

INDIAN INSTITUTE OF TECHNOLOGY PATNA

Department of Civil and Environmental Engineering
Master of Technology in *Civil and Infrastructure Engineering*

REVISED CURRICULUM

1st Year:

First Semester:

Subject ID	Subject	L-T-P	Credits
CE505	Advanced Engineering Mathematics	3-0-0	6
CE507	Civil Engineering Design - I	1-2-0	6
CE5××	Elective-I	3-0-0	6
CE5××	Elective-II	3-0-0	6
CE5××	Elective-III	3-0-0	6
HS513	Technical Communication	2-0-0	4
CE595	Civil Engineering Lab-I	0-0-3	3
	<i>Sub-Total</i>	15-2-3	37

Second Semester:

Subject ID	Subject	L-T-P	Credits
CE506	Civil Engineering Design - II	1-2-0	6
CE512	Finite Element Methods	3-0-0	6
CE5××	Elective-IV	3-0-0	6
CE5××	Elective-V	3-0-0	6
CE5××	Elective-VI	3-0-0	6
CE596	Civil Engineering Lab-II	0-0-3	3
CE598	Seminar	0-0-4	4
	<i>Sub-Total</i>	10-2-7	37

2nd Year:

Third Semester:

Subject ID	Subject	L-T-P	Credits
CE605	Thesis/Industrial Project Phase-I		24
	<i>Sub-Total</i>		24

Fourth Semester:

Subject ID	Subject	L-T-P	Credits
CE606	Thesis/Industrial Project Phase-II		24
	<i>Sub-Total</i>		24

TOTAL CREDITS: 37+37+24+24 = 122

Departmental Elective - I, II, and III	
CE511	Advanced Structural Mechanics
CE513	Advanced Foundation Engineering
CE515	Advanced Structural Analysis
CE517	Structural Dynamics
CE519	Air Pollution and Control
CE521	GIS in Water Resources
CE523	Soil Exploration
CE525	Highway Geometric Design
CE527	Infrastructure Economics, Laws and Professional Ethics
CE529	Machineries and Equipments in Infrastructure Engineering
CE531	Masonry Structures
CE533	Biological Processes for Water and Wastewater Treatment
CE535	Soil Dynamics
CE537	Solid and Hazardous Waste Management
CE539	Stochastic Hydrology
CE541	Urban and Regional Planning
CE543	Water Resources Management

Departmental Elective - IV, V and VI	
CE510	Environmental Impact Assessment
CE514	Advanced Hydrology
CE516	Advanced Soil Mechanics
CE518	Advanced Structural Design
CE522	Advanced Water and Wastewater Engineering
CE524	Airport Engineering
CE526	Earthquake-Resistant Design of Structure
CE528	Railway Engineering
CE530	Geotechnical Earthquake Engineering
CE532	Ground Improvement Techniques and Reinforced Earth
CE534	Groundwater Hydrology
CE536	Industrial Pollution Control and Prevention
CE538	Project Economics, Valuation and Contracts
CE540	Integrated Region and Smart City
CE542	Open Channel Hydraulics
CE544	Site Remediation
CE546	Special Topics in Geotechnical Engineering
CE548	Theory of Plates and Shells
CE550	Traffic Engineering and Highway Safety
CE566	Physico-Chemical Processes for Water and Wastewater Treatment