

**Department of Civil Engineering
2024-24**

1. Core Civil Engineering Subjects:

• Civil Engineering Basics:

- Engineering Mechanics (Theory and Lab)
- Concrete Technology
- Elementary Design of structure (RCC)
- Fundamentals of Geotechnical Engineering
- Strength of Materials
- Introduction to Structural Engineering
- Fundamentals of Surveying
- Building Planning and Drawing

• Advanced Civil Engineering:

- Fundamental of Structural Design(RCC) (Theory and Lab)
- Fundamental of Structural Design(Steel) (Theory and Lab)
- Highway and Traffic Engineering (Theory and Lab)
- Advanced Surveying (Theory and Lab)
- Fluid Mechanics & Hydraulic Machines
- Advanced Geotechnical Engineering
- Structural Analysis

2. Mathematics and Basic Sciences:

- Calculus for Engineers (Theory and Lab)
- Statistics for Engineers (Theory and Lab)
- Physics (Optics & Waves)
- Mathematics III (PDE, Probability & Statistics)
- Environment Science (Audit)

3. Interdisciplinary Engineering Subjects:

- **Electrical and Electronics Engineering:**

- Basic Electronics (Theory and Lab)
- Principles of Electrical Engineering (Theory and Lab)

- **Programming and Computer Skills:**

- Essentials of Information Technology (Theory and Lab)
- Programming Logics

- **Engineering Graphics:**

- Engineering Graphics (Theory and Lab)

4. Humanities and Social Sciences:

- Communication Skills & Colloquium (Theory and Lab)
- Environmental Pollution and Global Issues
- Making of Modern India
- Humanities/Management Electives

5. Professional Development:

- Product Innovation & Entrepreneurship
- Professional Electives (Elective 1, 2, 3)
- Open Electives (Elective 1, 2, 3)
- Seminar
- Engineering Project (Literature Review, Design & Analysis, Prototype & Testing)

6. Workshop and Practical Training:

- Mechanical Workshop Practice
- Civil Engineering Labs (Concrete, Fluid, SOM, Surveying)
- Engineering Project (Across multiple semesters)