

# SCHEME OF STUDIES

(EFFECTIVE FROM BATCH  
2021 and Onward)

<b>FIRST</b>									
<b>Fall</b>					<b>Spring</b>				
Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Theory	Practical	Total			Theory	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	Basic Mechanical 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
<b>Total Credit</b>		<b>12</b>	<b>4</b>	<b>16</b>	<b>Total Credit</b>		<b>11</b>	<b>4</b>	<b>15</b>
<b>SECOND</b>									
<b>Fall</b>					<b>Spring</b>				
Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Theory	Practical	Total			Theory	Practical	Total
CE-201	Engineering Surveying-II	3	1	4	CE-222	Engineering Drawing-II	1	2	3
CE-205	Mechanics of Solids-I	3	1	4	CE-219	Fluid Mechanics-I	3	1	4
CE-220	Geology for Engineers	2	0	2	CE-221	Structural Analysis-I	3	0	3
HS-218	Business Communication	2	1	3	HS-219	Professional Ethics	2	0	2
HS-205 / HS-209	Islamic Studies OR Ethical Behaviour (for Non- Muslims)	2	0	2	MT-331	Probability & Statistics	3	0	3
					CF-303	Applied Economics for Engineers	3	0	3
<b>Total Credit</b>		<b>12</b>	<b>3</b>	<b>15</b>	<b>Total Credit</b>		<b>11</b>	<b>4</b>	<b>15</b>
<b>THIRD</b>									
<b>Fall</b>					<b>Spring</b>				
Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Theory	Practical	Total			Theory	Practical	Total
CE-320	Reinforced Concrete Design-I	3	0	3	CE-302	Transportation Engineering-I	3	1	4
CE-321	Construction Engineering	3	0	3	CE-305	Soil Mechanics-I	3	1	4
CE-323	Quantity & Cost Estimation	3	0	3	CE-314	Structural Analysis-II	3	0	3
CE-319	Fluid Mechanics-II	3	1	4	CE-322	Mechanics of Solids-II	3	0	3
MT-443	Numerical Analysis	3	0	3	CE-424	Essentials in Construction Project Management	3	0	3
AR-309	Architecture and Town Planning	3	0	3	-	-	-	-	-
<b>Total Credit</b>		<b>18</b>	<b>1</b>	<b>19</b>	<b>Total Credit</b>		<b>15</b>	<b>2</b>	<b>17</b>
<b>FINAL</b>									
<b>Fall</b>					<b>Spring</b>				
Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Theory	Practical	Total			Theory	Practical	Total
CE-403	Soil Mechanics-II	3	1	4	CE-###	Civil Engineering Elective (3+0 OR 2+1 OR 1+2)	3	0	3
CE-432	Transportation Engineering-II	2	0	2	CE-###	Management Elective	3	0	3
CE-418	Hydraulics and Water Resources Engineering-I	3	1	4	CE-###	Social Science Elective	2	0	2
CE-420	Reinforced Concrete Design-II	3	0	3	CE-421	Design of Steel Structures	3	0	3
EN-301	Environmental Engineering-I	2	1	3	EN-401	Environmental Engineering-II	2	1	3
CE-409	Civil Engineering Project*	0	3	3	CE-409	Civil Engineering Project	0	3	3
<b>Total Credit Hours</b>		<b>13</b>	<b>6</b>	<b>19</b>	<b>Total Credit Hours</b>		<b>13</b>	<b>4</b>	<b>17</b>

\* 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):

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