

Late Purushottam Hari (Ganesh) Patil Shikshan Sanstha's MAULI GROUP OF INSTITUTION'S COLLEGE OF ENGINEERING AND TECHNOLOGY, SHEGAON

Department of Mechanical Engineering Value Added Courses

ME 01: Introduction to AutoCAD

Overview:

AutoCAD is a commercial computer-aided design (CAD) and drafting software application developed and marketed by Autodesk. AutoCAD is primarily used for 2D drafting. It is a drawing tool that is created to replace drawing boards of the past. It is used across a wide range of industries, by architects, project managers, engineers, graphic designers, and many other professionals. With AutoCAD one can easily create blueprints and floor plans, graphic designs, engineering drafts, wiring details, for electronics and electrical and much more.

In this hands on computer aided drafting course, participation will be provided an "Introduction to AutoCAD", which includes basic drawing and editing commands, how to coordinate entity methods, object snap techniques, display manipulation. In class, problem assignments will be given. The main purpose of AutoCAD is to communicate design intent. In this course, common tools & commands will be covered that are used in detailing of drawings.

Course Outcomes:

At the end of the course the student will be able:

- 1. To understand AutoCAD workplace, interface and basic commands.
- 2. To develop basic 2D drawings with editing and viewing tools.
- 3. To organize drawings on layers and inserting blocks.
- 4. To understand & make layouts for publishing drawings.
- 5. To make objects in 3D workspace using basic commands.
- 6. To understand the data and transform it into a graphic drawings.

ME02: Aerospace Industry Orientation Course

Overview:

Aerospace Industry Orientation Programme is Industry-customized and job-oriented training to bridge the gap between academic curriculum and industry requirements. Indian Society for Technical Education (ISTE) has signed the MoU with P3 Academy, Bangalore for promoting skill development and industry oriented training for students.

This course provides the basic knowledge of Aircraft Orientation, Design, Analysis and Maintenance. Design is the first step in product development; a continuous evolving process which is influenced by the changing need & demand. Analysis is integral part of the product design and development. Engineering Analysis determines whether and to what extent the Product can withstand undesirable, sub-optimal and even extreme conditions of operation. Technical Publication or Documentation is the discipline of creating maintenance and servicing Manuals for various products so that those who refer these manuals can easily understand the various aspects, methods and processes for maintaining, repairing, inspecting or operating of the products.

Course Outcomes:

At the end of the course the student will be able to:

- 1. Understand aircraft classification and various components of aircraft.
- 2. Describe aerospace design requirements and stages along with material.
- 3. Analyze aircraft structure.
- 4. Understand various types of aircraft maintenance.
- 5. Understand technical publication manual for aircraft maintenance.