CAD/CAM LAB

Objective: To impart knowledge on usage of various drafting, Modeling, analytical tools like auto cad, pro/e, Ansys for engineering simulations in industry's by solving some real time problems

Sections Handled: I YEAR II SEM A, B

Major Equipment Details:

S. No	Name of the Equipment	Quantity
1	Intel i5 7 generation core processor, 1 TB Hard disk, 8GB RAM, 2 GB NVIDIA graphics card, 64 bit Windows operating system	36
2	10 KVA 'V Guard' Online UPS System with 30 Minutes battery backup	1
3	AUTODESK Inventor software	unlimited
4	Ansys academic teaching mechanical &CFD version 2,56,00 nodes version 18.0 with perpetual license	50users
5	CREO 4.0 University plus lab pack with perpetual license	50users
6	MTAB model XLTURN CNC slant bed lathe with 8 station indexing tool post and fanuc emulated control	1

Faculty In charge with qualification: Mr. D. BalaNagesh-
M.Tech
Lab Technical name with qualification: K. Suresh, D.M,E

Experiment list as per curriculum:

1. a).2D truss using Ansys. Take E=2E5, poisons ratio = 0.3
   b) Analysis of continuous beam with overhang using Ansys.
2. a) 2D Structural analysis using Ansys.
   b) Determination of principle and Vonmises stress in axis symmetric components
3. 3D Structural analysis using Ansys.
4. Estimation of natural and mode shapes Harmonic response of beams
5. Steady state heat analysis of a plane axis symmetric components.
6. Buckling analysis using Ansys
7. Plain turning and Facing using CNC part programming
8. Step turning using CNC part programming
9. taper turning using CNC part programming
10. Study and demonstration of RP machine and creation of simple parts
11. Study of various post processor statements
12. Virtual 3D printing simulation lab using V labs