SCHEMEOF STUDIES

(EFFECTIVE FROM BATCH 2021 and Onward)

				RHR	ST				
	Fall				Spring				
Course	Course Title		Credit Hou		Course	Course Title		Credit Hou	urs
Code		Theory	Practical	Total	Code			Practical	Total
CE-107	Engineering Drawing-I	1	2	3	CE-109	Engineering Surveying-I	2	1	3
CE-102	Statics and Dynamics	3	1	4	CE-110	Chemistry for Civil Engineers	1	1	2
EE-123	Basic Electrical Engineering	2	0	2	CE-111	Introduction to Computing for Civil Engineers	1	2	3
CE-108	Engineering Materials	2	1	3	ME-110	Engineering	2	0	2
MT-114	Calculus	3	0	3	HS-111	Functional English	2	0	2
HS-106 / HS- 127	Pakistan Studies OR Pakistan Studies (for Foreigners)	1	0	1	MT-221	Linear Algebra & Ordinary Differential Equations	3	0	3
	Total Credit	12	4	16		Total Credit	11	4	15
				SEC	OND				
	Fall					Spring			
Course	Course Title		Credit Hours		Course	Course Title	Credit Hours		
Code		Theory	Practical	Total	Code		Theory	Practical	Total
CE-201 CE-205	Engineering Surveying-II Mechanics of Solids-I	3	1	4	CE-222 CE-219	Engineering Drawing-II Fluid Mechanics-I	3	2	3 4
CE-203	Geology for Engineers	2	0	2	CE-219	Structural Analysis-I	3	0	3
HS-218	Business Communication	2	1	3	HS-219	Professional Ethics	2	0	2
HS-205	Islamic Studies OR								
/ HS- 209	Ethical Behaviour (for Non- Muslims)	2	0	2	MT-331	Probability & Statistics	3	0	3
					CF-303	Applied Economics for Engineers	3	0	3
	Total Credit	12	3	15		Total Credit	11	4	15
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Convege	Fall		Cuadit Han			Spring		Cuadit Har	
Course	Fall Course Title		Credit Hou	rs	Course	Spring Course Title		Credit Hou	
Course Code	Course Title Reinforced Concrete	Theory 3	Credit Hou Practical			Course Title Transportation	Theory 3	Credit Hou Practical	Total
Code CE-320	Course Title Reinforced Concrete Design-I	Theory 3	Practical 0	Total 3	Course Code CE-302	Course Title Transportation Engineering-I	Theory 3	Practical 1	Total 4
Code	Course Title Reinforced Concrete	Theory	Practical	Total 3	Course Code	Course Title Transportation	Theory	Practical	Total
CE-320 CE-321	Course Title Reinforced Concrete Design-I Construction Engineering	Theory 3 3	Practical 0 0	Total 3	Course Code CE-302 CE-305	Course Title Transportation Engineering-I Soil Mechanics-I	Theory 3 3	Practical 1	Total 4 4
Code CE-320 CE-321 CE-323	Course Title Reinforced Concrete Design-I Construction Engineering Quantity & Cost Estimation	Theory 3 3 3	Practical 0 0 0	Total 3 3 3 3	Course Code CE-302 CE-305 CE-314	Course Title Transportation Engineering-I Soil Mechanics-I Structural Analysis-II	Theory 3 3 3	Practical 1 1 0	Total 4 4 3
Code CE-320 CE-321 CE-323 CE-319	Course Title Reinforced Concrete Design-I Construction Engineering Quantity & Cost Estimation Fluid Mechanics-II	3 3 3 3 3 3 3	Practical	Total 3 3 3 4 3	Course Code CE-302 CE-305 CE-314 CE-322	Course Title Transportation Engineering-I Soil Mechanics-I Structural Analysis-II Mechanics of Solids-II Essentials in Construction Project Management	3 3 3 3 3	1 1 0 0 0	Total 4 4 3 3 3
Code CE-320 CE-321 CE-323 CE-319 MT-443	Course Title Reinforced Concrete Design-I Construction Engineering Quantity & Cost Estimation Fluid Mechanics-II Numerical Analysis Architecture and Town	3 3 3 3 3 3 3	0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Total 3 3 4 3 19	Course Code CE-302 CE-305 CE-314 CE-322 CE-424	Course Title Transportation Engineering-I Soil Mechanics-I Structural Analysis-II Mechanics of Solids-II Essentials in Construction	3 3 3 3 3	1 1 0 0 0	Total 4 4 3 3 3
Code CE-320 CE-321 CE-323 CE-319 MT-443	Course Title Reinforced Concrete Design-I Construction Engineering Quantity & Cost Estimation Fluid Mechanics-II Numerical Analysis Architecture and Town Planning Total Credit	3 3 3 3 3 3 3	Practical	Total 3 3 3 4 3	Course Code CE-302 CE-305 CE-314 CE-322 CE-424	Course Title Transportation Engineering-I Soil Mechanics-I Structural Analysis-II Mechanics of Solids-II Essentials in Construction Project Management Total Credit	Theory 3 3 3 3 -	1 1 0 0 0 0 -	Total 4 4 3 3 -
Code CE-320 CE-321 CE-323 CE-319 MT-443 AR-309	Course Title Reinforced Concrete Design-I Construction Engineering Quantity & Cost Estimation Fluid Mechanics-II Numerical Analysis Architecture and Town Planning Total Credit Fall	Theory 3 3 3 3 3 3 18	Practical 0 0 0 1 0 1 1	Total 3 3 4 3 19 FIN	Course Code CE-302 CE-305 CE-314 CE-322 CE-424	Course Title Transportation Engineering-I Soil Mechanics-I Structural Analysis-II Mechanics of Solids-II Essentials in Construction Project Management Total Credit Spring	Theory 3 3 3 3 - 15	Practical 1 0 0 0 - 2	Total 4 4 3 3 - 17
Code CE-320 CE-321 CE-323 CE-319 MT-443 AR-309 Course	Course Title Reinforced Concrete Design-I Construction Engineering Quantity & Cost Estimation Fluid Mechanics-II Numerical Analysis Architecture and Town Planning Total Credit Fall	Theory 3 3 3 3 3 18	Practical	Total 3 3 3 4 3 19 FIN	Course	Course Title Transportation Engineering-I Soil Mechanics-I Structural Analysis-II Mechanics of Solids-II Essentials in Construction Project Management Total Credit Spring	Theory 3 3 3 3 - 15	Practical 1 0 0 - 2 Credit Hou	Total 4 3 3 - 17
Code CE-320 CE-321 CE-323 CE-319 MT-443 AR-309	Course Title Reinforced Concrete Design-I Construction Engineering Quantity & Cost Estimation Fluid Mechanics-II Numerical Analysis Architecture and Town Planning Total Credit Fall	Theory 3 3 3 3 3 3 18	Practical 0 0 0 1 0 1 1	Total 3 3 4 3 19 FIN	Course Code CE-302 CE-305 CE-314 CE-322 CE-424 AL Course Code CE-	Course Title Transportation Engineering-I Soil Mechanics-I Structural Analysis-II Mechanics of Solids-II Essentials in Construction Project Management - Total Credit Spring Course Title Civil Engineering Elective	Theory 3 3 3 3 - 15	Practical 1 0 0 0 - 2	Total 4 4 3 3 - 17
Code CE-320 CE-321 CE-323 CE-319 MT-443 AR-309 Course Code	Course Title Reinforced Concrete Design-I Construction Engineering Quantity & Cost Estimation Fluid Mechanics-II Numerical Analysis Architecture and Town Planning Total Credit Fall Course Title Soil Mechanics-II Transportation	3 3 3 3 3 18 Theory	Practical 0 0 0 1 0 1 Credit Hou	Total 3 3 3 4 3 19 FIN	Course Code CE-302 CE-305 CE-314 CE-322 CE-424 AL Course Code CE-### CE-	Course Title Transportation Engineering-I Soil Mechanics-I Structural Analysis-II Mechanics of Solids-II Essentials in Construction Project Management Total Credit Spring Course Title	Theory 3 3 3 3 - 15	Practical 1 0 0 - 2 Credit Hotel	Total 4 3 3 - 17 Total
Code CE-320 CE-321 CE-323 CE-319 MT-443 AR-309 Course Code CE-403 CE-432	Course Title Reinforced Concrete Design-I Construction Engineering Quantity & Cost Estimation Fluid Mechanics-II Numerical Analysis Architecture and Town Planning Total Credit Fall Course Title Soil Mechanics-II Transportation Engineering-II Hydraulics and Water	3 3 3 3 3 18 Theory 3	Practical	Total 3 3 3 4 3 19 FIN	Course CE-302 CE-305 CE-314 CE-322 CE-424	Course Title Transportation Engineering-I Soil Mechanics-I Structural Analysis-II Mechanics of Solids-II Essentials in Construction Project Management Total Credit Spring Course Title Civil Engineering Elective (3+0 OR 2+1 OR 1+2)	Theory 3 3 3 3 - 15 Theory 3	Practical	Total 4 3 3 3 - 17 Total 3
Code CE-320 CE-321 CE-323 CE-319 MT-443 AR-309 Course Code CE-403 CE-432	Course Title Reinforced Concrete Design-I Construction Engineering Quantity & Cost Estimation Fluid Mechanics-II Numerical Analysis Architecture and Town Planning Total Credit Fall Course Title Soil Mechanics-II Transportation Engineering-II Hydraulics and Water Resources Engineering-I Reinforced Concrete	Theory 3 3 3 3 3 18 Theory 2	Practical	Total 3 3 3 4 3 19 FIN Total 4 2	Course CE-302 CE-305 CE-314 CE-322 CE-424	Course Title Transportation Engineering-I Soil Mechanics-I Structural Analysis-II Mechanics of Solids-II Essentials in Construction Project Management Total Credit Spring Course Title Civil Engineering Elective (3+0 OR 2+1 OR 1+2) Management Elective	Theory 3 3 3 3 - 15 Theory 3	Practical	Total 4 3 3 3 - 17 Total 3 3 3
Code CE-320 CE-321 CE-323 CE-319 MT-443 AR-309 Course Code CE-403 CE-432 CE-418	Course Title Reinforced Concrete Design-I Construction Engineering Quantity & Cost Estimation Fluid Mechanics-II Numerical Analysis Architecture and Town Planning Total Credit Fall Course Title Soil Mechanics-II Transportation Engineering-II Hydraulics and Water Resources Engineering-I	Theory 3 3 3 3 3 18 Theory 3 2 3	Practical	Total 3 3 3 4 3 19 FIN Total 4 2 4	Course CE-305 CE-314 CE-322 CE-424 AL Course Code CE-### CE-###	Course Title Transportation Engineering-I Soil Mechanics-I Structural Analysis-II Mechanics of Solids-II Essentials in Construction Project Management Total Credit Spring Course Title Civil Engineering Elective (3+0 OR 2+1 OR 1+2) Management Elective Social Science Elective	Theory 3 3 3 3 - 15 Theory 3 2	Practical	Total 4 3 3 3 - 17 Total 3 3 2
Code CE-320 CE-321 CE-323 CE-319 MT-443 AR-309 Course Code CE-403 CE-432 CE-432	Course Title Reinforced Concrete Design-I Construction Engineering Quantity & Cost Estimation Fluid Mechanics-II Numerical Analysis Architecture and Town Planning Total Credit Fall Course Title Soil Mechanics-II Transportation Engineering-II Hydraulics and Water Resources Engineering-I Reinforced Concrete Design-II Environmental	Theory 3 3 3 3 3 18 Theory 3 2 3 3	Practical	Total 3 3 4 3 19 TIN Total 4 2 4 3	Course CE-302 CE-305 CE-314 CE-322 CE-424	Course Title Transportation Engineering-I Soil Mechanics-I Structural Analysis-II Mechanics of Solids-II Essentials in Construction Project Management Total Credit Spring Course Title Civil Engineering Elective (3+0 OR 2+1 OR 1+2) Management Elective Social Science Elective Design of Steel Structures Environmental	Theory 3 3 3 3 - 15 Theory 3 2 3	Practical	Total 4 3 3 - 17 Total 3 3 2 3
Code CE-320 CE-321 CE-323 CE-319 MT-443 AR-309 Course Code CE-403 CE-432 CE-418 CE-420 EN-301 CE-	Reinforced Concrete Design-I Construction Engineering Quantity & Cost Estimation Fluid Mechanics-II Numerical Analysis Architecture and Town Planning Total Credit Fall Course Title Soil Mechanics-II Transportation Engineering-II Hydraulics and Water Resources Engineering-I Reinforced Concrete Design-II Environmental Engineering-I Civil Engineering	Theory 3 3 3 3 3 3 18 Theory 3 2 3 3 2	Practical 0 0 0 1 0 1 Practical 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Total 3 3 4 3 19 FIN Total 4 2 4 3 3 3	Course CE-302 CE-305 CE-314 CE-322 CE-424	Course Title Transportation Engineering-I Soil Mechanics-I Structural Analysis-II Mechanics of Solids-II Essentials in Construction Project Management Total Credit Spring Course Title Civil Engineering Elective (3+0 OR 2+1 OR 1+2) Management Elective Social Science Elective Design of Steel Structures Environmental Engineering-II	Theory 3 3 3 3 3 - 15 Theory 3 2 0	Practical	Total 4 3 3 - 17 Total 3 2 3 3 3

^{*} Duration one academic year: Requires literature survey and preliminary work during this Semester 1 credit hour of theory class = 1 contact hour 1 credit hour of lab / design class / practical = 3 contact hours

List of Elective Courses (more courses may be added as per need):

Elective	Course Code	Title			
	CE-422	Structural Design and Drawing			
	CE-423	Masonry Structures			
	CE-419	Applied Hydraulics			
	CE-426 Building Information Modelling				
Civil Engineering	CE-429	Geo Synthetics and Their Applications			
Elective	CE-431	Geoinformatics Applications			
	CE-433	Coastal and Harbour Engineering			
	CE-438	Hydraulics and Water Resources Engineering – II			
	CE-425	Modern Aspects of Construction Project Management			
Management Sciences Elective	CE-430	Construction Contract Management			
Sciences Elective	CE-434	Procurement Management			
Social Sciences Elective	CE-427	Introduction to Entrepreneurship and Opportunity Assessment			