

DEPARTMENT OF CIVIL ENGINEERING

COURSE OUTCOMES

II year I Sem NECR23

Subject Code	Subject	Course Outcomes	Blooms Level
23CE2001	Surveying	Apply the principle and methods of surveying and measuring of horizontal and vertical- distances and angles	BL-2
		Identify the source of errors and rectification methods	BL-3
		Apply surveying principles to determine areas and volumes	BL-2
		Setting out curves and using modern surveying equipments	BL-3
		Apply the basics of Photogrammetry Surveying in field	BL-4
23CE2002	Strength of Materials	Understand the basic materials behavior under the influence of different external loading conditions and the support conditions.	BL-2
		Draw the diagrams indicating the variation of the key performance features like axial forces, bending moment and shear forces in structural members.	BL-3
		Acquire knowledge of bending concepts and calculation of section modulus and for determination of stresses developed in the beams	BL-2
		Analyze the deflections due to various loading conditions.	BL-3
		Assess stresses across section of the thin, thick cylinders and columns to arrive at optimum sections to withstand the internal pressure using Lamé's equation	BL-4
23CE2003	Fluid Mechanics	Understand the principles of fluid statics, kinematics and dynamics	BL-2
		Apply the laws of fluid statics and concepts of buoyancy	BL-3
		Understand the fundamentals of fluid kinematics and differentiate types of fluid flows.	BL-2
		Apply the Principle of conservation of energy for flow measurement.	BL-3
		Analyze the losses in pipes and discharge through pipe network.	BL-4
	Environmental Science	Identify various natural resources & its impact on life of human beings	BL-3
		Understand about biodiversity & its conservation	BL-2
		Apply control measures of urban and industrial wastes	BL-3
		Identify the Prevention and Control measures of Pollution	BL-3
		Understand about Environment and human health	BL-2

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II year II Sem NECR23

Subject Code	Subject	Course Outcomes	Blooms Level
23CE2004	Engineering Geology	Understand the significance of geological agents on Earth surface and its significance in Civil Engineering.	BL-2
		Identify and understand the properties of Minerals and Rocks	BL-3
		Understand the concepts of Groundwater and its geophysical methods.	BL-2
		Classify and measure the Earthquake prone areas, Landslides and subsidence to practice the hazard zonation.	BL-2
		Investigate the project site for mega/mini civil engineering projects and site selection for mega engineering projects like Dams, Reservoirs and Tunnels.	BL-4
23CE2005	Concrete Technology	Familiarize the basic ingredients of concrete and their role in the production of concrete and its behavior in the field.	BL-2
		Test the fresh concrete properties and the hardened concrete properties. Understand the basic concepts of concrete. Design the concrete mix by BIS method.	BL-2
		Evaluate the ingredients of concrete through lab test results. realize the importance of quality of concrete	BL-5
		Understand the behavior of concrete in various environments.	BL-2
		Familiarize the basic concepts of special concrete and their production and applications.	BL-2
23CE2006	Structural Analysis	Apply energy theorems to analyze trusses	BL-3
		Analyze indeterminate structures by using Castigliano's-II theorem	BL-4
		Analyze of fixed and continuous beams	BL-4
		Analyze continuous beams and portal frames by using slope-deflection method	BL-4
		Analyze continuous beams and portal frames by using Moment-distribution method	BL-4
23CE2007	Hydraulics And Hydraulic Machinery	Understand the characteristics of laminar and turbulent flows.	BL-2
		Apply the knowledge of fluid mechanics to address the uniform flow problems in open channels.	BL-3
		Solve non-uniform flow problems and hydraulic jump phenomenon in open channel flows.	BL-3
		Evaluate the performance of impact of jets on plates and design Pelton wheel, Francis and Kaplan turbine.	BL-5
		Understand the principles, losses and its efficiencies of centrifugal pumps.	BL-2