

B.Sc. Civil Engineering Courses

Semester	Sr. No.	Course Code	Course Title	Credit Hours	Knowledge Area (HEC-NCRC)	Knowledge Profile (PEC)
1	1	CE-101	Engineering Drawing	(1-2-3)	Engineering Foundation	WK3
	2	NS-102	Engineering Mechanics	(2-1-3)	Natural Sciences	WK1
	3	ES-103	Engineering Geology	(2-0-2)	Natural Sciences	WK1
	4	CE-104	Surveying-I	(2-1-3)	Engineering Foundation	WK3
	5	MA-105	Calculus and Analytical Geometry	(3-0-3)	Mathematics	WK2
	6	HU-112	Islamic Studies	(2-0-2)	Humanities	---
	Total Cr. Hrs.				(12-4-16)	
2	1	CE-106	Surveying-II	(2-2-4)	Major Based Core (Breadth)	WK4
	2	CE-107	Engineering Materials	(2-1-3)	Engineering Foundation	WK3
	3	HU-108	Professional Ethics	(2-0-2)	Humanities	WK7
	4	MA-109	Differential Equations	(3-0-3)	Mathematics	WK2
	5	HU-110	Pakistan Studies	(2-0-2)	Humanities	---
	6	HU-111	Professional English	(2-0-2)	Humanities	WK7
	Total Cr. Hrs.				(13-3-16)	
3	1	CE-201	Fluid Mechanics-I	(2-1-3)	Engineering Foundation	WK3
	2	CE-202	Properties of Concrete	(2-1-3)	Engineering Foundation	WK3
	3	CE-203	Engineering Practice	(2-0-2)	Engineering Foundation	WK3
	4	MA-204	Numerical Analysis & Computer Programming	(3-1-4)	Mathematics & Computing	WK2
	5	MS-212	Hazards and Disaster Management	(3-0-3)	Management Sciences	WK7
	6	NS-214	Introduction to GIS and RS	(2-0-2)	Natural Sciences	WK1
	Total Cr. Hrs.				(14-3-17)	

Semester	Sr. No.	Course Code	Course Title	Credit Hours	Knowledge Area	Knowledge Profile (WK)
4	1	CE-206	Theory of Structures-I	(3-0-3)	Engineering Foundation	WK3
	2	CE-207	Strength of Materials-I	(3-1-4)	Engineering Foundation	WK3
	3	CE-208	Soil Mechanics-I	(2-1-3)	Engineering Foundation	WK3
	4	CE-209	Drawing, Estimation & Construction	(2-1-3)	Engineering Foundation	WK4
	5	MA-213	Probability and Statistics	(3-0-3)	Mathematics	WK2
	6	HU-211	Communication Skills & Technical Report Writing	(3-0-3)	Humanities	WK7
	Total Cr. Hrs.				(16-3-19)	
5	1	CE-301	Theory of Structures-II	(3-1-4)	Major Based Core (Breadth)	WK4
	2	CE-302	Strength of Materials-II	(3-1-4)	Major Based Core (Depth)	WK4
	3	CE-303	Soil Mechanics-II	(3-1-4)	Major Based Core (Depth)	WK4
	4	MS-304	Construction, Planning & Management	(2-1-3)	Management Sciences	WK6
	5	CE-305	Hydrology and Water Resources	(2-1-3)	Engineering Foundation	WK3
	Total Cr. Hrs.				(13-5-18)	
6	1	CE-306	Environmental Engineering-I	(2-0-2)	Major Based Core (Breadth)	WK3
	2	CE-307	Reinforced Concrete-I	(3-0-3)	Major Based Core (Breadth)	WK5
	3	CE-308	Design of Steel Structures	(3-0-3)	Major Based Core (Depth)	WK5
	4	CE-309	Fluid Mechanics-II	(2-1-3)	Major Based Core (Breadth)	WK4
	5	CE-310	Transportation Engineering-I	(2-1-3)	Major Based Core (Breadth)	WK3
	6	CE-311	Computer Applications	(2-1-3)	Computing	WK2
	Total Cr. Hrs.				(14-3-17)	

Semester	Sr. No.	Course Code	Course Title	Credit Hours	Knowledge Area	Knowledge Profile (WK)
7	1	CE-401	Environmental Engineering-II	(2-1-3)	Major Based Core (Depth)	WK4
	2	CE-402	Reinforced Concrete-II	(3-1-4)	Major Based Core (Depth)	WK5
	3	CE-403	Hydraulics Engineering	(2-1-3)	Major Based Core (Breadth)	WK5
	4	CE-404	Transportation Engineering-II	(2-1-3)	Major Based Core (Depth)	WK5
	5	CE-405	Foundation Engineering	(2-1-3)	Major Based Core (Depth)	WK5
	6	CE-406(A)	Project	(0-3-3)	Civil Engineering Project	WK8
	Total Cr. Hrs.			(11-8-19)		
8	1	CE-407	Structural Engineering	(3-0-3)	Major Based Core (Depth)	WK4
	2	CE-408	Irrigation Engineering	(2-0-2)	Major Based Core (Depth)	WK5
	3	CE-409	Analysis and Design of Structures	(2-2-4)	Major Based Core (Depth)	WK6
	4	MS-411	Entrepreneurship & Leadership	(2-0-2)	Management Science	---
	5	CE-406(B)	Project	(0-3-3)	Civil Engineering Project	WK8
	Total Cr. Hrs.			(9-5-14)		