

**Bachelor of Engineering (Hons) in Civil and Structural Engineering (E103)**

Semester	Module Title	Credit Value
FIRST YEAR		
1	Engineering Drawing	10
	Effective Communication	10
	Surveying and GIS	20
	Engineering Mechanics	10
	Engineering Mathematics I	10
2	Melayu Islam Beraja	10
	Technical Communication	10
	Computing for Engineers	10
	Engineering Mathematics II	10
	Engineering Design	10
	Principles of Fluid Mechanics	10
SECOND YEAR		
3	Professional Ethics	10
	Engineering Hydrology	10
	Engineering Mathematics III	10
	Mechanics of Solids	10
	Hydraulics	10
	Construction Materials	10
4	Technopreneurship	10
	Sustainability for Engineers	10
	Engineering Geology	10
	Structural Analysis	20
	Soil Mechanics	10
THIRD YEAR		
5	Reinforced & Pre-stressed Concrete Design	20
	Geotechnics I	20
	Water Supply Engineering	10
	Elective 1, 2 Module	10
6	Geotechnics II	10
	Structural Steel & Composite Design	20
	Construction Management	20
	Elective 1, 2 Module	10
June - July	EXPERIENCE PLUS (INDUSTRIAL PLACEMENT)	
FOURTH YEAR		
7	Final Year Project	10
	Integrated Structural Design Project	20
	Highway Engineering	10
	Elective 2 Module on Structures	20
8	Final Year Project	30
	Integrated Structural Design Project	20

	Elective 2 Module	10
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### Elective Modules

Module	Module Title	Credit Value
<b>ELECTIVE 1 MODULE</b>		
5 or 6	Transport Engineering	10
	Wastewater Treatment	10
<b>ELECTIVE 2 MODULE</b>		
7 or 8	Computer Aided Structural Design	10
	Advanced Structural Analysis	20
	Advanced Structural Design I	20
	Advanced Structural Design II	10
	Earth Retaining Structures	10
	Water Resources Engineering	20
	Waste Management	10
	Stability of Earth Slope	10
	Soil Improvement and Monitoring	10
	Design & Construct Green Buildings	10
	Renewable Energy Technology	10