

## **INSTITUTE OF AERONAUTICAL ENGINEERING**

(Autonomous)

Dundigal, Hyderabad - 500 043

## **CIVIL ENGINEERING**

## **COURSE CATALOG – BT22**

2022 ONWARDS		COURSE CATALOG: B.TECH IN CIVIL ENGINEERING (CE)					
Semester - I	Semester - II	Semester - III	Semester - IV	Semester - V	Semester - VI	Semester - VII	Semester - VIII
English	Chemistry	Probability and Statistics	Theory of Structures	Analysis of determinate and Indeterminate structures	Design of Steel Structures	Environmental Engineering	Repair and Rehabilitation of Structures
Engineering Physics	Elements of Electronics Engineering	Strength of Materials	Concrete Technology	Hydrology and Water Resources Engineering	Geotechnical Engineering	Foundation Engineering	Programme Elective - V
Linear Algebra and Calculus	Complex Analysis and Vector Calculus	Fluid Mechanics	Hydraulics and Hydraulic Machinery	Design of Reinforced Concrete Structures	Highway and Pavement Engineering	Advanced Structural Analysis and Design	Programme Elective - VI
Elements of Electrical Engineering	Data Structures	Engineering Geology and Construction Materials	Business Economics and Financial Accountancy	Programme Elective - II	Programme Elective - III	Programme Elective - IV	Science, Society and Ethical values
Python Programming	Engineering Mechanics	Surveying and Geomatics	Programme Elective - I	Open Elective – I / MOOCS	Open Elective - II / MOOCS	Open Elective – III / MOOCS	Project Work (Stage – II) FSI
English Laboratory	Computer Aided Engineering Drawing Laboratory	Surveying Laboratory	Building Information Modelling Laboratory	Concrete and Highway Materials Laboratory	Geotechnical Engineering Laboratory	Environmental Engineering Laboratory	
Engineering Physics Laboratory	Data Structures Laboratory	Computer Aided Building Drawing Laboratory	Strength of Materials Laboratory	Structural Design and Detailing Laboratory	Advanced Materials Testing Laboratory	Project Planning Laboratory	
Python Programming Laboratory	EE and EC Workshop	Statistical methods using R	Hydraulics and Hydraulic Machinery Laboratory	Object Oriented Programming Development and Languages Laboratory	Mathematical Methods in Civil Engineering	Project Work (Stage – I) / FSI	
Engineering Workshop	Experiential Engineering Education (ExEEd) - Academic Success	ExEEd – Prototype / Design Building	ExEEd - Fabrication / Model Development	ExEEd - Project Based Learning	ExEED – Research Based Learning		
Induction Program	Indian Constitution	Environmental Engineering and Science	Gender Sensitivity				
Credits: 20	Credits: 20	Credits: 20	Credits: 20	Credits: 20	Credits: 20	Credits: 20	Credits: 20
Total Credits Total Credits							160