



**BANSAL INSTITUTE OF RESEARCH & TECHNOLOGY,
BHOPAL**
Kokta Anand Nagar, Bhopal



DEPARTMENT OF CIVIL ENGINEERING

COURSE OUTCOMES (COs)

Semester: V

Course Name: Fluid Mechanics -I		Course Code: CE-501
Students will be able to:		
CO1:	Understand the principles of fluid statics and determine fluid pressure using appropriate pressure-measuring devices.	
CO2:	Analyze the kinematics and dynamics of fluid flow and explain the behavior of fluids under different flow conditions.	
CO3:	Apply the energy equations and fundamental laws of fluid mechanics to solve fluid flow problems and use suitable flow measurement devices.	
CO4:	Explain the characteristics of laminar flow and apply the relevant equations and principles to analyze flow over plates and through conduits.	
CO5:	Apply dimensional analysis and similarity principles to solve problems related to fluid flow and pipe flow systems.	

Course Name: Transportation Engg. - II		Course Code: CE-502
Students will be able to:		
CO1:	Understand the different modes of transportation and explain their key components, characteristics, and applications in transportation engineering.	
CO2:	Explain the principles of highway planning and geometric design in accordance with relevant IRC and IS standards.	
CO3:	Differentiate between flexible, rigid, and low-cost pavements and understand their design features, construction methods, and applications.	
CO4:	Understand the components of airports and aircraft and explain the basic principles of airport planning and design.	
CO5:	Apply the fundamental concepts of transportation engineering to analyze and solve problems related to various modes of transportation.	



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Course Name: Quantity Surveying & Costing		Course Code: CE-503 C
Students will be able to:		
CO1:	Prepare specifications for construction materials and various items of work in accordance with standard engineering practices.	
CO2:	Estimate the quantities of materials and prepare detailed estimates and cost abstracts for construction projects.	
CO3:	Analyze the rates of different construction items by considering material, labor, equipment, and other project costs.	
CO4:	Understand the fundamental principles of valuation and apply them for the assessment of land and building properties.	
CO5:	Identify and explain the legal aspects of construction projects, including contracts, regulations, and other statutory requirements.	

Course Name: Remote Sensing & GIS		Course Code: CE-504 B
Students will be able to:		
CO1:	Understand the fundamental principles of remote sensing and apply various tools and techniques for remote sensing data analysis.	
CO2:	Explain the process of satellite data acquisition and interpret the characteristics of different types of satellite images.	
CO3:	Understand the basic concepts and components of Geographic Information Systems (GIS) and their role in spatial data management.	
CO4:	Analyze GIS data models and apply appropriate modeling techniques for spatial analysis and decision-making.	
CO5:	Apply remote sensing and GIS techniques to solve planning, mapping, monitoring, and other civil engineering problems.	

**Approved By: -
Head of Department**