

**Revised Curriculum of B.Sc. Engineering Honours Degree Programme**  
**Civil Engineering Specialization**  
**Department of Civil Engineering**

Module Code	Module Name	Category	Lectures hrs/week	Lab/ Assignments hrs/weeks	Credits		Norm		
					GPA	NGPA	GPA	NGPA	Total
Semester 1									
MA1012	Mathematics	C	3.0	1/1	3.0				
CS1032	Programming Fundamentals	C	2.0	3/1	3.0				
ME1032	Mechanics	C	2.0	3/4	2.0				
MT1022	Properties of Materials	C	2.0	3/4	2.0				
CE1022	Fluid Mechanics	C	2.0	3/4	2.0				
EE1012	Electrical Engineering	C	2.0	3/4	2.0				
EL1012	Language Skill Enhancement I	C	-	3/1	1.0		15.0	0.0	15.0
Total for Semester 1					15.0	0.0	15.0	0.0	15.0
Term A									
EL1022	Language Skill Enhancement II	C	-	6/1	1.0		1.0	3.5	4.5
MN1012	Engineering in Context	C	2.0	-		1.0			
CE1952	Engineering Design	C	2.0	3/1		1.5			
CE1962	Engineering Skill Development	C	0.5	6/1		1.0			
DE1xx2	Non-Technical Elective I*	E			2.0		2.0	0.0	2.0
Total for Term A					3.0	3.5	3.0	3.5	6.5
Semester 2									
MA1022	Methods of Mathematics	C	3.0	1/1	3.0		14.0	0.0	14.0
CE1112	Structural Mechanics I	C	2.5	3/2	3.0				
CE1122	Fluid Mechanics II	C	2.5	3/2	3.0				
CE1132	Building Construction and Materials	C	2.0	3/1	3.0				
ME1812	Basic Thermal Sciences	C	2.0	-	2.0		2.0	0.0	2.0
CS2812	Visual Programming	E	1.0	3/1	2.0				
CE2712	Building Design Process	E	1.0	3/1	2.0				
Total for Semester 2					18.0	0.0	16.0	0.0	16.0

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Semester 3									
MA2012	Differential Equations	C	2.0	-	2.0				
MA2022	Calculus	C	2.0	-	2.0				
CE2012	Structural Mechanics II	C	2.5	3/2	3.0				
CE2022	Design of Steel Structures	C	2.0	3/1	3.0				
CE2032	Hydraulic Engineering I	C	2.5	3/2	3.0				
CE2042	Soil Mechanics & Geology I	C	2.0	3/1	3.0				
CE2052	Construction Planning & Cost Estimating	C	2.0	3/1	3.0				
CE2062	Surveying I	C	2.0	3/1	3.0	0.0	22.0	0.0	22.0
Total for Semester 3					22.0	0.0	22.0	0.0	22.0
Semester 4									
MA2032	Linear Algebra	C	2.0	-	2.0				
MA3012	Applied Statistics	C	2.0	-	2.0				
CE2112	Structural Analysis I	C	2.5	3/2	3.0				
CE2122	Design of Concrete Structures I	C	2.0	3/1	3.0				
CE3012	Hydraulic Engineering II	C	2.5	3/2	3.0				
CE2132	Soil Mechanics & Geology II	C	2.0	3/1	3.0				
CE2142	Surveying II	C	2.0	3/1	3.0				
Total for Semester 4					19.0	0.0	19.0	0.0	19.0
Semester 5									
CE3112	Structural Analysis II	C	2.5	3/2	3.0				
CE3122	Design of Masonry & Timber Structures	C	2.0	3/1	3.0				
CE3132	Geotechnical Engineering	C	2.5	3/2	3.0				
CE3142	Construction Management	C	2.0	3/1	3.0				
CE3152	Fundamentals of Environmental Engineering	C	1.5	3/2	2.0				
CE3162	Fundamentals of Transportation Engineering	C	1.5	3/2	2.0				
MN3042	Business Economics & Financial Accounting	C	2.5	3/2	3.0				
Total for Semester 5					19.0	0.0	19.0	0.0	19.0

Effective for 2009 Intake onwards

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					GPA	NGPA	GPA	NGPA	Total
Term B & Semester 6									
CE3992	Industrial Training	C	-	-		6.0			
CE3912	Survey Camp	C	-	-		2.5	0.0	8.5	8.5
Total for Term B & Semester 6					0.0	8.5	0.0	8.5	8.5
Semester 7									
CE4012	Design of Concrete Structures II	C	2.0	3/1	3.0		15.0	2.0	17.0
CE4022	Hydraulic Design	C	2.0	3/1	3.0				
CE4032	Geotechnical Design	C	2.0	3/1	3.0				
CE4042	Highway Engineering	C	2.5	3/2	3.0				
CE4052	Environmental Engineering	C	2.5	3/2	3.0				
CE4902	Communication Skills for Projects	C	1.0	3/1		2.0	3.0	0.0	3.0
CE4312	Building Engineering	E	2.0	3/1	3.0				
CE4322	Irrigation Engineering	E	3.0	-	3.0				
CE4332	Remote Sensing & GIS	E	2.5	3/2	3.0				
CE4342	Construction Technology	E	2.0	3/1	3.0				
CE4352	Traffic Engineering & Planning	E	2.5	3/2	3.0				
Total for Semester 7					30.0	2.0	18.0	2.0	20.0
Term C									
CE4112	Management Skill Development	C	4.0	-	2.0		4.0	0.0	4.0
CE4912	Comprehensive Design Project**	C	-	-	1.0				
CE4922	Research Project***	C	-	-	1.0				
DE3xx2	Non-Technical Elective II*	E			2.0		2.0	0.0	2.0
Total for Term C					6.0	0.0	6.0	0.0	6.0

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					GPA	NGPA	GPA	NGPA	Total
Semester 8									
CE4123	Engineering Economics	C	2.0	-	2.0		9.0	0.0	9.0
CE4912	Comprehensive Design Project**	C	-	-	4.0				
CE4922	Research Project***	C	-	-	3.0				
CE4412	Bridge Engineering	E	2.0	3/1	3.0				
CE4422	Advanced Structural Engineering & Design	E	2.0	3/1	3.0				
CE4432	Design of Large Structures	E	2.5	3/2	3.0				
CE4442	Computational Mechanics	E	2.5	3/2	3.0				
CE4452	Coastal & Port Engineering	E	3.0	-	3.0				
CE4462	Disaster Risk Management & Mitigation	E	3.0	-	3.0				
CE4472	Environmental Geotechnics	E	2.0	3/1	3.0				
CE4482	Computational Geotechnical Engineering	E	2.0	3/1	3.0				
CE4492	Project Management	E	2.0	3/1	3.0				
CE4502	Management Information Systems	E	2.0	3/1	3.0				
CE4512	Facilities Management	E	2.0	3/1	3.0				
CE4522	Sustainable Design & Construction	E	2.0	3/1	3.0				
CE4532	Highway Construction & Maintenance Management	E	2.5	3/2	3.0				
CE4542	Analysis & Design of Transportation Systems	E	2.5	3/2	3.0				
CE4552	Water & Wastewater Treatment	E	2.5	3/2	3.0				
CE4562	Environmental Impact Assessment	E	2.0	3/1	3.0		9.0	0.0	9.0
Total for Semester 8					57.0	0.0	18.0	0.0	18.0
Total for the Programme					189.0	14.0	136.0	14.0	150.0

\* - Weekly load of lectures and lab/Assignment hrs vary among different Non-technical modules.

\*\* - A total of 5 credits for Comprehensive Design Project over Term C and Semester 8.

\*\*\* - A total of 4 credits for Research Project over Term C and Semester 8.

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**Modules Offered to Other Fields of Specialization**

Module Code	Module Name	Category	Lectures hrs/week	Lab/ Assignments hrs/weeks	Credits	
					GPA	NGPA
Semester 3						
CE1812	Mechanics of Materials	-	2.0	-	2.0	
CE1822	Aspects of Civil Engineering	-	2.0	-	2.0	
Semester 5						
CE2812	Soil Mechanics	-	2.0	3/1	3.0	