

Requirements for BSc in geophysics

Aug, 2023 - preliminary version.

All requirements here are for BSc Majors in Geophysics.

Details vary for honours, combined and other degree options.

Courses for UBC BSc Majors in Geophysics.	credits	term	recommend for EGBC	EGBC course Number	Course(s) taken (student's list)	Faculty of Science requirements - credits					
						Sci Breadth	3/4xx	Science	3/4xx Sci	Arts	Not Arts or Sci
<i>minimum credits</i>	120					18	48	72	30	12	24 (MAX)
<i>Credits taken</i>	120			Coloured to help count		18	48	95	36	12	0
First Year											
Communication Requirement	3	1		GP-C20							
CHEM 121 (or 111 or 141)	4	1		FS-A3				4			
CHEM 123	4	2		COM-B2		3		4			
MATH 100 or 102 or 104 (or 120 or 180 or 184)	3	1		FS A1				3			
MATH 101 or 103 or 105 (or 121)	3	2		COM-B1		3		3			
PHYS 106 or 107 or 117 (or 101 or 131)	3	1		FAS-A3		3		3			
PHYS 108 (or 118)	3	2		COM-B3				3			
PHYS 119 (or 109)	1	2						1			
DSCI 100	3	1		COM-B6		3		3			
Elective	3	2								3	
Total 1st year Credits	30										
Second Year											
Communication Requirement	3										
EOSC 212 or (EOSC 111 and one of EOSC 110, 112, 113)	3		EOSC 212	GP-C23				2			
EOSC 211	3			COM-B5		3		3			
EOSC 250	3			GP-C18				3			
MATH 200	3			GP-C1				3			
MATH 215	3			GP-C26				3			
MATH 221	3			GP-C12				3			
CHEM 205 or PHYS 203 (thermo)	3			GP-C29				3			
Elective	3		EOSC 220	COM-A1				3			
Elective	3		EOSC 221	req'd for 323				3			
<i>extra 2nd yr course needed for EGBC</i>	3		EOSC 223	COM-A4				3			
Total 2nd year Credits	33										
Third and Fourth Years											
EOSC 352	3			GP-C4			3	3	3		
EOSC 354	3			FGP-A1			3	3	3		
EOSC 410	3			GP-C14			3	3	3		
EOSC 453	3			FGP-A2			3	3	3		
MATH 316 (or PHYS 312)	3			GP-C16			3	3	3		
MATH 317	3						3	3	3		
Three of EOSC 329, 353, 450, 429, ATSC 404 or (two of EOSC 329, 353, 450, 429, ATSC 404) and one of EOSC 350, PHYS 301, MATH 345)	3		EOSC 353	FGP-A3			3	3	3		
The second of the EOAS courses as above	3		EOSC 450	FGP-A5			3	3	3		
The third of the EOAS courses as above	3		EOSC 350	FGP-A4			3	3	3		
Elective	3		EOSC 454	GP-C36			3	3	3		
Elective	3		EOSC 222	COM-A2				3			
Elective	3		EOSC 323	COM-A3			3	3	3		
Elective	3		EOSC 329 or 333	GP-53 or 54			3	3	3		
Elective	3		BIOL or CPSC	COM-B4		3	3	3			
Elective	3		arts							3	
Elective	3		arts							3	
Elective	3		arts 3/4xx				3			3	
Elective	3		3/4xx				3				
Elective	3		3/4xx				3				
Elective (<i>not needed if EOSC 223 is counted to total</i>)											
Total 3rd and 4th year Credits	57										

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NOTES:

This table for BSc Majors degree only. For Honours, combined majors and other options see the link in the next note.

All UBC geophysics degree requirements are detailed at <https://vancouver.calendar.ubc.ca/faculties-colleges-and-schools/faculty-science/bachelor-science/geophysics>

FoS requirements are at: <https://vancouver.calendar.ubc.ca/faculties-colleges-and-schools/faculty-science/bachelor-science/general-degree-requirements>

FoS Communication requirement: SCIE 113 is recommended for year 1

FoS Science Breadth requirement: Only 5 of the 6 requirements are automatically filled. Students need either a BIOL or CPSC elective course.

See FoS science breadth details at: <https://vancouver.calendar.ubc.ca/faculties-colleges-and-schools/faculty-science/bachelor-science/science-breadth-requirement>

FoS 12 Arts credits requirement: Suggestion is 1 in year 1, then 3 in years 3 & 4, at least one of which is a 3/4xx level course.

FoS 48 credits of 3/4xx courses: necessity for four 2xx geology courses means students must ensure electives are chosen to achieve this.

EOSC 454: Available starting 2023W.

EOSC 350: not 'required' for UBC's BSc in Geophysics, but certainly important for professional registration as a geophysicist. EOSC 454 can serve that role. NOTE: EGBC requires either "exploration geophysics" or "EM/DC methods" (FGP-A4, FGP-A6 in EGBC's "Group 2B" course list).

EGBC geology requirements: four geology courses (Group: 2A – Compulsory Geoscience), but five are "forced" because EOSC 323 requires 223, 222, & 221 which requires 220.

EGBC field course requirement: EOSC 223 is required - UNLESS student gains field experience with instruction elsewhere (coop, summer jobs, research or other). This adds a 6th course to term 2 of year 2. Therefore students could have one less elective in 3rd / 4th year. NOTE: students should take all EOSC 223 prerequisites in year 2.

EGBC Group 2C - Other Geophysics: 9 required, 12 options are part of UBC Geophysics required or elective course list.