

## Course Structure - BScEngHons Degree Programme Specializing in Civil Engineering

[Revised, Effective from E/22]

Sem.	Courses									
S1	EM1010 Calculus I (4)	EE1010 Electricity (3)	CO1010 Programming for Engineers I (3)	CE1010 Engineering Mechanics (3)	MA1100 Ethics and Sustainability (2)	EF1010 English for Communication I (3)				
S2	EM1020 Linear Algebra (3)	EM1030 Differential Equations (2)	CE1110 Materials Science (3)	CE1120 Elementary Fluid Mechanics and Thermodynamics (3)	CE1130 Mechanics of Materials (3)	ME1020 Engineering Drawing (2)	MI1010 Fundamentals of Manufacturing (2)			
S3	EM2010 Calculus II (2)	EM2020 Probability and Statistics (2)	CE2010 Structural Analysis I (2)	CE2020 Fluid Mechanics (3)	CE2040 Soil Mechanics and Engineering Geology I (3)	CE2050 Land Surveying Techniques (1)	EE2810 Essentials of Electrical Engineering for Civil Engineers (2)	ME2810 Mechanical Engineering for Civil Engineers (2)	General Elective-1 (2)	
S4	EM2040 Numerical Methods for Civil Engineers (2)	CE2110 Structural Analysis II (2)	CE2120 Engineering Hydrology (3)	CE2130 Building Planning and Construction (3)	CE2140 Soil Mechanics and Engineering Geology II (3)	CE2150 Engineering Surveying (3)	CE2190 Civil Engineering Laboratory I (1)	MA2400 Management for Civil Engineers (2)		
Industrial Training Segment-1										
S5	CE3010 Plates and Shells (2)	CE3020 Design of concrete structures (3)	CE3030 Design of Steel Structures (2)	CE3040 Economics, Finance and Entrepreneurship (2)	CE3050 Hydraulics (3)	CE3060 Environmental Engineering (3)	CE3070 Geotechnical Engineering and Design I (3)	CE3090 Civil Engineering Laboratory II (1)	General Elective-2 (2)	
S6	CE3110 Finite Element Methods in Solid Mechanics (3)	CE3120 Timber/Masonry Design (2)	CE3130 Design of Presressed and Water Retaining Structures (2)	CE3150 Hydraulic Engineering and Design (3)	CE3170 Geotechnical Engineering and Design II (2)	CE3180 Transportation and Highway Engineering (3)	CE3190 Civil Engineering Laboratory III (1)	Technical Elective-1 (2)	Technical Elective-2 (2)	CE3160 Civil Engineering Field Work (3)
Industrial Training Segment-2										
S7	CE4010 Research Project (3) [Cont. to S8]	CE4020 Integrated Design Project (1) [Cont. to S8]	CE4030 Construction Management (2)	Technical Elective-3 (2)	Technical Elective-4 (2)	Technical Elective-5 (2)	Technical Elective-6 (2)			
S8	CE4010 Research Project (3) [Cont. from S7]	CE4020 Integrated Design Project (3) [Cont. from S7]	CE4110 Construction Planning & Resource Management (2)	Technical Elective-7 (2)	Technical Elective-8 (2)					

Credit load of each course in brackets (x)

- Math., Basic Sciences and Computing
- Engineering -Sciences and -Designs
- Engineering -Research and -Design Projects
- Engineering -Management, -Economics, and Entrepreneurship
- Complementary Studies
- Industrial Training