

Zarqa University

Faculty of Engineering

Study Plan for Civil Engineering (8)

B.Sc. Program

September 2015/2016

GRADUATION REQUIREMENTS

Graduation Requirements Summary.

item	Requirements	Mandatory Hours	Elective Hours	Total Hours	Percent
1	University	15	12	27	16.56 %
2	Faculty	27	-	27	16.56 %
3	Department	103	6	109	66.88%
5	Total	145	18	163	100%

Course Numbering System

A course number consists of seven digits: AB CD E F G.

AB code of the Faculty, for engineering it is 09.

CD code of the Department, for Civil Engineering Department it is 02.

E code of the level of the course from 1 to 5.

F code of the subject area.

G code of the sequence number of the course in a subject area.

1- University Requirements (27credit hours):

a) Compulsory courses (15) credit hours as shown in the following list:

Course Number	Course Title	Credit hours	Prerequisites
0200100	Military Science	3	
0200102	Arabic Language 1	3	
0200103	English Language 1	3	
0200104	National Education	3	
0200111	Islamic Culture and Contemporary Issues	3	

b) Elective courses (12) credit hours to be chosen from the following groups:

Course No.	Course Title	Credit hours	Prereq.	Notes
0200112	Arabic language 2	3	0200102	---
0200113	History of Jordan and Palestine	3		
0200114	Jerusalem: History and Civilization	3	---	---
0200122	Principles of Education	3	---	
0200125	Principles of Law	3	---	
0200126	Principles of Communication Science	3	--	
0200127	University Code of Conduct	3	--	--
0300123	Principles of Astronomy	3	---	---
0300124	Scientific Culture	3	---	---
0300161	First Aid	3		
0300146	Fundamentals of Public Health	3		
0300145	Principles of Environmental Science	3	---	---
0300152	Computer Skills	3		
0300145	Principle of Environmental science	3	---	---
0200130	Crimes of Terrorism	3	---	---

Faculty Requirements (27 Credit hours)

Faculty Requirements

Twenty seven (27) credit hours of core coursework are required to fulfill the faculty requirements:

Course No.	Course Title	Credit Hours	Prerequisite
0300101	Calculus 1	3	-
0300102	Calculus 2	3	0300101
0300121	General Physics 1	3	
0300122	General Physics 2	3	0300121
0302111	General Physics Lab1	1	0300121*
0302112	General Physics Lab 2	1	0300122*
0300131	General Chemistry	3	-
0300133	General Chemistry Lab	1	
0902100	Introduction to Engineering and Professional Ethics	1	-
0904405	Technical Writing and Communication Skills	1	0200103
0905100	Engineering Workshops (1)	1	-
0905102	Engineering Drawing	3	-
1501110	Computer Programming 1	3	-
Total		27	

*- Co-requisite

2- Department Requirements.(109) Credit Hours:

A) Mandatory Civil Engineering Courses: (103 Cr. Hrs.):

Course No.	Course Title	Cr. Hr.	Prerequisite
0902112	Civil Surveying	3	0300101
0902114	Civil Surveying Lab.	1	0902112*
0902151	Environmental Chemistry	3	0303101
0902155	Basic Microbiology	3	--
0902200	Statistics and Probability for Engineering	3	0300102
0902221	Static	3	0300121
0902231	Concrete Technology	3	--
0902233	Concrete Technology lab	1	0902231*
0902262	Engineering Geology	3	--
0902300	Drawing with AutoCAD	1	0905102
0902332	Building Construction	3	0902231+ 0905213
0902343	Structural Analysis 1	3	0905213
0902345	Structural Analysis 2	3	0902343
0902348	Reinforced Concrete 1	3	0902231 + 0902343*
0902361	Soil Mechanics	3	0902262 + 0905213
0902363	Soil Mechanics lab	1	0902361*
0902405	Civil Drawing	1	0902300+0902348
0902442	Reinforced Concrete 2	3	0902348+0902345
0902444	Steel Structure	3	0902345
0902451	Hydrology and Hydraulics	3	0905341
0902453	Hydrology and Hydraulics lab.	1	0902451*
0902455	Waste Water and Sanitary Engineering	3	0905341+ 0902155
0902457	Introduction to Environmental Engineering	3	+0902151
0902471	Highway Engineering	3	0902112+0902361
0902474	Pavement Design	3	0902361
0902476	Highway Material and asphalt lab	1	0902474
0902477	Traffic Engineering	3	0902471
0902501	Project Management	3	0906302 + 0902200
0902505	Quantities, Contracts and Specification	3	0902348+ 0902444
0902561	Foundation Engineering	3	0902348 + 0902361
0902574	Airport and Railways Engineering	3	0902471
0902000	Practical Training	0	100 Credit Hours
0902585	Graduation Project (1)	2	120 Credit Hours
0902588	Graduation Project (2)	3	0902585
0904304	Numerical Analysis	3	0905201
0905201	Advance Engineering Mathematics	3	0300102
0905213	Mechanics of Materials	3	0902221
0905214	Mechanics of Materials Lab	1	0905213*
0905311	Dynamics	3	0902221
0905341	Fluid Mechanics	3	0905311
0906302	Engineering Economics and Management	3	0300102

* *Co-requisite*

** Engineering Training: for a period of 8 weeks in an civil engineering projects or organizations after successful completion of 100 credit hours of program's compulsory and electives requirements.

B) Elective, (6 Cr. Hrs.):

Course No.	Course Title	Cr. Hr.	Prerequisite
0902507	Computer Applications in Civil Engineering	3	0902442 + 1501110
0902508	Construction Management	3	0902501
0902509	Pro-Model Simulation	3	0902405
0902510	Remote Sensing and GIS	3	0902112
0902542	Pre-Stressed and Pre-cast Concrete	3	0902348
0902553	Water resources Engineering	3	0902451
0902555	Water Supply Engineering	3	0902451
0902565	Geo-environmental Engineering	3	0902457
0902576	Urban Transportation Planning and Engineering	3	0902471+0902474
0902578	Public Transportation Engineering	3	0902471
0902579	Highway Maintenance and Rehabilitation	3	0902474
0902587	Special Topics in Civil Engineering	3	Dep. Approve