



ENGINEERS &  
GEOSCIENTISTS  
BRITISH COLUMBIA

# Simon Fraser University

## Environmental Geoscience Course Equivalent Listing

(Updated December 2023)

### Instructions:

Prior to beginning, please ensure that you have reviewed the [Guideline to Completing Geoscience Checklists & Course Descriptions](#).

- A course can only be listed one time on the entire checklist
- Courses you list need to correspond to the course codes that appear on your transcript
  - If you are claiming courses from more than one institution, please clearly indicate the institution name where the course was completed.
- Courses must be acceptable for credit in the Faculty of Science or Applied Science
- If you are unsure which subject a course may be claimed towards, please choose the most relevant subject and indicate your uncertainty. Reviewers will try to determine the suitable subject.
- Note that EGBC staff or volunteers may contact the applicant for additional information during the assessment if additional information or clarification is required.

This course listing is a reflection of Engineers & Geoscientists BC's adoption of the Geoscientists Canada [Geoscience Knowledge Requirements](#). In consultation with the school, the courses in this document have been identified as equivalent to the subjects listed. Note that course codes can be subject to change at any time.

Name: \_\_\_\_\_

User ID: \_\_\_\_\_

	Number	Subject	SFU Course	For Applicant Use
<b>Group: 1A – Compulsory Foundation Science – 11-GEOCOM- Fundamental Science (All 3 Required)</b>				
	FS-A1	Calculus (1 semester)	MATH 150, 151, 154, 157 (Choose One)	
	FS-A2	Physics (1 semester)	PHYS 101,120 (Choose One)	
	FS-A3	Chemistry (1 semester)	CHEM 121	
<b>Group: 1B – Additional Foundation Science – 11-GEOCOM- Electives (6 Required – NO MORE THAN TWO COURSES IN ANY ONE SUBJECT)</b>				
	COM-B1	Mathematics	MATH 152, 155, 158 or any 200 level or higher	
	COM-B2	Chemistry	CHEM 122, 126 or any 200 level or higher	
	COM-B3	Physics	PHYS 102 & 130, 121 & 131, 126 & 131, or PHYS 141, or any 200 level PHYS or higher	
	COM-B4	Biology	BISC 101, 102, GEOG 215 or any 200 level BISC or higher	
	COM-B5	Computer Programming	EASC 305, Any 100 level CMPT or higher (Must have programming content)	
	COM-B6	Statistics	STAT 101, 201, 270, GEOG 251	
<b>Group: 2A – Compulsory Geoscience – 11-GEOCOM- Compulsory (All 4 Subjects Required – NO MORE THAN ONE COURSE IN EACH SUBJECT)</b>				
	COM-A1	Mineralogy & Petrology	EASC 202	
	COM-A2	Sedimentation & Stratigraphy	EASC 201	
	COM-A3	Structural Geology	EASC 204	
	COM-A4*	Field Techniques	GEOG 310, EASC 206 & 306, EASC 308, EASC 406	
*Applicants can choose to report work experience in lieu of taking a field techniques course offered by a post-secondary institution. Instructions can be found here: <a href="https://www.egbc.ca/COM-A4-Field-Techniques-Instructions-for-Reporting-Experience-Updated-April-2023.pdf.aspx">COM-A4-Field-Techniques-Instructions-for-Reporting-Experience-Updated-April-2023.pdf.aspx</a>				

**Simon Fraser University Environmental Geoscience Course Equivalent Checklist**

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<b>Group: 2B – Foundation Environmental Geoscience – 11-EG – (5 Required)</b> • Must have at least one course in each group, and • Maximum of two courses in each group				
Group A	FEG-A1	Geophysics	EASC 207	
	FEG-A2	Geochemistry	EASC 208, GEOG 316	
Group B	FEG-A3 (a)	Hydrology	GEOG 311	
	FEG-A3 (b)	Hydrogeology	EASC 304	
	FEG-A4	Engineering Geology	EASC 313, 413	
Group C	FEG-A5 *choose 1	Geomorphology/ Soil Science	GEOG 213, 317	
	FEG-A6	Glacial Geology	GEOG 412, EASC 403	
	FEG-A7	Remote Sensing or GIS	GEOG 253, 353	

[Group 2C – Electives on next page]

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<b>Group: 2C – Other Environmental Geoscience – 11-EG – Electives (9 Required)</b>				
<b>Multiple courses can be entered in each subject for only this section</b>				
Communication	EG-C1	Thesis	GEOG 491, EASC 499	
	EG-C2	Technical Writing	NO EQUIVALENT COURSE	
Earth Systems	EG-C3	Climatology	GEOG 214, GEOG 314, GEOG 414	
	EG-C4	Meteorology	CHEM 372	
	EG-C5	Oceanography	NO EQUIVALENT COURSE	
	EG-C6	Paleoenvironmental Studies	NO EQUIVALENT COURSE	
	EG-C7	Paleoclimatology	NO EQUIVALENT COURSE	
	EG-C8	Paleoecology	BISC 434, EASC 310	
	EG-C9	Ecology	BISC 204, GEOG 215	
Environmental Assessment	EG-C10	Environmental Assessment	REM 445	
Field Techniques	EG-C11	Field Techniques	GEOG 310, EASC 206 & 306, EASC 308, EASC 406, EASC 416	
Geochemistry	EG-C12	Environmental Geochemistry	EASC 208, GEOG 316 CHEM 371	
	EG-C13	Isotope Geochemistry	NO EQUIVALENT COURSE	
	EG-C14	Aqueous Geochemistry	EASC 315, 412, 416 CHEM 371	
	EG-C15	Biogeochemistry	GEOG 316	
	EG-C16	Atmospheric Geochemistry	CHEM 372	
	EG-C17	Low Temperature Geochemistry	NO EQUIVALENT COURSE	

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<b>Multiple courses can be entered in each subject for only this section</b>				
Geomorphology/ Surficial	EG-C18	Geomorphology	GEOG 213, 313, 412, 413, EASC 411	
	EG-C19	Natural Hazards	GEOG 312, EASC 209, 303	
	EG-C20	Quaternary Geology	GEOG 412, EASC 403	
	EG-C21	Pedology	GEOG 317, 417	
	EG-C22	Glaciology	EASC 314	
Geophysics	EG-C23	Environmental Geophysics	NO EQUIVALENT COURSE	
	EG-C24	Exploration Geophysics	EASC 317	
	EG-C25	Applied Geophysics	EASC 307	
Geotechnical	EG-C26	Engineering Geology	EASC 313, 413	
	EG-C27	Soil Mechanics	EASC 313	
	EG-C28	Rock Mechanics	EASC 313	
	EG-C29	Resource Geotechnics	EASC 413	
Hydrology/ Hydrogeology	EG-C30	Contaminant Transport	EASC 410	
	EG-C31	Hydrogeology	EASC 304, 405, 415	
	EG-C32	Hydrology	GEOG 311, 411, 418	
	EG-C33	Fluid Mechanics	GEOG 413	
Mineralogy/ Petrology	EG-C34	Crystallography	EASC 205, EASC 301, EASC 311	
	EG-C35	X-Ray Crystallography	NO EQUIVALENT COURSE	
	EG-C36	Analytical Methods	CHEM 316	

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<b>Group: 2C – Other Environmental Geoscience – 11-EG – Electives (9 Required) continued</b>				
<b>Multiple courses can be entered in each subject for only this section</b>				
Paleontology	EG-C37	Micropaleontology	EASC 310	
	EG-C38	Paleobiology	NO EQUIVALENT COURSE	
	EG-C39	Palynology	BISC 434	
Quantitative Analysis	EG-C40	Geostatistics	GEOG 352, GEOG 451	
	EG-C41	Computer Applications in Geoscience	GEOG 351, 356, 451, 457, REM 412, EASC 305	
	EG-C42	Geographic Information Systems	GEOG 255, 355, 455	
Regional Geology	EG-C43	Geology of Canada	EASC 408	
	EG-C44	Geology of North America	NO EQUIVALENT COURSE	
Remote Sensing	EG-C45	Remote Sensing	GEOG 253, 353, 453	
	EG-C46	Air Photo Interpretation	NO EQUIVALENT COURSE	
Resource Geology	EG-C47	Economic Geology	NO EQUIVALENT COURSE	
	EG-C48	Mineral Deposits	EASC 401	
	EG-C49	Ore Petrology	NO EQUIVALENT COURSE	
	EG-C50	Coal Geology	NO EQUIVALENT COURSE	
	EG-C51	Petroleum Geology	EASC 420	
	EG-C52	Industrial Minerals	NO EQUIVALENT COURSE	
Sedimentology	EG-C53	Chemical Sedimentology	NO EQUIVALENT COURSE	
	EG-C54	Clastic Sedimentology	EASC 302,402	
	EG-C55	Carbonate Sedimentology	EASC 402	
	EG-C56	Glacial Geology	GEOG 412, EASC 403	
	EG-C57	Limnogeology	BISC 414	

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<b>Multiple courses can be entered in each subject for only this section</b>				
Stratigraphy	EG-C58	Historical Geology	EASC 210	
	EG-C59	Sequence Stratigraphy	EASC 312	
	EG-C60	Stratigraphic Paleontology	NO EQUIVALENT COURSE	
	EG-C61	Geochronology	NO EQUIVALENT COURSE	
Structure	EG-C62	Global Tectonics	EASC 309	
	EG-C63	Tectonics	NO EQUIVALENT COURSE	
	EG-C64	Structural Geology	EASC 404	