



**DEENBANDHU CHHOTU RAM UNIVERSITY OF SCIENCE & TECHNOLOGY, MURTHAL, SONEPAT, HARYANA-131039**

**APPARATUS FOR M. Tech. in Mechanical Engineering (2 Years)**

	INFRASTRUCTURE	REQUIRED	AVAILABLE	DEFICIENCY
<b>List of Labs / Equipments</b>				
<b>S. No.</b>	<b>Name of Equipments</b>	<b>Quantity</b>		
<b>1<sup>st</sup> Year Labs: Computer Aided Engineering Lab, Numerical &amp; Optimization Methods Lab, Manufacturing Simulation Lab, Design of Thermal &amp; Energy Systems Lab, Vibration and Condition Monitoring Lab</b>				
<b>Nam of the lab: MEM-511-B: Computer Aided Engineering Lab</b>				
1.	One PC for each student loaded with MATLAB/AUTO-CAD/ANSYS for FEM / and other CAD Packages.	One each		
2.	CNC M/c's (Lathe, Milling, Drilling Machines integrated with computer for CNC programming)	One each		
<b>Name of the lab: MEM-513-B: Numerical &amp; Optimization Methods Lab</b>				
3.	PC loaded with an operating system e.g. Window-XP , Vista etc., C/C++/MAT Lab /SCI Lab, Printer	1 for each student		
<b>Name of the lab: MEI-508-B: Manufacturing Simulation Lab</b>				
4.	Academic Licence of ARENA Software (Rock Well Software)	1		
5.	Promodel Software Academic Licence	1		
6.	Minitab Software Academic Licence	1		
7.	Micro Soft Office	1		
<b>Name of the Lab: MET-508-B: Design of Thermal &amp; Energy Systems Lab</b>				
8.	Licence of LF 95 or latest version of FORTRAN compiler for each PC	1		
9.	C / C++, MATLAB	1		
10.	Printer	1		
<b>Name of the Lab: MED-508-B: Vibration and Condition Monitoring Lab</b>				
11.	Two Channel Portable FFT Analyzer with display device	1		
	General Purpose Memory Storage (Two Channel oscilloscope)	1		
12.	Vibration Rotor Kit with Vibration Pickups	1		
<b>2<sup>nd</sup> Year Labs: Cad Lab, Mechatronics &amp; C.I.M.S. Lab, Dissertation (Phase-I)</b>				
<b>Name of the lab: MED-607-A: Cad Lab</b>				
13.	Desktop Computer	One for each student		
14.	Graphical modelling & Analysis Software for CAD Applications	Multi-user licence		
<b>Name of the lab: MED:609-A: Mechatronics &amp; C.I.M.S. Lab</b>				
15.	Hydraulic system	One set (working test rig)		
16.	Electro-Hydraulic system	One set (working test rig)		
17.	Pneumatic system	One set (working test rig)		
18.	Electro-Pneumatic system	One set (working test rig)		
19.	Pick & Place Robotic Manipulator	One set (working test rig)		
<b>Name of the Lab: MEM-605-B: Dissertation (Phase-I)</b>				
20.	Research Facilities of M. Tech. Dissertation	As per requirements		
<b>Name of the Lab: MEM-607-B: Seminar Lab/Room</b>				
21.	Smart Class Room having facility of interactive Board, LCD Projector, P.C., Chairs, A.C., etc.	As per requirements		

Certified by the Director/Principal