

Self - Assessment Checksheet - Geophysics – New Syllabus September 2, 2011

*****Note: If self-assessment differs from APEGM assessment, APEGM assessment shall prevail *****

Applicant Name: _____ **Reviewed by:** _____

APEGM requirements		
Section IA: COMPULSORY FOUNDATION SCIENCES. 3 EUs required – 1 per area		
Mathematics (1 EU) (See Note 1)		
Physics (1 EU)		
Chemistry (1 EU)		
Section 1B. ADDITIONAL FOUNDATION SCIENCE – 6 EUs required – no more than 2 in any subject, Geo subjects containing the foundational topics listed may be substituted. See Note 2.		
Biology	1.	
	2.	
Chemistry	1.	
	2.	
Computer Programming	1.	
	2.	
Mathematics	1.	
	2.	
Physics	1.	
	2.	
Statistics	1.	
	2.	
Section II. GEOPHYSICS		
2A. COMPULSORY FOUNDATION GEOSCIENCE – 4 EUs – 1 EU per area		
Field Techniques	1.	
Mineralogy/Petrology	2.	
Sedimentation/Stratigraphy	3.	
Structural Geology	4.	
2B. ADDITIONAL FOUNDATION GEOSCIENCE – 1 EU for 5 subgroups		
Digital Signal Processing	.	
Global Geophysics/Physics of the Earth	.	
Seismology/Seismic Methods		
Exploration Geophysics		
Radiometrics/Gravity & Magnetics		
Electrical & Electromagnetic Methods		
2C. ADDITIONAL GEOSCIENCE. 9 EU's required – 2nd level or higher – at least four different groups		
Group	Course Possibilities	Course Number
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		

Communication	Thesis or Technical Writing	
Earth & Planetary Geoscience	Geomagnetism/Paleomagnetism	
	Global Tectonics	
	Global Geophysics	
Field Techniques		
Fundamental Maths/Physics	Complex Analysis	
	Differential Equations	
	Electricity & Magnetism	
	Mechanics	
	Thermodynamics	
	Vibrations, Waves & Optics	
Geology	Geochemistry	
	Igneous Petrology	
	Metamorphic Petrology	
	Sedimentary Petrology	
	Structural Geology	
	Tectonics	
Geophysical Methods & Interpretation	Analytical Methods	
	Marine Geophysics	
	Electrical & Electromagnetic Methods	
	Gravity & Magnetics	
	Seismology	
	Radiometrics	
	Rock Properties/Rock Physics	
	Seismic Interpretation	
Modern Physics		
Near Surface Geoscience	Environmental Geophysics	
	Geomorphology	
	GIS	
	Glacial/Quaternary Geology	
	Remote Sensing	
Regional Geology	Geology of Canada	
	Geology of North America	
Resource Geoscience	Fluid Flow in Porous Media	
	Hydrogeology/Hydrology	
	Mineral Deposits Geology	
	Petroleum Geology	
	Reservoir Engineering	
	Well Log Analysis	

Comments:

Note 1: 1 EU is approximately equal to one 3 Credit hour course. A 3 credit hour course will usually have three hours of lectures and three hours of labs per week for one semester (around 4 months).

Note 2: Normally only 1 Geoscience substitute would be allowed for Section 1B. However, up a maximum of two geoscience substitutes could be allowed if necessary, provided these geoscience courses had sufficient fundamentals content.

Note 3: Courses cannot be counted twice. For example, you cannot use the same Geochemistry course to fulfill both a chemistry requirement AND a Geochemistry requirement.

