

## (EFFECTIVE FROM BATCH 2018)

FIRST YEAR									
Fall					Spring				
Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Th	Pr	Total			Th	Pr	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
	Civil	12	4	16		Civil	11	4	15
	Specialization	12	4	16		Specialization	11	4	15
SECOND YEAR									
Fall					Spring				
Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Th	Pr	Total			Th	Pr	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	1	3	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 / CN-223	Applied Economics for Engineers / Fundamentals of Applied Economics for Engineers	3	0	3
							3	0	3
	Civil	12	4	16		Civil	15	3	18
	Specialization	12	4	16		Specialization	15	3	18
THIRD YEAR									
Fall					Spring				
Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Th	Pr	Total			Th	Pr	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-319 / CN-333	Fluid Mechanics-II / Construction Contracts	3	1	4	CE-314	Structural Analysis-II / Construction Jobsite Engineering Management	3	0	3
		3	0	3			3	0	3
MT-443 / CN-336	Numerical Analysis / Accounting and Financial Management	3	0	3	CE-322 / CN-323	Mechanics of Solids-II / Construction Economic Analysis	3	0	3
		3	0	3			2	0	2
AR-309	Architecture and Town Planning	3	0	3	CE-424	Essentials in Construction Project Management	3	0	3
					CN-433	Introduction to Entrepreneurship and Opportunity Assessment	2	0	2
							2	0	2
	Civil	18	1	19		Civil	15	2	17
	Specialization	18	0	18		Specialization	16	2	18
FINAL YEAR									
Fall					Spring				
Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Th	Pr	Total			Th	Pr	Total
CE-403 / CN-428	Soil Mechanics-II / Sustainable Construction	3	1	4	CE-###	Civil Engineering Elective (3+0 OR 2+1 OR 1+2)	3	0	3
		3	0	3					
CE-432 / CN-435	Transportation Engineering-II / Systems in Building Construction	2	0	2	CE-### / CN-429	Management Elective / Building Information Modelling	3	0	3
		3	0	3			1	2	3
CE-418	Hydraulics and Water Resources Engineering-I	3	1	4	CE-### / CN-427	Social Science Elective / Quality and Safety Aspects in Construction Engineering	2	0	2
							2	0	2
CE-420 / CN-416	Reinforced Concrete Design-II / Legal and Regulatory Environment in the Construction Industry	3	0	3	CE-421	Design of Steel Structures	3	0	3
		3	0	3	CN-434	Temporary Structures in Construction	3	0	3
EN-301	Environmental Engineering-I	2	1	3	EN-401 / CN-436	Environmental Engineering-II / Heavy Construction Equipment and Operations	2	1	3
							3	0	3
CE-409	Civil Engineering Project*	0	3	3	CE-409	Civil Engineering Project	0	3	3
	Civil	13	6	19		Civil	13	4	17
	Specialization	14	5	19		Specialization	12	5	17

\* 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
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
	CN-430	Disaster and Reconstruction Management
	CE-433	Coastal and Harbour Engineering
	CE-438	Hydraulics and Water Resources Engineering – II
	CN-424	Environmental Issues in Construction
Management Sciences Elective	CE-425	Modern Aspects of Construction Project Management
	CE-430	Construction Contract Management
	CE-434	Procurement Management
	CN-432	Leadership and Human Skills in Management
	CN-423	Management and Marketing of Construction Services
Social Sciences Elective	CE-427	Introduction to Entrepreneurship and Opportunity Assessment

List of Specialization in Construction Courses

Elective	Course Code	Title
Specialization Breadth Core	CN-223	<i>Fundamentals of Applied Economics for Engineers</i>
	CN-333	Construction Contracts
	CN-336	<i>Accounting and Financial Management</i>
	CN-331	Construction Jobsite Engineering Management
	CN-323	<i>Construction Economic Analysis</i>
Specialization Depth Core	CN-428	Sustainable Construction
	CN-416	<i>Legal and Regulatory Environment in the Construction Industry</i>
	CN-435	Systems in Building Construction
	CN-429	Building Information Modelling
	CN-427	<i>Quality and Safety Aspects in Construction Engineering</i>
	CN-434	Temporary Structures in Construction
	CN-436	Heavy Construction Equipment and Operations
	CN-433	<i>Introduction to Entrepreneurship and Opportunity Assessment</i>