

APEGS / Geoscientist Canada Geoscience Knowledge Requirement Course List in Geophysics, University of Saskatchewan
Updated: February 2023
(courses in brackets are no longer offered)

	Groups	Subjects	Acceptable UofS courses	Applicant Courses
3	1A Compulsory Foundation Science (Total 3 EUs) (1 EU in each area required)	Chemistry	CHEM 112.3 or (114.3)	
		Mathematics	MATH 110.3 or (123.3) or 133.4 or 176.3	
		Physics	(1/2 of PHYS 111.6 or 1/2 of PHYS 121.6) or PHYS 115.3 (GE 124.3 before 2014 only) or (PHYS 155.3) or 156.3	
6	1B Additional Foundation Science (Total 6 EUs) (6 EUs required, no more than 2 Additional Science EUs in any one subject.)	Biology	(BIOL 110.6) or BIOL 120.3, 121.3, (122.3), any BIOL 3cu course (200 level or higher that has any of these as a prerequisite)	
		Chemistry	CHEM 115.3, any CHEM 3cu course (200 level or higher that has any of these as a prerequisite), BMSC 200.3	
		Computer Programming	(CMPT 111.3 or 113.3 or 116.3) or CMPT 140.3, (115.3) or 141.3 or 142.3, (117.3) 141.3 or 145.3 or 146.3, any CMPT 3cu course (200 level or higher that has any of these as a prerequisite)	
		Mathematics	(MATH 112.3) or MATH 116.3 or (MATH 124.3) or MATH 134.3, MATH 164.3, any MATH 3cu course (200 level or higher that has any of these as a prerequisite)	
		Physics	(1/2 of PHYS 111.6 or 1/2 of PHYS 121.6) or PHYS 117.3 or PHYS 125.3, any PHYS 3cu course (200 level or higher that has any of these as a prerequisite)	
		Statistics	STAT 241.3, 242.3 or 245.3 or 246.3 or PLSC 214.3 (PLSC 314.3) or GE 210.3, any 3cu STAT course (300 level or higher that has any of these as a prerequisite)	
4	2A Compulsory Foundation Geoscience (Total 4EUs) (1 EU in each area required)	Field Techniques	1/2 of GEOL 485.6 or 487.3	
		Mineralogy and Petrology	GEOL 224.3 or 226.3	
		Sedimentation and Stratigraphy	GEOL 245.3	
		Structural Geology	GEOL 258.3	
5	2B Additional Foundation Geoscience (Minimum Total 5 EUs) (5 EUs required. Geology and Environmental Geoscience - a minimum of 1 and at most 2 from each sub-group; Geophysics - no more than 1 from each sub-group)	Digital Signal Processing	EP 214	
Global Geophysics / Physics of the Earth	GEOL 282			
Seismology/Seismic Methods	GEOL 335			
Exploration Geophysics	1/2 GEOL 485			
Radiometrics/ Gravity & Magnetics	GEOL 480			
Electrical & Electromagnetic Methods	GEOL 334			

APEGS / Geoscientist Canada Geoscience Knowledge Requirement Course List in Geophysics, University of Saskatchewan
Updated: February 2023
(courses in brackets are no longer offered)

Groups	Subjects	Acceptable UofS courses	Applicant Courses
9 2C Other Geoscience/Science (Minimum Total 9 EUs) (9 EUs must be from the EUs list or must be at a second level or higher acceptable for science credit toward a degree in science, applied science or engineering and relevant to geoscience). Extra subjects not used in 2A and 2B can be used in 2C. No one subject can be used to cover more than one requirement.	<p>The following groupings of subject areas could be used to satisfy the knowledge requirements for the other geoscience/science (2C). Within each subject area are listed possible topics that could be used to satisfy the requirements. The list is not meant to be exhaustive, but is provided as guide to topics that could satisfy the geoscience knowledge requirements.</p> <p>Applied Math/Physics Calculus Computer-Controlled Instrumentation Condensed Matter Physics Continuum Mechanics Digital Signal Processing Electromagnetic Theory Electronics for Scientists Fluid Dynamics Fluid Flow Porous Media Geostatistics Integral Transforms Linear Algebra Mathematical Physics Numerical Methods/Computing Optics Partial Differential Equations Signal Analysis Vector and Tensor Analysis</p> <p>Communication Thesis Technical Writing</p> <p>Earth & Planetary Geoscience Geomagnetism/Paleomagnetism Global Geology Global Geophysics</p> <p>Field Techniques</p> <p>Fundamental Math/Physics Complex Analysis Differential Equations Electricity & Magnetism Mechanics Thermodynamics Vibrations, Waves & Optics</p> <p>Geology Geochemistry Petrology Igneous Petrology Metamorphic Petrology Sedimentary Petrology Sedimentology Structural Geology/Tectonics Selected Special Topics</p>	<p>MATH 225, 223, 276, MATH 226, 224, MATH 238</p> <p>EP 214.3 if not used in 2B PHYS 356 or EE 301 EP 202.3 (EE 202.3) (EP 229.3)</p> <p>Geol 306.3</p> <p>MATH 266</p> <p>EP 228 EP 325.3 (EP 225.3)</p> <p>EP 320 MATH 276</p> <p>GEOL 490.3 or GEOL 492.6</p> <p>GEOL 406 GEOL 282.3 if not used in 2B</p> <p>1/2 of GEOL 485.6</p> <p>MATH 238, (MATH 338), MATH 331, MATH 339 PHYS 356, EE301 (PHYS 229) (EP 229)</p> <p>GEOL 229 GEOL 226 GEOL 324 GEOL 325 GEOL 442.3 GEOL 448.3 (GEOL 358) GEOL 498.3</p>	

APEGS / Geoscientist Canada Geoscience Knowledge Requirement Course List in Geophysics, University of Saskatchewan
Updated: February 2023
(courses in brackets are no longer offered)

	Groups	Subjects	Acceptable UofS courses	Applicant Courses
2C	Continued	<p>Geophysical Methods & Interpretation Analytical Methods Marine Geophysics Electrical and Electromagnetic Methods Gravity & Magnetism Seismology Radiometrics Rock Properties/Rock Physics Seismic Interpretation</p> <p>Modern Physics</p> <p>Near Surface Geoscience Air Photo/Land Sat Analysis Environmental Geophysics Geomorphology Geographic Information Systems Glacial/Quaternary Geology Remote Sensing</p> <p>Regional Geology Geology of Canada Geology of N. America</p> <p>Resource Geoscience Fluid Flow in Porous Media Hydrogeology/Hydrology</p> <p>Mineral Deposits Geology Petroleum Geology Reservoir Engineering Well Log Analysis</p>	<p>GEOL 483</p> <p>GEOG 222.3, (GEOG 321.3)</p> <p>GEOG 235.3, (GEOG 435.3) (GEOG 320.3), GEOG 322.3 GEOG 235.3, GEOG 335.3 GEOG 323.3, GEOG 423.3.</p> <p>(GEOG 445.3), GEOG 351.3 (GEOL 444)</p> <p>GEOG 225.3, GEOG 328.3, GEOG 325.3, GEOG 427.3 (GEOE 475.3)</p> <p>GEOL 465, 464 GEOL 463</p> <p>(GEOL 411)</p>	
27	Minimum EU Requirement	TOTAL	27	