

**Prince El- Hassan Bin Talal For Natural Resources & Environment  
Geology & Environment**

**Study Program : Bachelor  
Study Plan Type : Major  
Academic Year : 2022**

**The requirements to obtain a Bachelor degree is :-**

**\* The minimum requirements to get a Bachelor degree in / Geology & Environment / is to pass 132 credit hours, according to this study plan.**

**\* The credit hours are distributed to get a Bachelor degree as follows :-**

	<b>Number of credit hours</b>	
<b>University Requirements</b>	<b>27.000</b>	
<b>Compulsory</b>	<b>18.000</b>	
<b>Elective</b>	<b>9.000</b>	
<b>Faculty Requirements</b>	<b>20.000</b>	
<b>Compulsory</b>	<b>20.000</b>	
<b>Specialization Requirments</b>	<b>82.000</b>	
<b>Compulsory</b>	<b>67.000</b>	
<b>Elective</b>	<b>15.000</b>	
<b>Free Courses</b>	<b>3.000</b>	
	<b>0.000</b>	
<b>Pre-requist Courses</b>	<b>0.000</b>	
	<b>0.000</b>	
<b>Total :</b>	<b>132.000</b>	

**University Requirements Credit Hours : 27**  
**Requirement type : Compulsory Credit Hours :18**

<b>Course Number</b>	<b>Course Name</b>	<b>Credit Hours</b>	<b>Theoretical</b>	<b>Practical</b>	<b>Pre - Requisite</b>
2116011101	Arabic Communication Skills	3.000	3.000	0.000	121601099
2116021101	English Communication Skills	3.000	3.000	0.000	121602099
2214041117	Military Science	3.000	3.000		
1714041118	National Education	3.000	3.000	0.000	
2114041123	Leadership and Social Responsibility	2.000	2.000	0.000	
2114041124	Enterpreneurship and Innovation	2.000	2.000	0.000	
2114041125	Life Skills	2.000	2.000	0.000	

**University Requirements Credit Hours : 27**  
**Requirement type : Elective Credit Hours :9**

Course Number	Course Name	Credit Hours	Theoretical	Practical	Pre - Requisite
1804001128	Cyber Hygiene	3.000	3.000	0.000	110108099
2210031100	digital culture	3.000	3.000	0.000	
1916033201	Italian Language (2)	3.000	3.000	0.000	1716031101
1916034101	Russian Language (1)	3.000	3.000	0.000	
1916034102	Russian Language (2)	3.000	3.000	0.000	
1916034201	Japanese (2)	3.000	3.000	0.000	1716031102
1916035101	Turkish Language (1)	3.000	3.000	0.000	
1916036101	Korean Language (1)	3.000	3.000	0.000	
1916036102	Korean Language(2)	3.000	3.000	0.000	1916036101
1916037101	German Language (1)	3.000	3.000	0.000	
1916038101	Chinese Language (1)	3.000	3.000		
1916039101	Polish Language (1)	3.000	3.000	0.000	
1714041101	University Life of Student	3.000	3.000		
1714041102	Introduction to Psychology	3.000	3.000		
1714041104	Family and Child Education	3.000	3.000		
1714041107	Citizenship and Human Rights	3.000	3.000		
1714041110	Islam Current Issues	3.000	3.000		
1714041111	Islamic Thought	3.000	3.000		
1714041112	Jerusalem : Histroy and Civilization	3.000	3.000		
1714041113	Citizenship and Human Rights	3.000	3.000	0.000	
1714041114	Histroy and Civilization of Jordan	3.000	3.000		
1714041115	Sociology	3.000	3.000		
1714041116	Archaeology and Tourism	3.000	3.000		
1714041120	Economic and Management Science	3.000	3.000		
1714041121	Law and Ordering of Our Life	3.000	3.000		

**University Requirements Credit Hours : 27**  
**Requirement type : Elective Credit Hours :9**

Course Number	Course Name	Credit Hours	Theoretical	Practical	Pre - Requisite
1714041122	Principles of Sign Language	3.000	3.000		
1714041126	Humanistic Moral and Values Education	3.000	3.000		
1714041127	Conflict Resolution and Accept Others	3.000	3.000		
1714041128	Culultural Heritage in Jordan	3.000	3.000		
1914041130	Integrity Transperancy and anti - Corruption	3.000	3.000	0.000	
1714041193	Palestinian Cause	3.000	3.000		
1714041194	Arabic Language and Current Issues	3.000	3.000		
1814041195	Disability and Healthy Community	3.000	3.000		
1814041197	Selected Topics in National Trends	3.000	3.000		
1814041198	Education for Sustainable Development	3.000	3.000		
1814041199	Adjustment and Mental Health	3.000	3.000		
1814041200	Introduction to Education	3.000	3.000		
1914042111	Media Education	3.000	3.000	0.000	
2101081139	Physical Culture	3.000	3.000	0.000	
2201081140	Development and Environment	3.000	3.000	0.000	
0110108104	Energy and its Sources	3.000	3.000	0.000	
0110108113	Biotechnology and Society	3.000	3.000	0.000	
0110108114	Automobile Essentials	3.000	3.000	0.000	
0110108115	Computer Ethics	3.000	3.000	0.000	
0110108130	Health and Nutrients	3.000	3.000	0.000	
0110108131	Health Education and First Aid	3.000	3.000	0.000	
0110108132	Sport and Health	3.000	3.000	0.000	
0140108134	Ethics in Natural Science	3.000	3.000	0.000	
0170108135	Reproductive Health	3.000	3.000	0.000	
0140108166	Pharmaceutical Edification	3.000	3.000	0.000	

**University Requirements Credit Hours : 27**  
**Requirement type : Elective Credit Hours :9**

<b>Course Number</b>	<b>Course Name</b>	<b>Credit Hours</b>	<b>Theoretical</b>	<b>Practical</b>	<b>Pre - Requisite</b>
0121601105	Applied Arabic Language	3.000	3.000		
0121602102	Applied English Language	3.000	3.000	0.000	
0121602103	Technical Translation	3.000	3.000	0.000	
0141603101	Italian Language	3.000	3.000		
0151603102	Japanese Language ( Level 1 )	3.000	3.000	0.000	
0121603201	Spanish Language (1)	3.000	3.000		

**Faculty Requirements Credit Hours : 20**  
**Requirement type : Compulsory Credit Hours :20**

<b>Course Number</b>	<b>Course Name</b>	<b>Credit Hours</b>	<b>Theoretical</b>	<b>Practical</b>	<b>Pre - Requisite</b>
1712021120	Environmental Lab Analysis	2.000	1.000	3.000	
1701081138	General Chemistry (1)	3.000	3.000	0.000	
0110101102	Calculus (2)	3.000	3.000	0.000	110108101
0110102107	General Physics	3.000	3.000	0.000	
0110108101	Calculus (1)	3.000	3.000	0.000	
0110108105	General Biology (1)	3.000	3.000	0.000	
0110108116	Computer Skills	3.000	3.000	0.000	( 1001103 AND 1001104 ) OR ( 110108099 OR 1011100 )

**Specialization Requirments Credit Hours : 82**  
**Requirement type : Compulsory Credit Hours :67**

Course Number	Course Name	Credit Hours	Theoretical	Practical	Pre - Requisite
1712011101	General Geology (1)	3.000	3.000	0.000	
1712011102	General Geology (2)	3.000	3.000	0.000	1712011101
1712011103	Practical General Geology (1)	1.000	0.000	3.000	1712011101
1712011104	Practical General Geology (2)	1.000	0.000	3.000	1712011103
1712011211	Stratigraphy	3.000	2.000	3.000	1712011102
1712011212	Paleontology	3.000	2.000	3.000	1712011211
1712011221	Mineralogy	3.000	2.000	3.000	1712011103 AND 1712011102
1712011222	Optical Mineralogy Lab	1.000	0.000	3.000	1712011221 synchronous
1712011241	Natural Hazards	3.000	3.000	0.000	1712011101
1712011291	Remote Sensing	3.000	2.000	3.000	110102107 AND 110108116
1712011331	Igneous & Metamorphic Rocks	3.000	2.000	3.000	1712011222
1712011332	Sedimentology	3.000	2.000	3.000	1712011212 AND 1712011222
1712011351	Structual Geology	3.000	2.000	3.000	1712011104 AND 1712011211
1712011361	Principles of Geophysics	3.000	2.000	3.000	110102107
1712011392	Field Geotechnical Applications	2.000	0.000	6.000	1712021120 AND 1712011351
1712011433	Economic Geology	2.000	2.000	0.000	1712011331 AND 1712011332
1712011434	Geology of Jordan	3.000	3.000	0.000	1712011332 AND 1712011331
1712011452	Engineering Geology	3.000	2.000	3.000	1712011351
1712011471	Environmental Geochemistry	3.000	2.000	3.000	1712011331 AND 1701081138
1712011494	Petroleum Geology	3.000	3.000	0.000	1712011351
1712011495	Applied Field Geology	3.000	0.000	9.000	1712011392 AND 1712011241
1712021240	Environmental Soil Science	3.000	3.000	0.000	1712011101
1712031240	Geographic Information Systems	3.000	2.000	3.000	110108116 AND 1712011291
1712031250	Environmental Science	3.000	3.000	0.000	110108105 AND 1701081138

**Specialization Requirments Credit Hours : 82**  
**Requirement type : Compulsory Credit Hours :67**

<b>Course Number</b>	<b>Course Name</b>	<b>Credit Hours</b>	<b>Theoretical</b>	<b>Practical</b>	<b>Pre - Requisite</b>
1712031310	Groundwater Hydrology	3.000	2.000	3.000	1712011101 AND 110101102



**Specialization Requirments Credit Hours : 82**  
**Requirement type : Elective Credit Hours :15**

Course Number	Course Name	Credit Hours	Theoretical	Practical	Pre - Requisite
1712011205	Astronomy	3.000	3.000	0.000	
1712011206	Geomorphology	3.000	3.000	0.000	1712011104
1712011207	Geotops	3.000	3.000	0.000	1712011101
1712011313	Biostratigraphy	3.000	3.000	0.000	1712011212
1712011314	Sequence Stratigraphy	3.000	3.000	0.000	1712011332
1712011323	Mineral & Environmental Resources	3.000	3.000	0.000	1712011221
1712011396	Computer Applications in Geology	3.000	2.000	3.000	1712011291 AND 1712031240
1712011435	Oil Shale	3.000	3.000	0.000	1712011332
1712011436	Industrial Materials	3.000	3.000	0.000	1712011331 AND 1712011332
1712011453	Geotectonics	3.000	3.000	0.000	1712011351 AND 1712011331
1712011454	Rock Mechanics	3.000	2.000	3.000	1712011452
1712011462	Enviornmental & Applied Geophysics	3.000	3.000	0.000	1712011361
1712011463	Seismology	3.000	3.000	0.000	1712011361
1712011464	Well Logging	3.000	3.000	0.000	1712011494 AND 1712011361
1712011496	Mining and mineral Prospecting	3.000	3.000	0.000	1712011331
1712021411	Soil Spatial & Temporal Variability	3.000	3.000	0.000	1712031240 AND 1712031250
1712031150	Environmental Statistics	3.000	3.000	0.000	
1712031210	Water Chemistry	3.000	3.000	0.000	1701081138 AND 1712021120
1712031241	Meterology	3.000	3.000	0.000	110102107
1712031330	Solid & Hazardous Waste	3.000	3.000	0.000	1712031250
1712031420	Environmental Impact Assessment	3.000	3.000	0.000	1712031250
1712031431	Climate Change	3.000	3.000	0.000	1712031250

**Pre-Requist Courses Credit Hours : 0**  
**Requirement type : Credit Hours :0**

Course Number	Course Name	Credit Hours	Theoretical	Practical	Pre - Requisite
0001001096	Computer Skills Test	0.000	0.000	0.000	
0110108099	Computer Skills/ Prerequisite	3.000	3.000	0.000	1001096
0002110096	Arabic Placement Test	0.000	0.000	0.000	
0002120096	English Placement Test	0.000	0.000	0.000	
0121601099	Arabic Language / Pre-requisite	3.000	3.000		2110096
0121602099	English Language / Pre-requisite	3.000	3.000		2120096

free study materials are (3) credit hours, The student chooses it from any of the courses offered by the university departments.