

Department of Mechanical Engineering
2024-24

1. Core Mechanical Engineering Subjects:

- **Mechanical Engineering Basics:**
 - Engineering Mechanics (Theory and Lab)
 - Material Science
 - Heat Transfer & Thermal Machines
 - Fluid Mechanics & Hydraulic Machines
 - Mechanics of Deformable Solids
 - Kinematics & Dynamics of Machines
 - Engineering Materials & Applications
 - Applied Thermodynamics
- **Advanced Mechanical Engineering:**
 - Manufacturing Technology I (Theory and Lab)
 - Manufacturing Automation
 - Computer-Aided Design & Analysis (Theory and Lab)
 - Mechanical Engineering Lab (Thermal, Fluid, Design, Manufacturing)
 - Mechatronics, Robotics & Control (Theory and Lab)
 - Measurements & Metrology (Theory and Lab)
 - Machine Element & System Design
 - Manufacturing Processes
 - Production & Operations Management

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
- Mechanical Engineering Labs (Thermal, Fluid, Design, Manufacturing)
- Engineering Project (Across multiple semesters)