Faculty of Mechanical Engineering
M.E. Computer Integrated Manufacturing
(R 2021) Semester – I

Course Code: CM4161	Course Title: Computer Aided Manufacturing Laboratory	
Sl.No.	Description of Equipment	Required members (for batch of 25 students)
1	Computers	30
2	CAM Software for 3 axis machining or more	1
3	CNC Production type turning or Machining center	1
4	CNC Machining Centre	1
5	Video Measuring System	1
6	Coordinate Measuring Machine	1
7	Surface Roughness tester	1
8	Programmable Logic Controller with ladder logic programming software	1
9	RDMBS Package with relevant modules like Inventory Control and MRP	1
10	5 -axis Robot	1
11	3D Printer	1

Faculty of Mechanical Engineering

M.E. Computer Integrated Manufacturing

(R 2021) Semester – I

Course Code: CM4111

Course Title: Computer Aided Design And Computer Aided Engineering Laboratory

Sl.No.	Description of Equipment	Required members (for batch of 25 students)
1	Computers	30 Nos.
2	CAD software Package	1 (license - 30 user)
3	Open source CAD software for Additive Manufacturing	Free CAD, Open SCAD, Solve Space, BRL CAD
4	CAE Software package	1 (license - 30 user)

Faculty of Mechanical Engineering
M.E. Computer Integrated Manufacturing
(R 2021) Semester – II
CM4211   ADVANCED METROLOGY LABORATORY

Sl.No.	Description of Equipment	Required Numbers
1.	Slip Gauges	2 sets
2.	Optical Flat	1 no.
3.	Contact Type Surface Roughness Tester	1 no.
4.	Non-Contact Type Surface Roughness Tester	1 no.
5.	Michelson's Interferometer	1 no.
6.	Machine Vision System with accessories	1 no.
7.	Roundness Measuring machine	1 no.
8.	Autocollimator	1 no.
9.	Coordinate Measuring Machine (CMM) contact type	1 no.

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CM4212 AUTOMATION AND ROBOTICS LABORATORY

Sl.No.	Description of Equipment	Required Numbers
1.	Computer	30 nos.
2.	PID Controller Trainer Kit	1 no.
3.	Hydraulic Trainer Kit with accessories	1 no.
4.	Pneumatic Trainer Kit with accessories	1 no.
5.	PLC Interface Card	1 no.
6.	Hydraulic / Pneumatic circuit simulation compatible software	1 no.
7.	Robot Simulation Software	1 no.
8.	Pick and Place Robot	1 no.
9.	Packing and Assembly Station Trainer Kit	1 no.