







DEPARTMENT OF CIVIL ENGINEERING

COURSE OUTCOMES

III year I Sem NECR21

Subject Code	Subject	Course Outcomes	Blooms Level
21CE2008		Apply clauses of IS:456-2000 code design	BL-3
		specifications for different structural designs &	
		Design the beams with different end conditions	DI 0
	Concrete Structures	Understand and Design the beams for shear, torsion	BL-2
		and bond	BL-6
		Design one way slabs and two way slabs with different end conditions	DL-0
		Design the RCC columns with combined bending	BL-6
		and compression	DL 0
		Design foundations and stair cases of different shapes	BL-6
21CE2009	Soil Mechanics	Classify various types of soils using USCS and IS classification methods	BL-2
		Determine the permeability of soils and stratified soils.	BL-3
		Calculate the stress distribution in foundations.	BL-2
		Determination of settlement of foundations.	BL-3
		Calculate the shear strength of soil under different	BL-2
		drainage conditions.	
		Students able to know about types of roads and their	BL-2
	Highway Engineering	development from time to time and current projects.	DI 4
		Analyze the planning process required for highways and design the geometric features. Evaluate and recommend suitable highway materials	BL-4
21CE2010		Evaluate and recommend suitable highway materials.	BL-5
		Design of flexible& rigid pavement.	BL-6
		Analyze the traffic characteristic, parking facilities and their solutions using intersections.	BL-4
	Professional Elective- I (Ground Improvements)	Understand the necessity ground Improvement Techniques .	BL-2
21CE4005		To enable the student to understand Dynamic compaction.	BL-2
		Understand Ground Improvement by dewatering methods.	BL-2
		Understand different types admixtures and their suitability conditions.	BL-2
		To enable the student to understand about grouting and soil nailing.	BL-2









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III year II Sem NECR21

Subject Code	Subject	Course Outcomes	Blooms Level
21CE2011	Water Resources Engineering	Understand various components of hydrologic cycle that affect the movement of water in the earth	BL-2
		understand Various Infiltration technique	BL-2
		Analyze the distribution of water.	BL-5
		Understand the concepts of movement of ground water beneath the earth	BL-2
		Distribution systems for canal irrigation and the basics of design of Reservoir	BL-4
21CE2012	Environmental Engineering	Identify the sources of water and intake works for collection. Be able to forecast and calculate water demand.	BL-3
		Understands the stages and process of water treatment methods.	BL-2
		Understand the various methods of conveyance and distribution of water. Be able to design pipe-networks by hardy-cross method. Understand various joints, valves and house service connections.	BL-2
		Analyze the waste water collection system & its characteristics.	BL-4
		Explain the processing and management of waste water and sludge treatment.	BL-2
	Foundation Engineering	Understand the necessity of soil exploration.	BL-1
24 (772042		To enable the student to analyze slopes of stability.	BL-2
21CE2013		Compute Earth pressures acting on the retaining walls.	BL-2
		Understand the design of shallow foundations.	BL-3
		Design the well foundations and Pile foundations.	BL-3
21CE4008	Professional Elective II (Air Pollution & Control) MOOCS	Understand deferent types of air pollutants, their effects, and Quality standards.	BL-2
		Identify Factors influencing air pollution and Plume behavior.	BL-3
		Explain various types of air pollution controlling equipments.	BL-2
		Demonstrate various control methods of Gaseous pollution.	BL-2
		List the Vehicular pollution.	BL-1
21CE4011	III(Prestressed Concrete)	Understand the development & methods of pre-stressing.	BL-2
		Understand the losses in pre-stressing.	BL-2
		Analyse and design the sections to withstand flexure.	BL-4
		Design various pre-stressed concrete structural elements for shear.	BL-6
		Analyze control deflections in pre-stressed concrete beams.	BL-4









DEPARTMENT OF CIVIL ENGINEERING

IV year I Sem NECR21

Subject Code	Subject	Course Outcomes	Blooms Level
21CE2014	Design of Steel Structures	Explain the terms, design philosophies and relevant IS codes & Design the Bolted and Welded connections.	BL-2
		Design & Detailing of Tension, compression & Built-up members under different conditions.	BL-6
		Design & Detailing of laterally supported and unsupported beams.	BL-6
		Design of Beam-Column & Eccentric connections	BL-6
		Design & Detailing of components of Plate girder.	BL-6
	Estimation and Quantity Surveying	Estimate the various structural elements	BL-5
21CE2015		Illustrate various methods of detailed estimates for different structures	BL-2
		Explain the specifications	BL-2
		Analyze the Rate analysis	BL-4
		Summarize the valuation of buildings	BL-2
21CE4018	Professional Elective -IV(Municipal Solid Waste Management)	Understand the solid waste management.	BL-2
		Study of comparative assessment of waste generation and composition of developing and developed nations.	BL-1
		Understand the transportation and disposal of solid waste (waste disposal).	BL-2
		Study of product recovery and recycling of solid waste.	BL-1
		Understand Recovery Of Biological Conversion Products	BL-2
21CE4023	Professional Elective- V(Environmental Impact Assessment)	Classify the different methodologies of EIA and conditions under which a particular method can be adopted.	BL-2
		Find conservation areas and plant species at risk.	BL-1
		Illustrate the important plant or animal groups.	BL-2
		Determine how well the environmental management systems and equipment are performing. Verify compliance with the relevant national, local or other laws and regulations.	BL-5
		Prepare EIA reports.	BL-4