

First Semester							
Course Code	Course Title	NQF Level	Pre requisite	CR.	Contact Hours		
					L	Lab	
ENGL103	English for Academic Purposes I	5	ENGL012	3	3	0	
MATH111	Calculus I	5	MATH099	3	3	0	
PHYS111	General Physics I	5	-	3	2	2	
CHM101	General Chemistry I	5	-	3	2	2	
GS111	Arabic Language Skills	5	-	3	3	0	
<b>Total</b>					<b>15</b>	<b>13</b>	<b>4</b>

Second Semester							
Course Code	Course Title	NQF Level	Pre requisite	CR.	Contact Hours		
					L	Lab	
ENGL104	English for Academic Purposes II	5	ENGL103	3	3	0	
MGT100	Introduction to Entrepreneurship	6	-	2	2	0	
MATH112	Calculus II	6	MATH111	3	3	0	
PHYS113	General Physics II	6	PHYS111	3	2	2	
BIO114	Biology	5	-	3	3	0	
CEE171	Engineering Graphics and CAD	6	-	3	2	2	
<b>Total</b>					<b>17</b>	<b>15</b>	<b>4</b>

Third Semester							
Course Code	Course Title	NQF Level	Pre requisite	CR.	Contact Hours		
					L	Lab	
ENGL202	English Writing for Communication	6	ENGL104	3	3	0	
MATH210	Calculus III	6	MATH112	3	3	0	
MATH212	Probability and Statistics	6	MATH112	3	3	0	
MATH213	Differential Equations	6	MATH112	3	3	0	
CEE215	Engineering Mechanics-Statics	6	MATH111+PHYS111	3	3	0	
CEE218	Properties and Testing of Materials	6	PHYS113	3	2	2	
<b>Total</b>					<b>18</b>	<b>17</b>	<b>2</b>

Fourth Semester							
Course Code	Course Title	NQF Level	Pre requisite	CR.	Contact Hours		
					L	Lab	
GS133	History of Bahrain	5	-	3	3	0	
LAW106	Human Rights	5	-	2	2	0	
CEE232	Introduction to Environmental Engineering	6	CHM101+BIO114	3	2	2	
MATH214	Numerical Methods	7	MATH213	3	3	0	
CEE275	Computer Programming using MATLAB	6	MATH112	3	2	2	
CEE235	Fluid mechanics and Hydraulics	7	CEE215+MATH210	3	2	2	
<b>Total</b>					<b>17</b>	<b>14</b>	<b>6</b>

Fifth Semester							
Course Code	Course Title	NQF Level	Pre requisite	CR.	Contact Hours		
					L	Lab	
CEE341	Surveying	7	MATH212	3	2	2	
CEE321	Structural Analysis I	7	CEE215	3	3	0	
CEE333	Water Supply and Sewerage Networks	7	CEE171+CEE235	3	3	0	
CEE351	Project Management	7	MGT100	3	3	0	
CEE331	Physical Geology	7	CEE218	3	3	0	
CEE334	Environmental Impact Assessment	7	CEE232	3	3	0	
<b>Total</b>					<b>18</b>	<b>17</b>	<b>2</b>

Sixth Semester							
Course Code	Course Title	NQF Level	Pre requisite	CR.	Contact Hours		
					L	Lab	
CEE322	Structural Analysis II	7	CEE321	3	3	0	
CEE325	Concrete Design I	7	CEE218 + CEE321	3	3	0	
CEE342	Highway and Traffic Engineering	7	CEE341	3	3	0	
CEE326	Geotechnical Engineering	8	CEE215+CEE331	3	3	0	
CEE335	Water and Wastewater Treatment Plants	7	CEE333	3	2	2	
CEE350	Sustainable Design and Construction	7	CEE334	3	3	0	
<b>Total</b>					<b>18</b>	<b>17</b>	<b>2</b>
CEE367	Industrial Training	8	Completion of 80 Cr.	2	(300 training hours)		

Seventh Semester							
Course Code	Course Title	NQF Level	Pre requisite	CR.	Contact Hours		
					L	Lab	
CEE425	Concrete Design II	8	CEE325	3	3	0	
CEE426	Steel Design	8	CEE325	3	3	0	
CEE461	Engineering Practice and Ethics	8	CEE351	3	3	0	
CEE4xx	Elective I	8		3	3	0	
CEE4xx	Elective II	8		3	3	0	
CEE432	Solid Waste Management and Treatment	8	CEE333	3	2	2	
<b>Total</b>					<b>18</b>	<b>17</b>	<b>2</b>

Eighth Semester							
Course Code	Course Title	NQF Level	Pre requisite	CR.	Contact Hours		
					L	Lab	
CEE450	Engineering Economy	8	CEE351	3	3	0	
CEE4xx	Elective III	8		3	3	0	
CEE4xx	Elective IV	8		3	3	0	
CEE4xx	Elective V	8		3	3	0	
CEE466	Graduation Project	8	Completion of 120 Cr.	3	1	4	
<b>Total</b>					<b>15</b>	<b>13</b>	<b>4</b>

LIST OF ELECTIVE COURSES ( 4 Tracks)

1- Structures						
Course Code	Course Title	NQF Level	Pre requisite	CR.	Contact Hours	
					L	Lab
CEE421	Advanced Structural Design	8	CEE322+CEE325	3	3	0
CEE422	Pre-stressed Concrete	8	CEE425	3	3	0
CEE423	Reinforced Masonry	8	CEE325	3	3	0
CEE429	Advanced Steel Design	8	CEE426	3	3	0
CEE428	Bridge Design	8	CEE425	3	3	0

2- Water Resources and Environmental Management						
Course Code	Course Title	NQF Level	Pre requisite	CR.	Contact Hours	
					L	Lab
CEE431	Coastal Engineering	8	CEE333	3	3	0
CEE433	Transportation and the Environment	8	CEE232+CEE342	3	3	0
CEE434	Water Resource Systems	8	CEE333	3	3	0
CEE435	Introduction to Geo-Environmental Engineering	8	CEE232+CEE326	3	3	0
CEE436	Special Topics in Environmental Engineering	8	CEE432+CEE333	3	3	0

3- Transportation and Remote Sensing						
Course Code	Course Title	NQF Level	Pre requisite	CR.	Contact Hours	
					L	Lab
CEE441	Advanced Traffic Engineering	8	CEE342	3	3	0
CEE442	Sustainable Pavement Materials and Design	8	CEE350+CEE326	3	3	0
CEE443	Urban Transportation Planning	8	CEE342	3	3	0
CEE444	GIS Applications in Civil Engineering	8	CEE341	3	3	0
CEE445	Remote Sensing Applications in Civil Engineering	8	CEE341	3	3	0

4- Construction Engineering and Management						
Course Code	Course Title	NQF Level	Pre requisite	CR.	Contact Hours	
					L	Lab
CEE451	Specifications and Quantity Surveying	8	CEE351	3	3	0
CEE452	Building Information Modelling	8	CEE351	3	3	0
CEE453	Construction Methods and Management	8	CEE351	3	3	0
CEE454	Construction Estimation and Cost Control	8	CEE451	3	3	0
CEE455	Risk Management in Construction Industry	8	CEE351	3	3	0

ENGL012 & MATH099 are foundation courses for student who failed to pass the admission placement tests.

Courses	No	Cr.H
University Courses	7	19
Basic Science courses	10	30
Major Courses	30	89
<b>TOTAL</b>	<b>47</b>	<b>138</b>

Total Credits Hours	138
Total Contact Hours	149
No. of Compulsory Courses	42
No. of Elective Courses	5

NQF Level	Cr.H	%
Level 5	26	19
Level 6	35	25
Level 7	39	28
Level 8	38	28
<b>Total</b>	<b>138</b>	<b>100</b>