



A.V.C. COLLEGE OF ENGINEERING

[Affiliated to Anna University, Chennai] | Approved by AICTE, New Delhi |
 [Re-Accredited by NAAC with 'B++' grade(2ndCycle)] | An ISO 9001:2015
 Certified Institution | Mannampandal, Mayiladuthurai, Nagapattinam
 District, Tamilnadu- 609 305.
 Ph: 04364-227202, Fax: 04364-227299 www.avccengg.net



Department of Mechanical Engineering

MODERNISATION & REMOVAL OF OBSOLESCENCE (MODROBS)

Title of the Proposal : Design and simulation of fluid flow and heat transfer in renewable energy applications

Name of the Laboratory : CAD/CAM Laboratory

ANSYS Fluent
Name of Software Package: ANSYS CFD Premium “Fluent” (Academic Licence)
Number of License: 1 Number
Features: General solver capabilities – Single phase, non reacting flows – Heat Transfer – Particles flows (Multiphase) – Free surface flows (Multiphase) – Dispersed multiphase flows – Reacting flows – Turbo machinery – In flight icing – Optimization – High rheology materials – HPC fluids – Pre & post processing – Multi physics – Electro thermal interaction – other coupled interactions.
Number of Nodes: Supplier has to state.
Manufacturer: ANSYS
NASTRAN
Name of Software: NASTRAN Basic bundle (Academic Licence)
Number of License: 1 Number
Features: Linear static analysis, Normal modes analysis, Buckling analysis, Heat transfer analysis (steady-state and transient), Axisymmetric structural (Linear and Non linear static), Basic implicit nonlinear analysis, Spot weld analysis, Axisymmetric thermal
Number of Nodes: Supplier has to state.
Manufacturer: Siemens, MSC
NASTRAN
Name of Software: NASTRAN Basic bundle with Advanced Analysis Capability (Academic Licence)
Number of License: 1 Number
Features: Linear static analysis, Normal modes analysis, Buckling analysis, Heat transfer analysis (steady-state and transient), Axisymmetric structural (Linear and Non linear static), Basic implicit nonlinear analysis, Spot weld analysis, Axisymmetric thermal, Dynamic response analysis module, Super element analysis module, Direct matrix obstruction programming, Aero elasticity analysis module
Number of Nodes: Supplier has to state.
Manufacturer: Siemens, MSC
NASTRAN
Name of Software: NASTRAN Basic bundle with Most Advanced Analysis Capabilities(Academic Licence)
Number of License: 1 Number
Features: Linear static analysis, Normal modes analysis, Buckling analysis, Heat transfer analysis (steady-state and transient), Axisymmetric structural (Linear and Non linear static), Basic implicit nonlinear analysis, Spot weld analysis, Axisymmetric thermal, Dynamic response analysis module, Advanced non linear analysis module, Super element analysis module, Direct matrix obstruction programming, Design optimization module, Aero elasticity analysis module, Rotor dynamics.
Number of Nodes: Supplier has to state.
Manufacturer: Siemens, MSC

ANSYS
Name of Software: ANSYS (Academic Licence)
Number of License: 15 Numbers
Description: Up gradation of the ANSYS R10.0 software with the recent version for DELL WORKSTATION with a configuraton of Intel Xeon E3 1225 V2 CPU, 4 GB RAM, 500 GB HDD
Manufacturer: ANSYS
Hardware
Description: DELL precision workstation wth Intel Xeon, 8 GB RAM +8 GB Extendable,128 GB SSD, 2 TB HDD, 22" LCD Monitor and In build graphics card
Number of Items: 10 Numbers
Manufacturer: DELL