

School of Engineering
Department of Civil Engineering
Roadmap for BS Civil Engineering Program
From Batch 03 (Fall 2016)

First Semester						
Code	Course Title	Lec	Lab	CH	Cn	Pre Req
CE102	Engineering Mechanics	3	0	3	3	
CE102L	Engineering Mechanics (Lab)	0	1	1	3	
CE113	Construction Materials	2	0	2	2	
CE113L	Construction Materials (Lab)	0	1	1	3	
CE111	Civil Engineering Drawing	1	0	1	1	
CE111L	Civil Engineering Drawing (Lab)	0	2	2	6	
HM101	English Grammar and Comprehension	2	0	2	2	
HM150	Islamic Studies/Ethics	2	0	2	2	
NS128	Applied Calculus	3	0	3	3	
Total		13	4	17	25	

Third Semester						
Code	Course Title	Lec	Lab	CH	Cn	Pre Req
CE203	Mechanics of Solids	3	0	3	3	CE102
CE203L	Mechanics of Solids (Lab)	0	1	1	3	CE102L
HM221	Social & Ethical Aspects in Engineering	3	0	3	3	
CE222	Advanced Surveying	2	0	2	2	CE121
CE222L	Advanced Surveying (Lab)	0	1	1	3	CE121L
CE251	Fluid Mechanics	3	0	3	3	
CE251L	Fluid Mechanics (Lab)	0	1	1	3	
NS231	Probability and Statistics for Engineers	3	0	3	3	NS128
Total		14	3	17	23	

Fifth Semester						
Code	Course Title	Lec	Lab	CH	Cn	Pre Req
CE305	Advanced Mechanics of Solids	3	0	3	3	CE203
CE305L	Advanced Mechanics of Solids (Lab)	0	1	1	3	CE203L
CE343	Geotechnical Engg-II	3	0	3	3	CE242
CE343L	Geotechnical Engg-II (Lab)	0	1	1	3	CE242L
CE352	Advanced Fluid Mechanics	3	0	3	3	CE251
CE352L	Advanced Fluid Mechanics (Lab)	0	1	1	3	CE251L
CE306	Structural Analysis-II	3	0	3	3	CE204
MS302	Construction Engineering & Management	2	0	2	2	
Total		14	3	17	23	

Seventh Semester						
Code	Course Title	Lec	Lab	CH	Cn	Pre Req
MS401	Quantity Surveying and Contract Management	2	0	2	2	CE332
MS401L	Quantity Surveying and Contract Management (Lab)	0	1	1	3	
CE457	Hydraulics Engineering	3	0	3	3	CE252
CE457L	Hydraulics Engineering (Lab)	0	1	1	3	CE252L
CE464	Plain & Reinforced Concrete-II	3	0	3	3	CE363
CE464L	Plain & Reinforced Concrete-II (Lab)	0	1	1	3	CE363L
CE481L	Computer Applications in Civil Engg	0	1	1	3	
CE498	Project (Phase-I)	0	3	3	3	
HM401	Technical Report Writing & Presentation Skills	2	0	2	2	
Total		10	7	17	25	

Second Semester						
Code	Course Title	Lec	Lab	CH	Cn	Pre Req
CS143	Programming Fundamentals	2	0	2	2	
CS143L	Programming Fundamentals (Lab)	0	1	1	3	
CE121	Elementary Surveying	2	0	2	2	
CE121L	Elementary Surveying (Lab)	0	1	1	3	
EF132	Basic Electrical Engg.	2	0	2	2	
EF132L	Basic Electrical Engg. (Lab)	0	1	1	3	
HM112	Pakistan Studies	2	0	2	2	
NS131	Linear Algebra & Ordinary Differential Equations	3	0	3	3	NS128
NS141	Engineering Geology	2	0	2	2	
Total		13	3	16	22	

Fourth Semester						
Code	Course Title	Lec	Lab	CH	Cn	Pre Req
CE204	Structural Analysis-I	3	0	3	3	CE203
CE212	Civil Engineering Construction & Graphics	1	0	1	1	CE111
CE212L	Civil Engineering Construction & Graphics (Lab)	0	2	2	6	CE111L
NS242	Geo-Informatics	2	0	2	2	
NS242L	Geo-Informatics (Lab)	0	1	1	3	
CE242	Geotechnical Engineering-I	3	0	3	3	
CE242L	Geotechnical Engineering-I (Lab)	0	1	1	3	
HM231	Engineering Economics	2	0	2	2	
NS232	Numerical Analysis	2	0	2	2	NS131
NS232L	Numerical Analysis (Lab)	0	1	1	3	
Total		13	5	18	28	

Sixth Semester						
Code	Course Title	Lec	Lab	CH	Cn	Pre Req
CE361	Steel Structures	3	0	3	3	CE203
CE355	Environmental Engg-I	3	0	3	3	CE251
CE363	Plain & Reinforced Concrete-I	3	0	3	3	CE203
CE363L	Plain & Reinforced Concrete-I (Lab)	0	1	1	3	
CE371	Transportation Planning & Engineering	3	0	3	3	
MS303	Hydrology and Water Resources Management	3	0	3	3	CE251
MS303L	Hydrology and Water Resources Management (Lab)	0	1	1	3	
Total		15	2	17	21	

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Eighth Semester						
Code	Course Title	Lec	Lab	CH	Cn	Pre Req
MS403	Hazards & Disaster Management	2	0	2	2	
CE444	Pavement & Foundation Engineering	3	0	3	3	CE343, CE355
CE444L	Pavement & Foundation Engineering Lab	0	1	1	3	
CE456	Environmental Engg-II	3	0	3	3	CE355
CE456 L	Environmental Engg-II (Lab)	0	1	1	3	
CE459	Irrigation Engineering	3	0	3	3	CE457
CE459L	Irrigation Engineering (Lab)	0	1	1	3	
CE499	Project (Phase-II)	0	3	3	3	
Total		11	6	17	23	

Total Credit Hours = 136

- Note:** 1. CH Stands for Credit Hours
2. Cn Stands for Contact Hours.