



Benha University
Faculty of Science



Petroleum and mineral geology



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BSc. Petroleum and mineral geology
Credited



University Requirements					
University Compulsory Courses: 4 Credit Hours					
First level					
Course Code	Course Title	Theoretical	Practical	Credit Hours	Prerequisite
Uni102	Language	2	—	2	—
Uni103	Cultural Elective Course	2	—	2	—
University Requirements					
University Elective Courses: 4 Credit Hours					
First level					
Course Code	Course Title	Theoretical	Practical	Credit Hours	Prerequisite
Uni111	Cultural Elective Course	2	—	2	—
Uni112	Information and Communication Technology	2	—	2	—
Faculty Requirements					
Faculty Compulsory Courses: 104 Credit Hours					
First level					
Course Code	Course Title	Theoretical	Pract./ exc.	Credit Hours	Prerequisite
Geo111	General Geology	2	2	3	--

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Geo112	Crystals and Minerals	1	2	2	--
Chm151	Basics of Inorganic Chemistry	1	2	2	--
Phy111	Heat and Properties of Matter	1	2	2	--
Mat131	Algebra and Geometry	2	--	2	--
Bot111	Plant Taxonomy	1	2	2	--
Geo113	Mineralogy	1	2	2	--
Geo114	Rock-forming minerals	1	2	2	--
Chm161	Basics of organic chemistry	2	2	3	--
Phy112	Electricity, magnetism and light	1	2	2	--
Mat132	Differential and integral calculus	2	1	2	--
Zoo131	Animal diversity	1	2	2	--
Geo204	Structural Geology	2	2	3	--
Geo221	Sedimentary Rocks	1	2	2	--
Geo222	Igneous and Metamorphic Rocks	2	2	3	--

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Gph221	Geophysics - 1	2	2	3	--
Tc221	Soil and Rock Mechanics	2	-1/	2	--
Geo226	Layers	2	2	3	--
Geo227	Geological Mapping	1	2	2	--
Geo228	Petroleum Geology	2	2	3	--
Geo229	Micro Excavations	2	2	3	--
Gph222	Geophysics -2	1	2	2	--
Geo331	Mineral prospecting	2	-1/	2	Geo113
Geo332	Reservoir geology	2	2	3	Geo221
Geo333	Petroleum systems	1	2	2	Geo228
Tc331	Mine and quarry geology	2	2	3	Geo11
Gph331	Subsurface geophysical prospecting	2	2	3	Gph221
Geo338	Sequential stratigraphy	2	-1/	2	Geo226

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Geo339	Geological mapping in mines	2	-1	2	Geo227
Geo340	Ore deposits in Egypt	2	2	3	Geo113
Geo341	Microfossils of plants	2	2	3	Geo229
Gph332	Well logs	2	2	3	Gph221
Geo441	Petroleum Regions in Egypt	2	2	3	Geo228
Geo442	Geology of Egypt-1 (Basement Rocks)	2	2	3	Geo222
Geo443	Tectonic Geology and Tectonics of Egypt	2	2	3	Geo227
Geo444	Field Training in Petroleum and Mining	--	2/2	2	--
Tc441	Basin Mixture	2	-1/	2	Geo227
Geo445	Geology of Egypt-2 (Egyptian Layers)	2	2	3	Geo226
Geo446	Microscopic Raw Materials	2	2	3	Geo340
Geo447	Two Projects in Petroleum and Mining	2	--	2	--
Gph417	Seismic Prospecting Methods	2	2	3	Gph222
Tc446	Well Drilling	1	-2/	2	Tc221



Faculty Requirements

Faculty Elective Courses: 32 Credit Hours

Course Code	Course Title	Theoretical	Pract.	Credit Hours	Prerequisite
Geo223	Groundwater	2	1	2	--
Geo224	Geology, Mineral Deposits	2	1	2	--
Geo225	Invertebrate Fossils	2	1	2	--
Chm251	Petroleum Chemistry	2	1	2	--
Geo230	Radioactive ores	2	-1/	2	--
Geo231	Clay mineral applications	2	-1/	2	--
Geo232	Mineral extraction and environmental considerations	2	-1/	2	--
Chm252	Petrochemicals	2	-1/	2	Chm161
Geo334	Mineral Processes	1	2	2	--
Geo335	Geochemistry of Hydrocarbons	1	2	2	--
Geo336	Depositional Environments and Microfacies	1	2	2	--

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eo337	Field Geology	1	2	2	--
Geo342	Petroleum Regions of the World	1	-2/	2	--
Geo343	Geology of Precious Metals	1	-2	2	--
Gph333	Marine Geophysics	1	-2	2	--
Tc333	Geographic Information Systems	1	-2	2	--
Tc442	Mining Engineering	2	--	2	Tc221
Tc443	Petroleum Derivatives Technology	2	--	2	--
Tc444	Mineral Extraction and Development	2	--	2	--
Tc445	Minerals and Rocks in Industry	2	--	2	Geo114
Geo448	Risk and Disaster Management and Safety in Field Work	2	--	2	--
Geo449	Groundwater Mixing and Pollution Migration	2	--	2	Geo223
Geo450	Egyptian Mines and Quarries	2	--	2	Tc231
Tc447	Evaluation of Petroleum and Mineral Economics	2	--	2	--



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