

SREE VIDYANIKETHAN TECHNICAL SKILL DEVELOPMENT INSTITUTE

DESIGN/COMPUTER BASED TRAINING LAB

Description

Design/CBT lab is designed to teach the theory and tools of Computer Aided Design (CAD) and Computer Aided Manufacturing (CAM) with an emphasis on the central role of the geometric model in their seamless integration and a focus on the integration of these tools and the automation of the product development cycle.



Inside view of the Design/CBT Lab

Objectives

The main objective of this lab is to teach students with the basic and advanced commands and tools necessary for professional 3D part design, assembly and drafting using Siemens Solid Edge and Manufacturing NX software. After completing this course, a student will be able to:

- Present an overview of CAD and describe its applications in different fields
- Describe common terms associated with CAD hardware and software.
- Outline the basic principles associated with CAD and demonstrate common drafting techniques and shortcuts
- Introduce the advanced capabilities of CAD to increase productivity
- Provide information about the CAD industry resources
- Use effectively CAD / CAM systems in order to produce the final NC code for the manufacturing of various mechanical parts and carry out exchange of data between CAD and CAM systems.

Key areas covered

1. Computer-aided design (CAD) (Design)
2. Siemens PLM Software
3. Computer-aided engineering (CAE) (Simulation)
4. Computer-aided manufacturing (CAM) (Manufacturing)
5. POD software for online demonstration of various labs through tutorials

Softwares used

Solid edge, NX CAM, Siemens PLM Software, POD Software

Design/CBT lab syllabus includes 14 modules, which covers Design, CAE and CAM exercises



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