower Grades	Recommended TRU Upgrading Courses
<b>ENGLISH</b>	ENGL 1100 (recommended) or ENGL 1110, 1120, 1140, 1210, or CRWR 1150	English Studies 12 with 73% or higher	English 12 below 73% →	ENGL 0600 or English Accuplacer (placement test)
<b>MATH</b>	MATH 1150 AND MATH 1250 (recommended for Biology majors) or MATH 1140 AND MATH 1240 (recommended for other majors)	Pre-Calculus 12 with 67% or higher within the last 2 years	Pre-Calculus 12 below 67% →	MATH 0600 + 0610 or MATH 0630 or MATH 1000
			Foundations of Math stream →	MATH 0510 + 0630 or MATH 0510 + 0600 + 0610
			Other streams of Math or No Math in the last 2 years →	Math Accuplacer recommended (placement test)
<b>BIOLOGY</b>	BIOL 1210 AND BIOL 1110	Life Sciences 11 <b>or</b> Anatomy & Physiology 12 <b>AND</b> Chemistry 11 all with 67% or higher	If you need: Life Sciences 11 <b>OR</b> Anatomy & Physiology 12 →	BIOL 0500 or BIOL 0600 (1 course required, not both)
			If you need: Chemistry 11 →	CHEM 0500
<b>CHEMISTRY</b>	CHEM 1500 AND CHEM 1510	Pre-Calculus 12 <b>AND</b> Chemistry 11 both with 67% or higher	If you need: Pre-Calculus 12 →	See MATH section above
	CHEM 1500 AND CHEM 1520	Pre-Calculus 12 <b>AND</b> Chemistry 12 both with 73% or higher	If you need: Chemistry 11 → (Chemistry 12 not required)	CHEM 0500
<b>PHYSICS</b>	PHYS 1100 AND PHYS 1200	Pre-Calculus 12 <b>AND</b> Physics 11 both with 67% or higher	If you need: Pre-Calculus 12 →	See Math section above
	PHYS 1150 AND PHYS 1250	Pre-Calculus 12 <b>AND</b> Physics 12 both with 67% or higher	If you need: Physics 11 → (Physics 12 not required)	PHYS 0500

**Note:** 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.

## COURSE OFFERINGS – First and Second Year

**Note:** Many science and math courses are offered in either Fall or Winter semester only, not both

### FALL SEMESTER ONLY

**BIOLOGY:**

- BIOL 1210
- BIOL 2160
- BIOL 2170
- BIOL 2280

**CHEMISTRY:**

- CHEM 1500
- CHEM 2100
- CHEM 2120
- CHEM 2160

**MATH:**

- MATH 1150
- MATH 2110
- MATH 2210
- MATH 2240

**PHYSICS:**

- PHYS 1150
- PHYS 2000

### WINTER SEMESTER ONLY

**BIOLOGY:**

- BIOL 1110
- BIOL 2130
- BIOL 2340
- BIOL 2290

**CHEMISTRY:**

- CHEM 1510 or 1520
- CHEM 2220
- CHEM 2250

**COMMUNICATIONS:**

- CMNS 2300

**MATH:**

- MATH 1250
- MATH 2200
- MATH 2700
- MATH 3170

**PHYSICS:**

- PHYS 1250
- PHYS 2200
- PHYS 2590
- PHYS 3120 / MATH 3160

**IMPORTANT:** The General Science program requires careful planning. Students must ensure that during their second year they complete the prerequisites for the upper-level (3000 and 4000 level courses.)

# Bachelor of Science GENERAL SCIENCE - 2 CONCENTRATIONS (120 credits)

FIRST YEAR REQUIREMENTS (21-24 credits)			SECOND YEAR REQUIREMENTS			THIRD/FOURTH YEAR REQUIREMENTS (48 credits)			
COURSE		GRADE	1000/2000 Science course prerequisites (27 credits)			CHOOSE 2 SCIENCE CONCENTRATIONS			
ENGL 1100 or 1110 <sup>1,2</sup>			COURSE		GRADE	SCIENCE CONCENTRATION 1 (18 credits)			
OR any two of ENGL 1100, 1110, 1120, 1140 and 1210 <sup>1,2</sup>			1000/2000 level Science			COURSE		GRADE	
			1000/2000 level Science			3000/4000 concentration 1			
CHEM 1500 - Chemical Bonding/Organic Chem			1000/2000 level Science			3000/4000 concentration 1			
PHYS 1100 or 1150			1000/2000 level Science			3000/4000 concentration 1			
MATH 1140 (or 1150) -Calculus 1			1000/2000 level Science			3000/4000 concentration 1			
MATH 1240 (or 1250) -Calculus 2			1000/2000 level Science			3000/4000 concentration 1			
1 of BIOL 1110, 1210, GEOL 1110 or 2050			1000/2000 level Science			3000/4000 concentration 1			
			1000/2000 level Science			3000/4000 concentration 1			
COMP 3 credits <sup>1,4</sup>			CMNS 2290 or 2300			SCIENCE CONCENTRATION 2: (18 credits)			
<b>Important!</b> ❖ The General Science program requires careful planning. Students must ensure that during their second year they complete the prerequisites for the upper-level (3000- and 4000-level) courses. ❖ Completion of 18 upper-level credits in each of two areas (chosen from biology, chemistry, computing science, geology, mathematics and statistics, physics). This alternative is particularly recommended for students planning to qualify to teach in BC secondary schools.  <b>Notes:</b> 1. Must be taken prior to third year. 2. Students with a B or higher in ENGL 1100 or 1110 may complete the remaining 3-credits in any discipline outside of science. 3. Non-Science electives must be in at least two different subject areas (other than English). 4. The 3 credits of COMP: suggest: 3 of COMP 1020, 1030, 1050, 1070, 1080, 1150 OR COMP 1110 OR COMP 1130.			GENERAL ELECTIVES (21-24 credits)						
			Non-science elective <sup>3</sup>			3000/4000 concentration 2			
			Non-science elective <sup>3</sup>			3000/4000 concentration 2			
			Non-science elective <sup>3</sup>			3000/4000 concentration 2			
			Elective in lieu of 2 <sup>nd</sup> ENGL <sup>2</sup>			3000/4000 concentration 2			
			General elective (1000-4000 level)			3000/4000 concentration 2			
			General elective (1000-4000 level)			3000/4000 concentration 2			
			General elective (1000-4000 level)			3000/4000 Level Electives (12 credits)			
			General elective (1000-4000 level)			3000/4000 level Elective			
			<b>Electives:</b>  <b>Institutional Learning Outcomes (ILOs)</b> may be required to graduate. Refer to the <a href="#">Degree Works website</a> for more information.			3000/4000 level Elective			
3000/4000 level Elective									
3000/4000 level Elective									

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

# Bachelor of Science GENERAL SCIENCE - 3 CONCENTRATIONS (120 credits)

BACHELOR OF SCIENCE GENERAL SCIENCE - 3 CONCENTRATIONS (120 CREDITS)											
FIRST YEAR REQUIREMENTS (21-24credits)			SECOND YEAR REQUIREMENTS			3000/4000-Level (48 credits)					
COURSE		GRADE	1000/2000 Science course prerequisites (27 credits)			CHOOSE 3 SCIENCE CONCENTRATIONS					
ENGL 1100 or 1110 <sup>1,2</sup>			COURSE		GRADE	SCIENCE CONCENTRATION 1: (18 credits)					
1000 level ENGL <sup>1,2</sup>			1000/2000 level Science								
CHEM 1500			1000/2000 level Science			COURSE		GRADE			
PHYS 1100 or 1150			1000/2000 level Science			3000/4000 concentration 1					
MATH 1140 (or 1150) -Calculus 1			1000/2000 level Science			3000/4000 concentration 1					
MATH 1240 (or 1250) -Calculus 2			1000/2000 level Science			3000/4000 concentration 1					
1 of BIOL 1110, 1210, GEOL 1110 or 2050			1000/2000 level Science			3000/4000 concentration 1					
			1000/2000 level Science			3000/4000 concentration 1					
COMP 3 credits <sup>1,4</sup>			1000/2000 level Science			3000/4000 concentration 1					
<b>Important!</b> ❖ The General Science program requires careful planning. Students must ensure that during their second year they complete the prerequisites for the upper-level (3000- and 4000-level) courses. ❖ 3 Science concentrations requires: 18 (3000/4000 level) credits in one concentration and 6 (3000/4000 level) credits in the other 2 concentrations.  <b>Notes:</b> 1. Must be taken prior to third-year. 2. Students with a B or higher in ENGL 1100 or 1110 may complete the remaining 3-credits in any discipline outside of science. 3. Non-Science electives must be in at least two different subject areas (other than English). 4. The 3 credits of COMP: suggest: 3 of COMP 1020, 1030, 1050, 1070, 1080, 1150 OR COMP 1110 OR COMP 1130.			CMNS 2290 or 2300			SCIENCE CONCENTRATION 2: (6 credits)					
			ELECTIVES (21-24 credits)								
			Non-science elective <sup>3</sup>						3000/4000 concentration 2		
			Non-science elective <sup>3</sup>						3000/4000 concentration 2		
			Non-science elective <sup>3</sup>						SCIENCE CONCENTRATION 3: (6 credits)		
			Elective in lieu of 2 <sup>nd</sup> ENGL <sup>2</sup>								
			General elective (1000-4000 level)						3000/4000 concentration 3		
			General elective (1000-4000 level)						3000/4000 concentration 3		
			General elective (1000-4000 level)						3000/4000 Level Electives (18 credits)		
			General elective (1000-4000 level)						3000/4000 level Elective		
<b>Electives:</b>  <b>Institutional Learning Outcomes (ILOs)</b> may be required to graduate. Refer to the <a href="#">Degree Works website</a> for more information.						3000/4000 level Elective					
						3000/4000 level Elective					
						3000/4000 level Elective					
						3000/4000 level Elective					
						3000/4000 level Elective					

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

## 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](https://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		