

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:** Explain the general behavior of PC sections under external load.

Course: Surveying & Geomatics

Course Code: (5CE02)

At the end of Surveying & 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 and GIS.
- CO 6:** To know the EIA and transportation Planning.

Course: Numerical Methods and Computer Programming **Course Code: (5CE03)**

At the end of Numerical Methods and 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 solve the matrix operations and Runge Kutta methods.
- CO 5:** To solve Quadratic Equation and numerical Integral.
- CO 6:** To analyses, solve and design civil engineering problem by using computer programming.

Course: Watershed Engineering and Management (PE-I) **Course Code: (5CE04)**

At the end of Watershed Engineering and Management course the student will be able:

- CO 1:** To Explain the hydrology and hydrological data.
- CO 2:** To Analyze the hydrological methods for runoff.
- CO 3:** To Evaluate the ground water hydrological problems.
- CO 4:** To know the concept of hydrology of ground water.
- CO 5:** To study of water shed management.
- CO 6:** To know the concept of storm water management.

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 introduce steel structures and its basic components
- CO 2:** To understand methods of design of steel structure.
- CO 3:** To introduce structural steel fasteners like welding and bolting
- CO 4:** To introduce design method of tension & compression members.
- CO 5:** To introduce design method of beams, Column, Base Plate.
- CO 6:** To introduce design load on a typical steel roof trusses.

Course: Environmental Engineering – I

Course Code: (6CE02)

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

- CO 1:** To make the students conversant with sources and its demand of water.
- CO 2:** To understand the basic characteristics of water and its determination.
- CO 3:** To expose the students to understand the design of water supply lines.
- CO 4:** To provide adequate knowledge about the water treatment processes and its design.
- CO 5:** To have adequate knowledge on operation and maintenance of water supply.
- CO 6:** To acquire the knowledge of 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 adequate the knowledge of dimensional analysis.
- CO 6:** To understand the types of flow, energy and momentum principal.

Course: Advanced Construction Materials (PE-II)

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: Mini Project

Course Code: (6CE09)

At the end of Mini Project course the student will be able:

- CO 1:** To plan and execute a minor project.
- CO 2:** To write project report.