## Scheme of Studies Bachelor in Civil Engineering (Specialization in Construction) - (Applicable from Batch 2025 onwards)

Course   Course   Title	FIRSTYEAR										
Code	Fall Semester Spring Semester Credit Hys									Tue	
PH-129		Course Title						Course Title			
SE-107   For Foreigners   2   0   2   SE-108   Functional English   3   0		Applied Physics									3
ES-2096   Islamic Studies / Ethical Behaviour   2   0   2			2	0	2		EA-104	Functional English	3	0	3
ES 209	MT-116	Calculus & Analytical Geometry	3	0	3		ES-108	Ideology and Constitution of Pakistan	2	0	2
CE-112   Engineering Nechanics   CE-113   Engineering Mechanics   CE-114   Engineering Surveying-I   CE-115   Engineering Mechanics   CE-116   Engineering Mechanics   CE-117   Engineering Mechanics   CE-118   Engineering Mechanics   CE-119   Engineering Mechanics   CE-110   Engineering Mechanics   CE-110   Engineering Machanics   COurse Title   CE-120   Engineering Machanics   COurse Title   CE-120   Engineering Machanics   COurse   Engineering Machanics			2	0	2		CF-101	IT Fundamentals and Applications	2	1	3
CF-113						-					
Cy-100   Essentials of Chemistry   For computer science students   Specialization   14   3   17   Specialization   14   17   Specialization   15   Specialization   16   Specialization   17   Specialization					-	-	-	i			3
Secondary   Seco	CE-113		3	l	4	-	CE-115	Engineering Materials	2	l	3
Course   Course   Title   Credit Hrs   Check   Course   Title   Check   Chec	CY-100	(For computer science students)					-	-	-	-	-
Course   Course   Course   Credit Hrs   Credit Hrs   Credit Hrs   Course   Credit Hrs   Credit Hrs   Course   Credit Hrs   Credit Hrs   Course   Course   Credit Hrs   Course   Course   Credit Hrs   Course		Specialization	14							3	17
Course Code		Fall Samestar			SECO	ND	YEAR	Spring Samastar			
Code   Course Inter   Th   Pr   T   Code   CE-225   Rechanics of Solids-1   3   1   4   CE-226   Geology for Engineers   2   0   2   CE-225   CE-226   Geology for Engineers   2   0   2   CE-226   Geology for Engineers   1   1   2   CE-226   Geology for Engineers   1   1   2   CE-226   Geology for Engineers   1   1   2   CE-229   Structural Analysis-1   3   0   0   CE-230   Fluid Mechanics-4   3   1   Th   Th   Th   Th   Th   Th   Th	Course		C	redit F	Irs		Course	Course		redit F	Irs
CF-225   Mechanics of Solids-f   3   1   4   4   CF-216   Ceology for Engineers   2   0   2   CF-230   Celoglogy for Engineers   1   1   2   2   CF-230   Celoglogy for Engineers   2   0   2   CF-230   Celoglogy for Engineers   2   0   2   CF-230   Celogy for Engineers   2   0   2   CF-230   Celogy for Engineers   2   0   2   CF-230   Celogy for Engineers   2   0   Celo		Course Title						Course Title			T
CE-226   Geology for Engineers   2   0   2		Engineering Surveying-II		1							3
CE-110   Chemistry for Civil Engineers				_							3
EA-218   Business Communication   2				_		4		ł		-	4
AR-259	CE-110	Chemistry for Civil Engineers	1	1	2	-	MT-331		3	0	3
CF-200   Community Service   NC   -								for Engineers			2
Specialization   13	AR-259	Architecture and Town Planning	2	0	2	-				0	2
Course   Course   Course   Title   Credit Hrs   Code   Course Title   The   Pr   T   Third Pr   The   Pr   The   The   Pr   The   Pr   The   The   Pr   The   Th	-	-	-	-	-	-	CF-200	•		-	NC
Course   Course Title   The Pr   T   Course Code   Course Title   The Pr   T   Course Code   Course Title   The Pr   T   Course Title   Cou		Specialization	13	4		L		Specialization	14	3	17
Course Code		Fall Camastan			1111111	KD.	YEAR	Enving Compator			
Code   Course life   Th   Pr   T   Code   Course life   Th   Pr   T   CE-324   Reinforced Concrete Design-I   3   0   3   3   CE-341   Transportation Engineering-I   2   1   3   3   CN-338   Construction Engineering   2   0   2   CN-323   Construction Contracts   3   0   3   CN-326   Accounting and Financial   Management   3   0   3   CT-391   Introduction to AI and Data Science   3   0   3   CF-327   Solid Mechanics-I   3   0   CN-326   Management   3   0   3   CN-326   Management   3   0   3   CN-326   Management   3   0   3   CN-327   CN-328   Management   3   0	Course		Cı	redit H	Irs		Course		Cı	redit H	Irs
CE-341   Transportation Engineering-I   2		Course Title						Course Title			T
CN-338   Construction Engineering	CE-324	Reinforced Concrete Design-I	3	0	3		CE-331	Quantity & Cost Estimation	3	0	3
CN-323   Construction Engineering	CE-341	Transportation Engineering-I	2	1	3		CE-327		3	1	4
CN-336		Construction Engineering						Management			2
CF-390   Management	CN-323		3	0	3	4			2	0	2
Classical Course	CN-336		3	0	3		CE-330	Management	3	0	3
Specialization   16	CT-391	Introduction to AI and Data Science	3	0	3		CE-328	Opportunity Assessment		0	2
Course Code   Course Title   Credit Hrs   Code   Course Title   CN-428   Sustainable Construction   3   0   3   3   0   3   CR-454   Hydraulic and Water Resources Engineering-I   CN-437   Legal and Regulatory Environment in the Construction Industry   EN-406   Environmental Engineering   3   1   4   CN-438   Systems in Building Construction   2   0   2   CR-409   Civil Engineering Design Project - I   0   3   3   3   CR-401   Professional Ethics   2   0   CR-409   Credit Hrs   Code   Course Title   Credit Hrs   Code   CN-440   Construction Engineering   2   0   CN-440   CN-440   Construction Engineering   2   0   CR-454   CN-429   Building Information Modelling   1   2   CR-409   Civil Engineering Elective   2/1   0/1   CR-409   Civil Engineering Elective   CN-434   Temporary Structures in Construction   3   0   CR-409   Cr-401   Professional Ethics   2   0   CN-439   Heavy Construction Equipment and Operations   CR-409   Civil Engineering Design Project - II   0   3   CR-409   Civil Engineering Design Project - II   0   3   CR-409   Cr-409   Civil Engineering Design Project - II   0   3   CR-409   Cr-409   Civil Engineering Design Project - II   0   3   CR-409	-			-	-	-	EA/ES-###		_	-	NC
Course Code   Course Title   Credit Hrs   Code   Course Title   Credit Hrs   Code   Course Title   Credit Hrs   Code   Course Title   Code   Course Title   Credit Hrs   Code   Course Title   Code   Course Title   Credit Hrs   Code   Course Title   Credit Hrs   Code   Course Title   Code   Course Title   Code   Course Title   Credit Hrs   Code   Course Title   Code   Construction Engineering   Construction Hodeling   1 2 2   Code   Course Title   Code   Course Title   Code   Construction Engineering   Construction Hodeling   1 2 2   Code   Course Title   Construction Engineering   Construction Engineering Elective   Color   Hittle Professional Elective   Color   Course Title   Construction Engineering   Course Title   Course Title Title Profession   Cou		Specialization	16	1			VEAD	Specialization	15	1	16
Course Code         Course Title         Credit Hrs Th         Code         Code         Course Title         Credit Hrs Th         Code         Code         Course Title         Credit Hrs Th         Th         Pr         Th         Th         Pr         Th         Th         Th         Pr         Th         Th		Fall Semester			1 0 11 1/4		III/AIK	Spring Semester			
CN-428 Sustainable Construction  CE-454 Hydraulic and Water Resources Engineering-I  CN-437 Legal and Regulatory Environment in the Construction Industry  EN-406 Environmental Engineering  CE-409 Civil Engineering Design Project - I  CN-438 Systems in Building Construction  Specialization  Specialization  COM-428 CN-440 Quality and Safety Aspects in Construction Engineering  CN-440 Construction Engineering  CN-440 Construction Engineering  CN-429 Building Information Modelling  CN-429 Building Information Modelling  CE-CV-  ###  CE-CV-  ###  Civil Engineering Elective  CH-434 Temporary Structures in Construction  CF-401 Professional Ethics  CN-439 Heavy Construction Equipment and Operations  CE-409 Civil Engineering Design Project - II  Specialization  Specialization  Specialization  13 5 18	Course		Cı	redit H	Irs		Course			redit I	Irs
CE-454 Hydraulic and Water Resources Engineering-I  CN-437 Legal and Regulatory Environment in the Construction Industry  EN-406 Environmental Engineering  CE-409 Civil Engineering Design Project - I  CN-438 Systems in Building Construction  Systems in Building Construction  Systems in Building Construction  Specialization  Specialization  Sustainable Construction Engineering  CN-429 Building Information Modelling  CN-429 Building Information Modelling  CN-429 Civil Engineering Elective  CN-429 Civil Engineering Elective  CN-429 Civil Engineering Elective  CN-434 Temporary Structures in Construction  CN-434 Temporary Structures in Construction  CN-439 Heavy Construction Equipment and Operations  CN-439 Civil Engineering Design Project - II  Specialization  Specialization  Specialization  CN-439 Civil Engineering Design Project - II  Specialization  Specialization  Specialization  Sustainable Construction Engineering  CN-429 Building Information Modelling  CN-429 Civil Engineering Elective  CN-439 Heavy Construction Equipment and Operations  CN-439 Civil Engineering Design Project - II  Specialization  Specialization  Specialization  Specialization  Sustainable Construction Engineering  CN-429 Construction Engineering  CN-429 Civil Engineering Elective  CN-439 Civil Engineering Design Project - II  ONC - NC  CE-409 Civil Engineering Design Project - II  ONC - NC  CE-409 Civil Engineering Design Project - II  ONC - NC  CE-409 Civil Engineering Design Project - II  ONC - NC	Code	Course Little	Th	Pr	T		Code		Th	Pr	T
Engineering-I  CN-437 Legal and Regulatory Environment in the Construction Industry  EN-406 Environmental Engineering CE-409 Civil Engineering Design Project - I  CN-438 Systems in Building Construction CN-438 Systems in Building Construction CN-439 Systems in Building Construction CN-430 Systems in Building Construction CN-439 Systems in Building Construction CN-	CN-428	Sustainable Construction	3	0	3		CN-440		2	0	2
the Construction Industry  EN-406 Environmental Engineering  CE-409 Civil Engineering Design Project - I  CN-438 Systems in Building Construction  CN-438 Systems in Building Construction  ES/EA-### Foreign Language-II  NC - NC  Specialization  Specialization  Specialization  Specialization  EN-406 Environmental Engineering  3	CE-454	Engineering-I	3	1	4		CN-429	Building Information Modelling	1	2	3
CE-409 Civil Engineering Design Project - I 0 3 3 3 CF-401 Professional Ethics 2 0 CN-438 Systems in Building Construction 2 0 2 ES/EA-### Foreign Language-II NC - NC Specialization 13 5 18 Specialization 13 5 18	CN-437		2	0	2			Civil Engineering Elective	2/1	0/1	2
CE-409 Civil Engineering Design Project - I 0 3 3 3 CF-401 Professional Ethics 2 0 CN-438 Systems in Building Construction 2 0 2 ES/EA-### Foreign Language-II NC - NC Specialization 13 5 18 Specialization 13 5 18	EN-406	Environmental Engineering	3	1	4		CN-434		3	0	3
ES/EA-### Foreign Language-II NC - NC Specialization 13 5 18  CN-439 Operations	CE-409	Civil Engineering Design Project - I	0	3	3				2	0	2
Specialization 13 5 18 Specialization 12 5 1	CN- 438	Systems in Building Construction	2	0	2		CN-439		2	0	2
	ES/EA-### Foreign Language-II		NC	-	NC		CE-409	Civil Engineering Design Project - II	0	3	3
				5	18			Specialization	12	5	17
Total Credit Hours (Fall Semester) 55 15 70 Total Credit Hours (Spring Semester) 55 11 6											
		Total Credit Hours (Fall Semester)	55	15	70		Total Cred	lit Hours (Spring Semester)	55	11	66
Total <b>BE - Civil (Specialization in Construction)</b> Credit Hours 111 25 1					Total l	BE .	- Civil (Spec	cialization in Construction) Credit Hours	111	25	136

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

	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-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
CN-441	Environmental Issues in Construction	2	0	2
CN-442	Disaster and Reconstruction Management	2	0	2
MG-228	Sociology and Development	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		