

Department of Civil Engineering

B.E. 5th Sem

Course: Design of Reinforced & Prestressed Concrete Structures

Course Code: (5CE01)

At the end of Design of Reinforced & Prestressed Concrete Structures course the student will be able:

- CO 1:** To analyze and design of rectangular section
- CO 2:** To analyze and design of slab.
- CO 3:** To analyze and design of staircase and retaining wall.
- CO 4:** To analyze and design of column and footing.
- CO 5:** To understand grid slab and ductile detailing.
- CO 6:** To explain the general behavior of PC sections under external load.

Course: Surveying and Geomatics

Course Code: (5CE02)

At the end of Surveying and Geomatics course the student will be able:

- CO 1:** To understand the use of different types of curves and their field implications.
- CO 2:** To understand the triangulation adjustment.
- CO 3:** To understand the hydrographic survey.
- CO 4:** To acquire skills in handling spatial data base warehousing and mining.
- CO 5:** To understand the surveying with advance instrument like remote sensing, GPS.
- CO 6:** To understand the surveying with advance instrument like remote sensing, GPS and GIS.

Course: Numerical Methods & Computer Programming

Course Code: (5CE03)

At the end of Numerical Methods & Computer Programming course the student will be able:

- CO 1:** To use spreadsheet software for solving civil engineering problems.
- CO 2:** To impart knowledge to analyze, solve, design and code numerical method problems using C language.
- CO 3:** To impart knowledge to analyze, solve, design and code civil engineering problems using C language.
- CO 4:** To make use of programming for solving the mathematical problems.
- CO 5:** To make use of programming for solving the quadratic equations using C language.
- CO 6:** To solve and code for civil engineering problems using C language.

Course: Highway Construction and Management (PE-I)

Course Code: (5CE04)

At the end of Highway Construction and Management course the student will be able:

- CO 1:** To know the development of transport, various road development plans and policies in India and test procedures for highway materials.
- CO 2:** To understand the principles of highway geometric design as per IRC standards.
- CO 3:** To study the different types of pavement its construction, maintenance & design by different methods
- CO 4:** To understand the Traffic engineering & different types of traffic control devices.
- CO 5:** To study the causes, preventions, better planning & design of highway to prevent accidents.
- CO 6:** To study various types of equipment, their working principles & limitations for flexible and rigid pavement

Course: Disaster Management (OE-I)

Course Code: (5CE05)

At the end of Disaster Management course the student will be able

- CO 1:** To understand concept and terms related to Disaster.
- CO 2:** To understand various types of Natural and Artificial Disaster.
- CO 3:** To decide and take actions to mitigate impact of disaster.
- CO 4:** To know roles and responsibility of organizations – public and private, individual and group to manage disaster.
- CO 5:** To development of Comprehensive Disaster Management Policies:
- CO 6:** To the creation and implementation of national or regional policies that outline disaster management strategies and responsibilities.

B.E. 6th Sem

Course: Design of Steel Structure

Course Code: (6CE01)

At the end of Design of Steel Structure course the student will be able:

- CO 1:** To explain the methods of design of steel structure.
- CO 2:** To design bolted and welded connection.
- CO 3:** To identify the different failure modes of bolted and welded connections, and determine their design strengths.
- CO 4:** To design the Tension and compression member.
- CO 5:** To identify and compute the design loads on a typical steel roof trusses.
- CO 6:** To design basic elements of steel structure like beams, column and bases.

Course: Environmental Engineering – I

Course Code: (6CE02)

At the end of Environmental Engineering – I course the student will be able:

- CO 1:** To define and explain the significance of terms and parameters frequently used in water supply engineering.
- CO 2:** To evaluate the influence of the different parameter in design and treatment of water Treatment plant (water quality parameters).
- CO 3:** To study Basic methodology for water treatment (viz., sedimentation, coagulation, flocculation, filtration, disinfection and water softening.)
- CO 4:** To understand water quality criteria and standards, and their relation to public Health.
- CO 5:** To understand the concept of disinfection
- CO 6:** To Understand the Distribution system.

Course: Fluid Mechanics

Course Code: (6CE03)

At the end of Fluid Mechanics course the student will be able:

- CO 1:** To describe basic properties of fluid flow.
- CO 2:** To apply the knowledge to fluid flow problems.
- CO 3:** To analyse the type of flow by using basic of mathematical principle.
- CO 4:** To solve and modelling the pipe flow problems.
- CO 5:** To understand the dimensional analysis.
- CO 6:** To study of different flows.

Course: Advanced Construction Materials

Course Code: (6CE04)

At the end of Advanced Construction Materials course the student will be able:

- CO 1:** To understand special type of concrete and supplementary cementations materials.
- CO 2:** To recognize various types of metals and new alloy steels.
- CO 3:** To understand Thermal and Sound insulating materials.
- CO 4:** To know types of construction chemicals and wastes.
- CO 5:** To recognize types of shoring and formwork materials.
- CO 6:** To understand the elementary concept of smart materials.

Course: Environmental Management

Course Code: (6CE05)

At the end of Environmental Management course the student will be able:

- CO 1:** To be aware of different environmental problems, their causes and effects.
- CO 2:** To have knowledge regarding different environmental policies & management plans.
- CO 3:** To Have thorough knowledge about Environmental Legislation and Acts.
- CO 4:** To Acquire information about various agencies for Environmental Managements in India.
- CO 5:** To Have knowledge regarding different systems working for Environmental Management.
- CO 6:** To understand the Basics of Data Base Management System