Scheme of Studies Bachelor in Civil Engineering (Applicable from Batch 2025 onwards)

ES-105/ Paki ES-127 (For MT-116 Calc ES-206/ ES 209 stud CE-112 Engi CE-113 Engi CY-100 Esse (For Code CE-224 Engi CE-225 Mec CE-226 Geo CE-110 Cher EA-218 Busi AR-259 Arcl CE-341 Tran CE-329 Con CE-342 Fluid MT-443 Nun	Fall Semester Course Title plied Physics cistan Studies / Pakistan Studies or Foreigners) leulus & Analytical Geometry mic Studies / Ethical haviour (For Non-Muslims dents) gineering Drawing-I gineering Mechanics sentials of Chemistry or computer science students) Civil Fall Semester Course Title gineering Surveying-II chanics of Solids-I ology for Engineers emistry for Civil Engineers siness Communication chitecture and Town Planning - Civil Fall Semester	Th 3 2 3 2 1 3 NC 14	Pr	3 2 3 4 NC 17 SECON	Course Code MT-221 EA-104 ES-108 CF-101 CE-114 CE-115 - O YEAR Course Code CE-228 CE-229 CE-230 MT-331 CE-### CF-201	Course Title Linear Algebra & Ordinary Differential Equations Functional English Ideology and Constitution of Pakistan IT Fundamentals and Applications Engineering Surveying-I Engineering Materials - Civil Spring Semester Course Title Engineering Drawing-II Structural Analysis-I Fluid Mechanics-I Probability & Statistics Social Sciences Elective Civics and Community Engagement	Th 3 3 2 2 2 2 14	edit H Pr 0 0 1 1 1 1 - 3 edit H Pr 2 0 1 0 0	3 3 3 3 3 - 17 Trs T 3 3 4 3
Code	plied Physics distan Studies / Pakistan Studies or Foreigners) lculus & Analytical Geometry mic Studies / Ethical haviour (For Non-Muslims dents) gineering Drawing-I gineering Mechanics sentials of Chemistry or computer science students) Civil Fall Semester Course Title gineering Surveying-II chanics of Solids-I ology for Engineers emistry for Civil Engineers siness Communication chitecture and Town Planning - Civil	Th 3 2 3 1 3 NC 14 CTh 3 3 2 1 2 -	Pr 0 0 0 0 0 1 1 1 0 0 1 1 0 0	T 3 2 3 4 NC 17 SECON Hrs 4 4 2 2 3	Code MT-221 EA-104 ES-108 CF-101 CE-114 CE-115 - O YEAR Course Code CE-228 CE-229 CE-230 MT-331 CE-###	Linear Algebra & Ordinary Differential Equations Functional English Ideology and Constitution of Pakistan IT Fundamentals and Applications Engineering Surveying-I Engineering Materials - Civil Spring Semester Course Title Engineering Drawing-II Structural Analysis-I Fluid Mechanics-I Probability & Statistics Social Sciences Elective	Th 3 3 2 2 2 2 14 Cr Th 1 3 3 3 2	Pr 0 0 0 1 1 1 1 - 3 Pedit H Pr 2 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 3 3 - 17 Trs T 3 3 4 3
PH-129 App ES-105/ Paki ES-127 (For MT-116 Calc ES-206/ ES 209 stud CE-112 Engi CE-113 Engi CY-100 Esse (For Course Code CE-224 Engi CE-225 Mee CE-226 Geo CE-110 Cher EA-218 Busi AR-259 Arcl - Course Code CE-324 Rein CE-324 Rein CE-329 Con CE-342 Fluic MT-443 Nun	cistan Studies / Pakistan Studies or Foreigners) Iculus & Analytical Geometry unic Studies / Ethical haviour (For Non-Muslims dents) gineering Drawing-I gineering Mechanics sentials of Chemistry or computer science students) Civil Fall Semester Course Title gineering Surveying-II chanics of Solids-I ology for Engineers emistry for Civil Engineers siness Communication chitecture and Town Planning - Civil	3 2 3 2 1 3 NC 14 CTh 3 3 2 1 2 -	0 0 0 0 0 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0	3 2 3 4 NC 17 SECON Hrs 4 4 2 2 3	MT-221 EA-104 ES-108 CF-101 CE-114 CE-115 - OYEAR Course Code CE-228 CE-229 CE-230 MT-331 CE-###	Differential Equations Functional English Ideology and Constitution of Pakistan IT Fundamentals and Applications Engineering Surveying-I Engineering Materials	3 2 2 2 2 2 - 14 Cr Th 1 3 3 3 2	0 0 0 1 1 1 1 - 3 3 Pedit H Pr 2 0 1 0 0 0	3 3 2 3 3 3 - 17 17 3 3 4 3
ES-127 (For MT-116 Calc ES-206/ ES 209 stud CE-112 Enging CE-113 Enging CY-100 Esse (For Code CE-224 Enging CE-225 Mec CE-226 Geo CE-110 Chen EA-218 Busing AR-259 Arch CE-324 Reim CE-324 Reim CE-341 Trann CE-329 Con CE-342 Fluit MT-443 Num	correspond of the computer science studies of the computer science students) Grant Seminary of the computer science students) Civil Fall Semester Course Title Indicate of Solids-I cology for Engineers Computer science students of the computer science sci	3 2 1 3 NC 14 Th 3 3 2 1 2 2	0 0 2 1 - 3 Pr 1 1 0 1 1 0 0	3 2 3 4 NC 17 SECON Hrs T 4 4 2 2 3 3	ES-108 CF-101 CE-114 CE-115 - YEAR Course Code CE-228 CE-229 CE-230 MT-331 CE-###	Functional English Ideology and Constitution of Pakistan IT Fundamentals and Applications Engineering Surveying-I Engineering Materials - Civil Spring Semester Course Title Engineering Drawing-II Structural Analysis-I Fluid Mechanics-I Probability & Statistics Social Sciences Elective	2 2 2 2 - 14 Cr Th 1 3 3 3 3 2 2	0 1 1 1 - 3 edit H Pr 2 0 1 0 0	2 3 3 - 17 Trs Trs Trs 3 4 3
ES-206/ ES 209 CE-112 CE-113 CY-100 Course Code CE-224 CE-225 CE-226 CE-210 CE-110 EA-218 Busi AR-259 Arcl - Course Code CE-324 CE-341 CE-341 CE-342 Mun CE-342 Mun Intre	mic Studies / Ethical haviour (For Non-Muslims dents) gineering Drawing-I gineering Mechanics sentials of Chemistry or computer science students) Civil Fall Semester Course Title gineering Surveying-II schanics of Solids-I ology for Engineers emistry for Civil Engineers siness Communication chitecture and Town Planning - Civil	2 1 3 NC 14 2 1 2 2	0 2 1 - 3 Eredit 1 Pr 1 1 0 1 0	2 3 4 NC 17 SECON Hrs 4 4 2 2 3 3	CF-101 CE-114 CE-115 - O YEAR Course Code CE-228 CE-229 CE-230 MT-331 CE-###	IT Fundamentals and Applications Engineering Surveying-I Engineering Materials - Civil Spring Semester Course Title Engineering Drawing-II Structural Analysis-I Fluid Mechanics-I Probability & Statistics Social Sciences Elective	2 2 2 - 14 Cr Th 1 3 3 3 3 2 2	1 1 1 - 3 3 Pedit H Pr 2 0 1 0 0 0	3 3 - 17 17 3 3 4 3
Course Code CE-224 Engi CE-225 Mec CE-226 Geo CE-110 Cher EA-218 Busi AR-259 Arcl CE-324 CE-341 Tran CE-329 Con CE-342 Fluid MT-443 Num	haviour (For Non-Muslims dents) gineering Drawing-I gineering Mechanics sentials of Chemistry or computer science students) Civil Fall Semester Course Title gineering Surveying-II schanics of Solids-I ology for Engineers emistry for Civil Engineers siness Communication chitecture and Town Planning - Civil	1 3 NC 14 Th 3 3 2 1 2	2 1 1 - 3 Seredit 1 1 0 1 1 0 0	3 4 NC 17 SECON Hrs 4 4 2 2 3	CE-114 CE-115 - O YEAR Course Code CE-228 CE-229 CE-230 MT-331 CE-###	Engineering Surveying-I Engineering Materials Civil Spring Semester Course Title Engineering Drawing-II Structural Analysis-I Fluid Mechanics-I Probability & Statistics Social Sciences Elective	2 2 - 14 Cr Th 1 3 3 3 2 2	1 1 1 - 3 3 Pedit H Pr 2 0 1 0 0 0	3 3 - 17 Irs T 3 3 4 3
CE-112 Engi CE-113 Engi CY-100 Esse (For Course Code CE-224 Engi CE-225 Mec CE-226 Geo CE-110 Chei EA-218 Busi AR-259 Arcl - Course Code CE-324 Rein CE-324 Rein CE-341 Tran CE-329 Con CE-342 Fluid MT-443 Num	gineering Drawing-I gineering Mechanics sentials of Chemistry or computer science students) Civil Fall Semester Course Title gineering Surveying-II schanics of Solids-I cology for Engineers semistry for Civil Engineers siness Communication chitecture and Town Planning - Civil	NC 14 Th 3 3 2 1 2 -	1 - 3 - 3 - 1 - 1 - 0 - 1 - 1 - 0 - 0 - 1 - 0 - 0	4 NC 17 SECON Hrs 4 4 2 2 3	CE-115 - Course Code CE-228 CE-229 CE-230 MT-331 CE-###	Engineering Materials Civil Spring Semester Course Title Engineering Drawing-II Structural Analysis-I Fluid Mechanics-I Probability & Statistics Social Sciences Elective	2 - 14 Cr Th 1 3 3 3 2	- 3 edit H Pr 2 0 1 0 0	3 - 17 Trs T 3 3 4 3
Course Code CE-224 Engi CE-225 Mec CE-226 Geo CE-110 Chei EA-218 Busi AR-259 Arcl - Course Code CE-324 Rein CE-324 Rein CE-341 Tran CE-329 Con CE-342 Fluid MT-443 Nun	Fall Semester Course Title gineering Surveying-II schanics of Solids-I ology for Engineers emistry for Civil Engineers siness Communication chitecture and Town Planning - Civil	NC 14 Th 3 3 2 1 2 -	- 3 Pr 1 1 0 1 1 1 0 0	NC 17 SECON Hrs 4 4 2 2 3 3	Course Code CE-228 CE-229 CE-230 MT-331 CE-###	Civil Spring Semester Course Title Engineering Drawing-II Structural Analysis-I Fluid Mechanics-I Probability & Statistics Social Sciences Elective	- 14 Cr Th 1 3 3 2	- 3 edit H Pr 2 0 1 0 0	- 17 (rs
Course Code CE-224 Engi CE-225 Mec CE-226 Geo CE-110 Chei EA-218 Busi AR-259 Arcl - Course Code CE-324 Rein CE-324 Rein CE-341 Tran CE-329 Con CE-342 Fluid MT-443 Nun	Fall Semester Course Title gineering Surveying-II chanics of Solids-I ology for Engineers emistry for Civil Engineers siness Communication chitecture and Town Planning - Civil	14 Th 3 3 2 1 2 2	3 Pr 1 1 0 1 0	17 SECON Hrs 4 4 2 2 3	Course Code CE-228 CE-229 CE-230 MT-331 CE-###	Spring Semester Course Title Engineering Drawing-II Structural Analysis-I Fluid Mechanics-I Probability & Statistics Social Sciences Elective	Cr Th 1 3 3 3	Pr 2 0 1 0 0 0	T 3 3 4 3
Course	Civil Fall Semester Course Title gineering Surveying-II chanics of Solids-I ology for Engineers emistry for Civil Engineers siness Communication chitecture and Town Planning - Civil	Th 3 3 2 1 2 -	Pr 1 1 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Hrs	Course Code CE-228 CE-229 CE-230 MT-331 CE-###	Spring Semester Course Title Engineering Drawing-II Structural Analysis-I Fluid Mechanics-I Probability & Statistics Social Sciences Elective	Cr Th 1 3 3 3	Pr 2 0 1 0 0 0	T 3 3 4 3
Code Code CE-224 Engi CE-225 Mec CE-226 Geo CE-110 Cher EA-218 Busi AR-259 Arcl - - Course Code CE-324 Rein CE-341 Tran CE-329 Con CE-342 Fluid MT-443 Nun	Course Title gineering Surveying-II chanics of Solids-I ology for Engineers emistry for Civil Engineers siness Communication chitecture and Town Planning - Civil	Th 3 3 2 1 2 -	Pr 1 1 0 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0	Hrs	Course Code CE-228 CE-229 CE-230 MT-331 CE-###	Course Title Engineering Drawing-II Structural Analysis-I Fluid Mechanics-I Probability & Statistics Social Sciences Elective	Th 1 3 3 3 2	Pr 2 0 1 0 0 0	3 3 4 3
Code Ce-224 Enging CE-224 Enging CE-225 Mec CE-226 Geo CE-110 Cher EA-218 Busing Arcl - - Course Arcl Code CE-324 Reim CE-324 Reim CE-329 Con CE-342 Fluid MT-443 Nun	Course Title gineering Surveying-II chanics of Solids-I ology for Engineers emistry for Civil Engineers siness Communication chitecture and Town Planning - Civil	Th 3 3 2 1 2 -	Pr 1 1 0 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0	T 4 4 2 2 3	Code CE-228 CE-229 CE-230 MT-331 CE-###	Course Title Engineering Drawing-II Structural Analysis-I Fluid Mechanics-I Probability & Statistics Social Sciences Elective	Th 1 3 3 3 2	Pr 2 0 1 0 0 0	3 3 4 3
Code Ce-224 Enging CE-224 Enging CE-225 Mec CE-226 Geo CE-110 Cher EA-218 Busing Arcl - - Course Arcl Code CE-324 Reim CE-324 Reim CE-329 Con CE-342 Fluid MT-443 Num	gineering Surveying-II chanics of Solids-I ology for Engineers emistry for Civil Engineers siness Communication chitecture and Town Planning - Civil	Th 3 3 2 1 2 -	Pr 1 1 0 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0	T 4 4 2 2 3	Code CE-228 CE-229 CE-230 MT-331 CE-###	Engineering Drawing-II Structural Analysis-I Fluid Mechanics-I Probability & Statistics Social Sciences Elective	Th 1 3 3 3 2	Pr 2 0 1 0 0 0	3 3 4 3
CE-224 Eng CE-225 Mec CE-226 Geo CE-110 Cher EA-218 Busi AR-259 Arcl - Course Code CE-324 Reir CE-341 Tran CE-329 Con CE-342 Fluid MT-443 Nun	gineering Surveying-II chanics of Solids-I ology for Engineers emistry for Civil Engineers siness Communication chitecture and Town Planning - Civil	3 3 2 1 2 2	1 0 1 1 0	4 4 2 2 3	CE-228 CE-229 CE-230 MT-331 CE-###	Structural Analysis-I Fluid Mechanics-I Probability & Statistics Social Sciences Elective	1 3 3 3 2	2 0 1 0	3 3 4 3
CE-225 Mec CE-226 Geo CE-110 Chei EA-218 Busi AR-259 Arcl - Course Code CE-324 Rein CE-341 Tran CE-329 Con CE-342 Fluid MT-443 Nun	chanics of Solids-I cology for Engineers emistry for Civil Engineers siness Communication chitecture and Town Planning - Civil	3 2 1 2 2	1 0 1 1	2 2 3	CE-229 CE-230 MT-331 CE-###	Structural Analysis-I Fluid Mechanics-I Probability & Statistics Social Sciences Elective	3 3 2	0 1 0 0	3 4 3
CE-226 Geo CE-110 Chei EA-218 Busi AR-259 Arcl - Course Code CE-324 Rein CE-324 Tran CE-329 Con CE-342 Fluid MT-443 Nun	ology for Engineers emistry for Civil Engineers siness Communication chitecture and Town Planning - Civil	2 1 2 2	0 1 1 0	2 2 3	CE-230 MT-331 CE-###	Fluid Mechanics-I Probability & Statistics Social Sciences Elective	3 3 2	1 0 0	4
CE-110 Chei EA-218 Busi AR-259 Arcl - Course Code CE-324 Rein CE-341 Tran CE-329 Con CE-342 Fluid MT-443 Nun	emistry for Civil Engineers siness Communication chitecture and Town Planning - Civil	1 2 2	1 1 0	3	MT-331 CE-###	Probability & Statistics Social Sciences Elective	3 2	0	3
Course Code CE-324 Reir CE-341 Tran CE-329 Con CE-342 Fluid MT-443 Nun	siness Communication chitecture and Town Planning - Civil	2 2 -	1 0	3	CE-###	Social Sciences Elective	2	0	
Course Code CE-324 Rein CE-341 Tran CE-329 Con CE-342 Fluid MT-443 Nun	chitecture and Town Planning - Civil	2	0						2
Course Code CE-324 Rein CE-341 Tran CE-329 Con CE-342 Fluid MT-443 Nun	- Civil	-	-	2	CF-201	Civics and Community Engagement	2		
Code Rein CE-324 Rein CE-341 Tran CE-329 Con CE-342 Fluid MT-443 Nun		13	-	_ !		Civies and Community Engagement		0	2
Code Rein CE-324 Rein CE-341 Tran CE-329 Con CE-342 Fluid MT-443 Nun		13	i	1 - 1	CF-200	Community Service	NC	-	NC
Code Rein CE-324 Rein CE-341 Tran CE-329 Con CE-342 Fluid MT-443 Nun	Fall Semester		4	17		Civil	14	3	17
Code Ce-324 Rein CE-341 Tran CE-342 Con CE-342 Fluid MT-443 Nun	Fall Semester			THIRD	YEAR				
Code CE-324 Rein CE-324 Tran CE-341 Tran CE-329 Con CE-342 Fluid MT-443 Nun						Spring Semester			
CE-324 Rein CE-341 Tran CE-329 Con CE-342 Fluid MT-443 Nun	Course Title		redit l		Course	Course Title		edit H	
CE-341 Tran CE-329 Con CE-342 Fluid MT-443 Nun	inforced Concrete Design-I	Th	Pr	T	Code		Th	Pr 1	T
CE-329 Con CE-342 Fluid MT-443 Nun	Inforced Concrete Design-I Insportation Engineering-I	3	0	3	CE-327 CE-331	Soil Mechanics-I Quantity & Cost Estimation	3	0	3
CE-342 Fluid MT-443 Nun			0						
MT-443 Nun	nstruction Engineering	3		3	CE-325	Structural Analysis-II	3	0	3
Intro	id Mechanics-II	2	1	3	CE-326	Mechanics of Solids-II	3	0	3
CT 201 Intro	merical Analysis	3	0	3	CE-330	Essentials in Construction Project Management	3	0	3
C1-391 Scie	roduction to AI and Data ence	3	0	3	CE-328	Introduction to Entrepreneurship and Opportunity Assessment	2	0	2
-	- Civil	16	2	18	EA/ES-###	Foreign Language-I Civil	NC 17	1	NC 18
	CIVII	10	Z		YEAR	CIVII	1/	1	10
	Fall Semester			3 3 12/3 1	TEAR	Spring Semester			
Course		C	redit l	Hrs	Course		Credit Hrs		
Code	Course Title	Th	Pr	Т	Code	Course Title	Th	Pr	Т
	1 Mechanics-II	2	1	3	CE-456	Design of Steel Structures	3	0	3
CE-454 Engi	draulic and Water Resources gineering-I	3	1	4	CE-432	Transportation Engineering-II	2	0	2
CE-455 Rein	inforced Concrete Design-II	3	0	3	CE/CN-###	Civil Engineering Elective	2/1	0/1	2
	vironmental Engineering	3	1	4	CE/CN-###	Management Sciences Elective	2	0	2
	vil Engineering Design nject - I	0	3	3	CF-401	Professional Ethics	2	0	2
EA/ES-### Fore	eign Language-II	NC	-	NC	CF-402	Occupational Health and Safety	1	0	1
		-	-	-	CE-409	Civil Engineering Design Project - II	0	3	3
,			6	17		Civil	12	3	15
	Civil	11		-			ı		
Tota	Civil	11					57	10	
	Civil tal Credit Hours (Fall Semester)	53	16	69		Total Credit Hours (Spring Semester)	3/		67

Number of contact hours:

The contact hours for the study of courses are as follows:

1 credit hour of theory class = 1 contact hour

1 credit hour of lab/design class / practical = 3 contact hours

Elective Courses					
	Civil Engineering Electives	Th	Pr	T	
CE-442	Applied Hydraulics	2	0	2	
CE-443	Structural Design & Drawing	2	0	2	
CE-444	Masonry Structures	2	0	2	
CE-445	Building Information Modeling	1	1	2	
CE-446	Geosynthetics and Their Applications	2	0	2	
CE-447	Geoinformatics Applications	1	1	2	
CE-448	Coastal and Harbour Engineering	2	0	2	
CE-449	Hydraulics and Water Resource Engineering-II	2	0	2	
CE-450	Commute and Mass Transit	2	0	2	
CN-441	Environmental Issues in Construction	2	0	2	
CN-442	Disaster and Reconstruction Management	2	0	2	
	Management Sciences Electives	Th	Pr	T	
CN-443	Management and Marketing of Construction Services	2	0	2	
CN-444	Leadership and Human Skills in Management	2	0	2	
CE-451	Modern Aspects of Construction Project Management	2	0	2	
CE-452	Procurement Management	2	0	2	
CE-453	Construction Contract Management	2	0	2	
	Social Sciences Electives	Th	Pr	T	
CE-241	Engineer and Society	2	0	2	
MG-228	Sociology and Development	2	0	2	
CE-242	Professional Ethics in Construction Industry	2	0	2	
CF-311	Applied Economics for Engineers	2	0	2	

	Foreign Language - I	
EA-220	Chinese Language-I	NC
ES-222	Arabic Language-I	NC
EA-224	German Language-I	NC
EA-226	French Language-I	NC
EA-231	Turkish Language-I	NC
EA-233	Japanese Language-I	NC
EA-235	Russian Language-I	NC

Foreign Language - II				
EA-221	Chinese Language-II	NC		
ES-223	Arabic Language-II	NC		
EA-225	German Language-II	NC		
EA-227	French Language-II	NC		
EA-232	Turkish Language-II	NC		
EA-234	Japanese Language-II	NC		
EA-236	Russian Language-II	NC		