

## Department of Civil Engineering

### 1. About the Department:

- o Department of Civil Engineering is well known for its industry driven curriculum and state-of-the-art laboratory and testing facilities. The department offers a Bachelor of Engineering (B.E.) degree program in Civil Engineering accredited by the National Board of Accreditation (NBA) and Master of Engineering (M.E.) degree program in Structural Engineering
- o **Industry Collaboration:** Department of Civil Engineering signed MoU with leading associations/ industries like Construction Management Training Institute, Association of Consulting Civil Engineers India, Builders Association of India, COCENA, ICAR-IISWC, Nature Science Foundation, Siruthuli and established strong industry linkage.
- o **Thrust Areas:** Key area such as Structural detailing, Soil investigation, Materials testing, Building Information Modelling, Digital surveying and Non-destructive testing.

### 2. Facilities Available for Industry Collaboration

- **Soil Mechanics Laboratory:** Sample collection and bore log report preparation, Determination of soil properties, Standard Penetration Test.
- **Strength of Materials Laboratory:** Tensile strength test of steel and composite materials.
- **Concrete and Highway Engineering Laboratory:** Concrete mix design, Materials properties determination, Fresh concrete testing and Hardened concrete testing.
- **Structural Engineering Laboratory:** Non-Destructive testing, Behavioral studies of structural members, durability tests, structural health monitoring.
- **Environmental Engineering Laboratory:** Determination of physical and chemical properties of water and wastewater, Atomic Absorption Spectroscopy.
- **Surveying Laboratory:** Topographic surveying, Levelling, Contouring.

### 3. Consultancy Services

- Department of Civil Engineering offers a range of consultancy services to industry partners, leveraging its faculty expertise, state-of-the-art facilities, and strong industry connections. These services are designed to address specific industry needs and provide innovative solutions.

**Key Areas:** Soil investigation, Non-Destructive Testing, Structural Stability Certificate, Digital Surveying.

## 4. Testing Services

- Materials testing
- Testing of Concrete Specimens
- Water and Wastewater testing.

## 5. Executive Development Programs

- Executive development programs aim to enhance leadership skills, strategic thinking, and decision-making abilities. These initiatives focus on grooming individuals for higher-level roles within an organization.

### ● Programs Offered:

- ❖ Civil Engineering Software's
- ❖ Building Information Modelling
- ❖ Construction Project Management.

## 6. Research and Development Collaborations

- **Research Focus Areas:** The Industry-Institute Partnership Cell (IIPC) at KPRIET facilitates collaboration between academia and industry, focusing on cutting-edge research and development. Key R&D areas include 3D printing in construction industry, Building Information Modelling, Artificial intelligence in Civil Engineering, IoT in Civil Engineering.

- **Collaboration Opportunities:** Department of Civil Engineering offers numerous opportunities sustainable for collaborative research and joint projects with industry partners on Sustainable Building Design using innovative materials and methods, Advanced Water and Wastewater treatment processes, emerging technologies.

## 7. Achievements and Success Stories

- ❖ Received Runner up position in Best Industry Linkage Award from AICTE CII in 2021.
- ❖ 14 MoU's with leading industries and civil engineering associations.
- ❖ Generated a revenue of Rs. 15,00,000 through consultancy, testing services and training programmes during the last 3 academic years.