

## B.SC. CIVIL ENGINEERING CURRICULUM – Session 2018 to Session 2020

1 <sup>st</sup> SEMESTER						
Course Code	Courses	Credit Hours		Contact Hours		Prerequisite
		Theory	Lab	Theory	Lab	
CE-103	Construction Materials	2	1	2	3	None
CE-105	Civil Engineering Drawing	1	2	1	6	None
Phy-122	Basic Mechanics	2	1	2	3	None
MA-111	Applied Mathematics-I	3	0	3	0	None
EE-198	Basic Electrical Technology	1	1	1	3	None
MinE-170	Basic Engineering Geology	2	0	2	0	None
Total		11	5	11	15	
Semester Total		16		26		
2 <sup>nd</sup> SEMESTER						
Course Code	Courses	Credit Hours		Contact Hours		Prerequisite
		Theory	Lab	Theory	Lab	
CE-101	Elementary Surveying	3	1	3	3	None
CE-102	Computer Programming	2	1	2	3	None
HU-101	Communication Skills	0	1	0	3	None
IS/Hu-101	Islamic & Pak Studies/ Ethics	3	0	3	0	None
MA-112	Applied Mathematics-II	3	0	3	0	None
ME-119	Basic Mechanical	1	0	1	0	None

	Technology					
ME-100L	Workshop Practice	0	1	0	3	None
Total		12	4	12	12	
Semester Total		16		24		
<b>3rd SEMESTER</b>						
Course Code	Courses	Credit Hours		Contact Hours		Prerequisite
		Theory	Lab	Theory	Lab	
CE-201	Surveying and GIS-RS Applications	3	1	3	3	CE-101
CE-212	Mechanics of Materials	3	1	3	3	Phy-122
CE-231	Fluid Mechanics-I	3	1	3	3	None
IS/Hu-201	Islamic & Pak Studies/Ethics	3	0	3	0	None
MA-240	Numerical Analysis	2	1	2	3	None
Total		14	4	14	12	
Semester Total		18		26		
<b>4<sup>TH</sup> SEMESTER</b>						
Course Code	Courses	Credit Hours		Contact Hours		Prerequisite
		Theory	Lab	Theory	Lab	
CE-205	Civil Engineering Construction & Graphics	2	1	2	3	CE-105
CE-207	Engineering Economy and Construction Management	3	1	3	3	None
CE-211	Elementary Structural Analysis	3	0	3	0	Phy-122

CE-221	Geotechnical Engineering-I	3	1	3	3	None
ATP-201	Introduction to Architecture and Town Planning	2	0	2	0	None
Total		13	3	13	9	
Semester Total		16		22		

### 5<sup>TH</sup> SEMESTER

Course Code	Courses	Credit Hours		Contact Hours		Prerequisite
		Theory	Lab	Theory	Lab	
Mgt-317	Project Management in Engineering	2	0	2	0	None
CE-311	Structural Analysis	2	0	2	0	CE-211
CE-313	Steel Structures	3	1	3	3	CE-211
CE-321	Geotechnical Engineering-II	3	1	3	3	CE-221
CE-332	Hydrology and Water Resources Management	2	1	2	3	None
HU-300	Technical Report Writing	0	1	0	3	None
Total		12	4	12	12	
Semester Total		16		24		

### 6<sup>TH</sup> SEMESTER

Course Code	Courses	Credit Hours		Contact Hours		Prerequisite
		Theory	Lab	Theory	Lab	
CE-312	Structural Mechanics	3	1	3	3	CE-212

CE-314	Plain & Reinforced Concrete-I	3	1	3	3	CE-103, CE-212
CE-331	Fluid Mechanics-II	3	1	3	3	CE-231
CE-305	Hazards and Disaster Management	2	0	2	0	None
MA-356	Probability and Statistics in Engineering	2	0	2	0	None
Mgt-319	Entrepreneurship for Engineers	1	0	1	0	None
CE-306	Professional Ethics	1	0	1	0	None
Total		15	3	15	9	
Semester Total		18		24		

7 <sup>TH</sup> SEMESTER						
Course Code	Courses	Credit Hours		Contact Hours		Prerequisite
		Theory	Lab	Theory	Lab	
CE-412	Structural Engineering	3	1	3	3	CE-311, CE-314
CE-411	Plain & Reinforced Concrete-II	3	1	3	3	CE-311, CE-314
CE-421	Transportation Engineering	3	1	3	3	CE-221
CE-434	Hydraulic Engineering	3	1	3	3	CE-231
CE-499	Project	0	3	0	6	None
Total		12	7	12	18	
Semester Total		19		30		

8 <sup>TH</sup> SEMESTER						
Course Code	Courses	Credit Hours		Contact Hours		Prerequisite
		Theory	Lab	Theory	Lab	
CE-431	Irrigation Engineering	3	1	3	3	CE-231
CE-413	Design of Structures	2	1	2	3	CE-311, CE-314
CE-423	Pavement & Foundation Engineering	3	0	3	0	CE-321
ENE-440	Environmental Engineering	3	1	3	3	CE-231
CE-499	Project	0	3	0	6	None
Total		11	6	11	15	
Semester Total		17		26		

Total	Credit Hours	Contact Hours	BSc Civil Engineering
	136	202	

\*SURVEY CAMP in Hilly Terrain is compulsory for Degree Requirement

\*1-2 contact hours will be available for tutorial in each semester