

First Semester	Code	Course name	NQF Level	Prerequisites	Credit hour	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	PHYS011	3	2	2
	CHM101	General Chemistry I	5	-	3	2	2
	GS111	Arabic Language Skills	5	-	3	3	0
	Total				15	13	4

Third Semester	Code	Course name	NQF Level	Prerequisites	Credit hour	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
	Total				18	17	2

Fifth Semester	Code	Course name	NQF Level	Prerequisites	Credit hour	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
	Total				18	17	2

Seventh Semester	Code	Course name	NQF Level	Prerequisites	Credit hour	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
	Total				18	17	2

Elective courses	1- Structures						
	Code	Course name	NQF Level	Prerequisites	Credit hour	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

Elective courses	3- Transportation and Remote Sensing						
	Code	Course name	NQF Level	Prerequisites	Credit hour	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

Second Semester	Code	Course name	NQF Level	Prerequisites	Credit hour	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
	Total				17	15	4

Fourth Semester	Code	Course name	NQF Level	Prerequisites	Credit hour	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
	Total				17	14	6

Sixth Semester	Code	Course name	NQF Level	Prerequisites	Credit hour	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
	Total				18	17	2
	CEE367	Industrial Training	8	Completion of 80 Cr.	2	(300 training hours)	

Eighth Semester	Code	Course name	NQF Level	Prerequisites	Credit hour	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
	Total				15	13	4

Elective courses	2- Water Resources and Environmental Management						
	Code	Course name	NQF Level	Prerequisites	Credit hour	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

Elective courses	2- Water Resources and Environmental Management						
	Code	Course name	NQF Level	Prerequisites	Credit hour	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