

COMPUTER AIDED ENGINEERING DRAWING LAB

Description of the Laboratory:

CAED Lab consists of state of the art lab equipment and software which enhances the learning abilities and make student geared up for CAED industry. The engineering drawing skills are imparted and various commands for computer aided drawing and modeling are introduced to students by facilitating high end terminals supported by the latest hardware and software, latest visual aids, plotting devices, etc.

The students can also develop an understanding of 2D and 3D computer aided drafting with the requirement of good engineering drawings and be able to apply them to their work. It is essential to know the technical drawing rules before starting CAD-CAM programs. Using computers at the beginning of the engineering education will help the students visualize engineering components. Appropriate sketching exercises will be given during practice hours by using paper and a package program namely AutoCAD.

List of Experiments:

1. Practice exercise on Basic Lettering and Dimensioning
2. Practice exercise on Conventional representations
3. Practice exercise using basic drawing commands
4. Practice exercise using editing commands
5. Practice exercises on Ellipse, Parabola, Hyperbola and Rectangular Hyperbola
6. Practice exercises on Cycloid, Epicycloid, Hypocycloid and Involutives
7. Practice exercises on Projection of points
8. Practice exercises on projection of lines inclined to one plane
9. Practice exercises on projection of lines inclined to both planes
10. Practice exercises on Projections of regular plane surfaces
11. Practice exercises on Projections of regular solids
12. Practice exercises on Sections of solids
13. Practice exercises on Development of surfaces of right regular solids
14. Practice exercises on Orthographic Projections
15. Practice exercises on Isometric Projections

List of Softwares:

- AutoCAD-2013
- CREO Version 2.0
- SolidWorks-2016

Computer system configuration:

| S.No | Equipment/Software | Description | Total No. |
|------|-----------------------------|--|-----------|
| 1. | Lenovo Think Centre Desktop | Lenovo Desktop 10NLA01FIH Intel core i3-7100 CPU 3.90GHz 4 GB RAM, 1 TB HDD Lenovo Keyboard & Mouse 19.5" Lenovo LED Monitor | 66 |

Photographs of the Lab/Equipment:

