

TOTAL EXAMINATION PROGRAM
PEO Syllabus of Examinations, 2018 Edition

GEOLOGICAL ENGINEERING

INTRODUCTION

A full set of Geological Engineering examinations consists of the following, three-hour examination papers and an engineering report. Candidates will be assigned examinations based on an assessment of their academic background. Examinations from discipline syllabi other than those specific to the candidates' discipline may be assigned at the discretion of PEO's Academic Requirement Committee.

BASIC STUDIES EXAMINATIONS

04-BS-1	Mathematics
04-BS-2	Probability and Statistics
04-BS-3	Statics and Dynamics
04-BS-5	Advanced Mathematics
04-BS-6	Mechanics of Materials
04-BS-7	Mechanics of Fluids
04-BS-10	Thermodynamics
04-BS-11	Properties of Materials
04-BS-12	Organic Chemistry
04-BS-14	Geology
04-BS-15	Engineering Graphics and Design Process

PROFESSIONAL EXAMS – SPECIFIC TO GEOLOGICAL ENGINEERING

GROUP A

18-Geol-A1	Mineralogy and Petrology
18-Geol-A2	Hydrogeology
18-Geol-A3	Sedimentation and Stratigraphy
18-Geol-A4	Structural Geology
18-Geol-A5	Rock Mechanics
18-Geol-A6	Soil Mechanics
18-Geol-A7	Applied Geophysics

GROUP B

18-Geol-B1	Contaminant Hydrogeology
18-Geol-B2	Terrain Analysis
18-Geol-B3	Site Investigation
18-Geol-B4	Geomorphology and Pleistocene Geology
18-Geol-B5	Environmental Geology
18-Geol-B6	Resource Geology – Select <u>ONE</u> from
	18-Geol-B6-1 Petroleum Deposits
	18-Geol-B6-2 Coal Deposits
	18-Geol-B6-3 Metallic and Industrial Mineral Deposits
18-Geol-B7	Petroleum Development
18-Geol-B8	Resource Economics & Valuation
18-Geol-B9	Exploration & Mining Geology
18-Geol-B10	Geophysical Exploration Methods – Select <u>ONE</u> from
	18-Geol-B10-1 Gravity and Magnetic Fields
	18-Geol-B10-2 Electrical Methods
	18-Geol-B10-3 Exploration Seismology

COMPLEMENTARY STUDIES

11-CS-1	Engineering Economics
11-CS-2	Engineering in Society – Health & Safety
11-CS-3	Sustainability, Engineering and the Environment
11-CS-4	Engineering Management

3.2	Engineering Report
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