# UNITED GROUP OF INSTITUTIONS, PRAYAGRAJ

## **Introduction to Auto CAD with 2D & 3D Beginner**

## (Exclusively for Diploma – ME & CE)

• Objective of Course: Auto CAD is the most popular and widely used software for engineers and scientists. Millions of engineers and scientists worldwide use Auto CAD software for sketching and designing the objects and products transforming our world. Auto CAD software is used for sketching and modeling systems, interplanetary spacecraft, automobile and machine components devices. It is used for Learn sketching and taking field dimensions. Architecture, Civil engineering, Interior design, Automobile Industry, Aerospace Industry, Mechanical engineering, Fashion designing etc.

This course starts with introductory topics in Auto Cad before starting modeling. It touches the major topics, Engineers and Scientists encounter when faced with designing. Learn basic Auto CAD skills, Learn how to draw 2D drawings in Auto CAD. This course is designed to allow you to make any 2D drawing or drafting and designing. After this course, you can stand boldly and tackle those difficulties in designing problems on your own with Auto CAD.

#### **Duration of Course:**

60 hours

### **Prerequisite (Requirements):**

- ✓ Operating System: 64-bit Windows 10.
- ✓ Processor: 2.5 GHz (3+ GHz recommended)
- ✓ Memory: 8 GB (16GB recommended)
- ✓ Disk space: 10.0 GB.
- ✓ Optical mouse with 3 button
- ✓ Auto CAD software

## What you'll learn:

#### Module 1 (Week 1 –16 hours):

- > Set-up and start of Auto CAD environment.
- Advantages, disadvantages and applications Auto CAD.
- ➤ Co-relation between classical drawing and CAD.
- > Briefing about the Auto CAD display window. .
- This section reviews the basic AutoCAD controls.
- Discuss about windowing and clipping.

### Module 2 (Week 2 -14 hours):

➤ Discussion about the utilities command used in Auto CAD.

- Create basic geometric objects with the help of Draw menu bar such as lines, circles, and hatched areas.
- Practice session on different geometrical objects.
- Assign properties such as color and line type to individual objects.

### Module 3 (Week 3 –16 hours):

- Perform editing operations by modify tool bar such as erase, move, and trim on the objects in a drawing...
- Discuss about transformation concept of drawing
- > Discuss about use of modify command in present aspects.
- Practice session on different drawing with modify command.

## Module 4 (Week 4 –14 hours):

- > Create several types of dimensions and save dimension settings by name.
- ➤ How to use dimensions tool bar on any drawing.
- Practice session on different drawing with dimension command.
- > Output a drawing layout to a printer, a plotter, or a file. Save and restore the printer settings for each drawing.
- ► Introduction and concept for 3D model object using different 3D commands.

## Whothis courseis for:

All applicants must have active student status minimally completed at least two years of Diploma course work in Mechanical or Civil Engineering or equivalent.