# K K POLYTECHNIC

# **Department of Civil Engineering**

#### PSOs- PROGRAM SPECIFIC OUTCOMES

#### PSO1: Application of Civil Engineering Principles

Diploma Graduates will be able to apply fundamental civil engineering knowledge and skills to design, construct, and maintain infrastructure projects using modern softwares.

## PSO2: Proficiency in Modern Tools and Project Management

Diploma Graduates will demonstrate proficiency in using modern tools and technologies for surveying, designing, and managing construction projects adherence to budgetary constraints.

#### PEOs- PROGRAM EDUCATIONAL OBJECTIVES

| PEOs | STATEMENTS   |
|------|--|
| PEO1 | Diploma graduates will have a solid foundation in civil engineering principles and practices, enabling them to apply technicalknowledgeeffectivelyindesigning, analyzing, and managing civilengineering projects.            |
| PEO2 | Diplomagraduateswillpossessstrongproblem-solvingskills, allowing them to address complex engineering challenges throughinnovativesolutions, critical thinking, and practical application of engineering principles.          |
| PEO3 | Diploma graduates will demonstrate professional competence by workingeffectivelyinmultidisciplinaryteams, communicating clearly with stakeholders, and adhering to ethical standards and best practices in civil engineering |
| PEO4 | Diploma graduates will engage in lifelong learning and professional development to stay with current advancements in civilengineering technology, practices, and regulations.  |

# K K POLYTECHNIC

# **Department of MechanicalEngineering**

#### **PSO- PROGRAM SPECIFIC OUTCOMES**

#### **PSO 1: Application of Mechanical Engineering Principles**

Diploma Graduates will be able to apply fundamental Mechanical engineering knowledge and skills to design, construct, and maintain industrial projects using modern software

### **PSO 2: Proficiency in Modern Tools and Project Management**

Diploma Graduates will demonstrate proficiency in using modern tools and technologies for Analysis, Manufacturing and Designing projects adherence to budgetary constraints.

### PEOs-PROGRAM EDUCATIONAL OBJECTIVES

| PEO  | STATEMENTS   |
|------|--|
| PEO1 | To impart strong educational foundation in the field of Mechanical Engineering for successful career in industry and higher education.                       |
| PEO2 | To provide technical skills and resources to design, analyze and create innovative solutions for engineering problems in multidisciplinary work environment. |
| PEO3 | To inculcate leadership qualities, ethical attitude and competence to excel individually and work with teams in lifelong learning.                           |

## **OUTCOME BASED EDUCATION(OBE)**

## **PROGRAM OUTCOMES (POs)**

- **PO1. Basic and Discipline specific knowledge:** Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.
- **PO2. Problem analysis:** Identify and analyse well-defined engineering problems using codified standard methods.
- **PO3. Design/ development of solutions:** Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.
  - **PO4.Engineering Tools, Experimentation and Testing:** Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.
  - **PO5.**Engineering practices for society, sustainability and environment: Apply appropriate technology in context of society, sustainability, environment and ethical practices.
  - **PO6. Project Management:** Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.
    - **PO7.** Life-long learning: Ability to analyse individual needs and engage in updating in the context of technological changes

# K K POLYTECHNIC DHANBAD

#### VISION AND MISSION STATEMENT

#### VISION OF THE INSTITUTE

To create a collaborative academic environment to foster professional excellence and ethical values in the digital arena, delivering socially responsible citizens to become a university and entrepreneurial hub.

#### MISSION OF THE INSTITUTE

- 1. To provide high-quality education and develop student's abilities so that they are prepared for the future.
- 2. To develop an environment for sharing and exchange of resources globally for lifelong learning.
- 3. To foster innovation and research by providing a stimulating learning environment.
- 4. To impart morals and values in order to create