## Curriculum

## **Civil Engineering**

nostor	Subjects	Cuadita
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1	Mathematics-I for Civil Engg stream	4
	Applied Physics for Civil Engineering Stream	4
	Engineering Mechanics	3
	Engineering Science Course-I	3
	Emerging Technology Course-I or Programming Language Course-I	3
	Communicative English or Professional Writing Skills in English	1
	Samskrutika Kannada/ Balake Kannada or Indian Constitution	1
	Innovation and Design Thinking or Scientific Foundations of Health	1
2	Mathematics-II for Civil Engg Stream	4
	Applied Chemistry for Civil Engineering stream	4
	Computer-Aided Engineering Drawing	3
	Engineering Science Course-II	3
	Programming Language Course-II or Emerging Technology Course-II	3
	Communicative English or Professional Writing Skills in English	1
	Samskrutika Kannada/ Balake Kannada or Indian Constitution	1
3	Innovation and Design Thinking or Scientific Foundations of Health	1
	Complex variables, probability & sampling techniques	3
	Mechanics of Solids	3
	Mechanics of 67	3
	Building materials and construction technology	3
	Geological Engineering and Practice	3
	Planning and designing of buildings	3
	Basic material testing and concrete laboratory	1
	Mechanics of Fluids Laboratory	1
	Transform Calculus and Numerical Techniques	3
4	Engineering Survey	3
	Environmental Engineering	3
	Structural Analysis	3
	Sustainability and green construction	3
	Analysis of structures by using software	3
	Engineering Survey laboratory	1
	Environmental Engineering laboratory	4
5	Construction management	3
	Design and drawing of RCC Elements	4
	Geotechnical Engineering	3
	Hydrology and Irrigation Engineering	3
	Program elective 1	3
	Extensive survey	
		2
	Environmental Science	
	Universal Human Values  Gootochnical Engineering Jahoratory	
	Geotechnical Engineering laboratory  Estimation—Costing and Engineering Economics	7
		3
	Advanced Geotechnical Engineering  Transportation Engineering	3
	Transportation Engineering	3
7	Program elective 2	3
	Open elective 1	3
	Mini Project	2
	Project management software laboratory	1
	Transportation Engineering laboratory	1
	Finite Element Method	3
	Design and drawing of Steel Elements	4
	Design & Drawing of Transportation & Irrigation sub structures	4
	Program elective 3	3
	Open elective 2	3
	Project work phase – I	2
8	Design and drawing of RCC and steel structures	4
	Program elective 4	3
	Program elective 5	3
_	Project work phase – II	8

## **Electives**

**Advanced Structural Mechanics** 

**Ground Water Hydrology** 

**Environmental Impact Assessment** 

**Advanced Construction Materials, Equipment and Technology** 

Structural Dynamics and Earthquake Engineering

Water Resources Engineering

**Ground Improvement Techniques** 

Geospatial surveying

Advanced design of RCC structures Pavement Design and Maintenance

**Advanced Foundation Engineering** 

Integrated Water Resources Modeling and Management

Design of PSC and RCC bridges

Solid Waste Management

Urban Transport and intelligent transportation systems

Deep foundations

**Advanced Design Steel Structures Economic Evaluation and DPR** 

Pavement construction, maintenance & management

**Geo-environmental Engineering**