

DEPARTMENT OF MECHANICAL ENGINEERING

DETAILS OF THE CAD & SIMULATION LABORATORY

Name of the Laboratory	:	CAD & SIMULATION Lab
Name of the Lab In-charge	:	Mr. A. Venkatesh
Name of the Lab-Technician In-charge	:	Mr. Subramanyam
Area of the Lab	:	167 Sq.mt
Lab Occupancy	:	36
Description of the Lab	:	CAD/CAM Lab consists of state of the art lab equipments and softwares which enhances the learning abilities and make student geared up for CAD/CAM/CAE industry.

LIST OF EXPERIMENTS

1. Modelling and assembly of Knuckle Joint
2. Modelling and assembly of Crank Hook
3. Modelling and assembly of Plummer Block
4. Modelling and assembly of Pipe Vice
5. Determination of deflection and stresses in 2D and 3D trusses and beams
6. Determination of deflections component and principal and Von-Mises stresses in plane stress, plane strain and axisymmetric components.
7. Steady state heat transfer Analysis of plane and axisymmetric components
8. Development of process sheets for various components based on tooling machines
9. Machining of simple components on CNC lathe and CNC Milling Machine
10. Machining of simple components on CNC machines by transferring NC Code from a CAM package through RS 232

LIST OF EQUIPMENT

S.NO	Name of the Major Equipment(Above Rs. 50,000)	Quantity
1.	CNC Flexturn Lathe Machine	1
2.	CNC Train OFFLINE Simulation Software	5 Users
3.	Ansys Multiphysics	5 Users
4.	Creo 2. 0	50 Users
5.	Aristo Robot Simulation Software	1 Users
6.	MATLAB	60 Users
7.	Promodel(Students Version)	10 Users
8.	Lingo(Students Version)	10 Users
9.	Flexsim(Students Version)	10 Users
10.	Tora(Students Version)	10 Users
11.	Siemens offline Simulation Software(Students Version)	18 Users



OVERVIEW OF CAD & SIMULATION LAB



STUDENTS WORKING ON MODELING SOFTWARES



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