

## Laboratory and Workshop

### List of Major Equipment/Facilities in each Laboratory/Workshop

### List of Experimental Setup in each Laboratory/Workshop

	Programme	Department	Course	Level	Name of the Laboratory	Lab / Major Equipments
1	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	BIOMEDICAL INSTRUMENTATION AND SIGNAL PROCESSING	POST GRADUATE	3D DESIGN LABS	Solidworks Ansys
2	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	THERMAL AND FLUID ENGINEERING	POST GRADUATE	ABB ROBOTICS LAB	ABB ROBOTIC HAND FOR AUTOMATIC WELDING, ABB ROBOTIC HAND FOR PICK AND PLACE
3	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	GEOINFORMATICS AND EARTH OBSERVATION	POST GRADUATE	ADVANCE REMOTE SENSING, GIS AND GEOSPATIAL MODELING LAB	Arc GIS, ENVI, Matlab, QGIS
4	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	THERMAL AND FLUID ENGINEERING	POST GRADUATE	ADVANCED FLUID MECHANICS LAB	Flow Visualization Equipment, Venturi Meter Calibration Apparatus, Vortexing Apparatus
5	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	APPLIED MECHANICS	POST GRADUATE	ADVANCED METROLOGY LAB	Coordinate Measuring Machine, Tesa Visio, Adv vision inspection, cnc cmm tesa, elect height gauge
6	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	GEOINFORMATICS AND EARTH OBSERVATION	POST GRADUATE	ADVANCED WIRELESS NETWORKS	NI ELVIS II + Basic
7	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	MECHANICAL ENGINEERING	UNDER GRADUATE	AERODYNAMICS LAB	Wind Tunnel and accessories

8	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	CYBERSECURITY SYSTEMS AND NETWORKS	POST GRADUATE	BIG DATA RESEARCH LAB	Power Edge, Laptops, Computers, Servers
9	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	MECHANICAL ENGINEERING	UNDER GRADUATE	CAD LAB	COMPUTER, PROJECTOR, NETWORK ITEMS AND OTHERS
10	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	THERMAL AND FLUID ENGINEERING	POST GRADUATE	CAE LAB	Ansys 18, OpenFoam 16
11	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	MECHANICAL ENGINEERING	UNDER GRADUATE	CIM LAB	Prolight 3000 Turning Center, Expert Mill, View Flex mac, Open FMS manager, View Flex machine, Cnc
12	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	COMPUTER SCIENCE AND ENGINEERING	POST GRADUATE	CISCO LAB	Computers, Network switches, Network items and others
13	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	THERMAL AND FLUID ENGINEERING	POST GRADUATE	COMPUTATIONAL RESEARCH LAB	Ansys 18, OpenFoam 16, Lammps
14	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	COMPUTER SCIENCE AND ENGINEERING	UNDER GRADUATE	COMPUTER LAB 1	Computers, Network switches, Network items and others
15	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	COMPUTER SCIENCE AND ENGINEERING	UNDER GRADUATE	COMPUTER LAB 2	Computers, Network switches, Network items and others
16	MCA	MASTERS IN COMPUTER APPLICATIONS	MASTERS IN COMPUTER APPLICATIONS	POST GRADUATE	COMPUTER LAB I	NETWORK ITEMS AND OTHERS
17	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	COMPUTER SCIENCE AND ENGINEERING	UNDER GRADUATE	COMPUTER LAB II	Network Items and Others
18	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	ARTIFICIAL INTELLIGENCE	POST GRADUATE	COMPUTER LABS - PG	HP Compaq 3330 Pro MT PC
19	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	COMPUTER SCIENCE AND ENGINEERING (ARTIFICIAL INTELLIGENCE)	UNDER GRADUATE	COMPUTER LABS COMMON	HP Compaq 6200 Pro MT PC

20	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	WIRELESS NETWORKS AND APPLICATIONS	POST GRADUATE	COMPUTER NETWORKS LAB	Power Vault (TM) md1200 Disk Storage Enclosure, 2U
21	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	COMPUTER SCIENCE AND ENGINEERING	POST GRADUATE	COMPUTER SCIENCE LAB	Optiplex 3010 MT N-Series Base
22	ENGINEERING AND TECHNOLOGY	ELECTRICAL AND ELECTRONICS ENGINEERING	ELECTRICAL AND ELECTRONICS ENGINEERING	UNDER GRADUATE	CONTROL & AUTOMATION LAB	Level Control trainer, Quanser Equipment, Quanser Qbot-2, NI Multisim software 14.1
23	ENGINEERING AND TECHNOLOGY	ELECTRICAL AND ELECTRONICS ENGINEERING	HYBRID & ELECTRIC VEHICLES ENGINEERING	POST GRADUATE	CONTROL & INSTRUMENTATION LAB	Temperature Measurement Trainer, Level Control Trainer (SCADA), Microcontroller Based Stepper Motor
24	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	CYBERSECURITY SYSTEMS AND NETWORKS	POST GRADUATE	CRYPTOGRAPHIC LAB	Power Vault Rack mount tape library, Computers
25	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	CYBERSECURITY SYSTEMS AND NETWORKS	POST GRADUATE	CYBER SECURITY LAB	Dell™ powerEdge™ R510 Rack Mount Server x8 Chasis HotPlug SERVER
26	ENGINEERING AND TECHNOLOGY	ELECTRONICS & COMMUNICATION ENGG	ELECTRONICS & COMMUNICATION ENGG	UNDER GRADUATE	DIGITAL LAB	Digital Trainer Kit
27	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	ARTIFICIAL INTELLIGENCE	UNDER GRADUATE	DIGITAL MANUFACTURING LAB	Prusa i3 Mk3s 3D printer
28	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	BIOMEDICAL INSTRUMENTATION AND SIGNAL PROCESSING	POST GRADUATE	DIGITAL SIGNAL PROCESSING	Dell Power Edge (TM) R515 Rack Mount Server
29	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	WIRELESS NETWORKS AND APPLICATIONS	POST GRADUATE	DISTRIBUTED NETWORKS AND ALGORITHMS	Power Vault TL 2000 Rack Moun Tape Library with 1xLTO% SAS Drive
30	ENGINEERING AND TECHNOLOGY	ELECTRONICS & COMMUNICATION ENGG	ELECTRONICS & COMMUNICATION ENGG	UNDER GRADUATE	DSP LAB	DSP Based VLSI Trainer Kit

31	ENGINEERING AND TECHNOLOGY	ELECTRICAL AND ELECTRONICS ENGINEERING	ELECTRICAL AND COMPUTER ENGINEERING	UNDER GRADUATE	ELECTRICAL MACHINES LAB	Rectifier ,DC Shunt Motor 7.5 hp coupled to 3 ph 5 KVA Alternator,3 phase variable Inductive load,MG
32	ENGINEERING AND TECHNOLOGY	ELECTRICAL AND ELECTRONICS ENGINEERING	ELECTRICAL AND ELECTRONICS ENGINEERING	UNDER GRADUATE	ELECTRICAL MEASUREMENTS LAB	National Instrument USB DAQ Device, NI Smart Camera, 1Phase Energy Meter, 3Phase Energy Meter
33	ENGINEERING AND TECHNOLOGY	ELECTRICAL AND ELECTRONICS ENGINEERING	ELECTRICAL AND ELECTRONICS ENGINEERING	UNDER GRADUATE	ELECTRICAL WORKSHOP	pcb manufacturing set up,LCR Meter
34	ENGINEERING AND TECHNOLOGY	ELECTRONICS & COMMUNICATION ENGG	ELECTRONICS & COMMUNICATION ENGG	UNDER GRADUATE	ELECTRONIC CIRCUITS LAB	Power Supply,DSO,Function Generator,Cathode Ray Oscilloscope 30MHZ,
35	ENGINEERING AND TECHNOLOGY	ELECTRICAL AND ELECTRONICS ENGINEERING	ELECTRICAL AND ELECTRONICS ENGINEERING	UNDER GRADUATE	EMBEDDED SYSTEMS & ROBOTICS LAB	TPS2013B Oscilloscope,3 phase 4 leg semikron IGBT based Inverter,Four leg IGBT based VSI
36	ENGINEERING AND TECHNOLOGY	ELECTRICAL AND ELECTRONICS ENGINEERING	EMBEDDED CONTROL SYSTEMS	POST GRADUATE	ENERGY ENGINEERING LAB	Digital Oscilloscope,Electronic s Load,3 Phase IGBT Inverter, Power Quality and Energy Analyser
37	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	COMPUTER SCIENCE AND ENGINEERING	UNDER GRADUATE	EPABX ROOM	MD 110 EPABX
38	ENGINEERING AND TECHNOLOGY	ELECTRICAL AND ELECTRONICS ENGINEERING	ELECTRICAL AND ELECTRONICS ENGINEERING	UNDER GRADUATE	EQUIPMENT REPAIR LAB	four channel DSO, Function Generator, 10A Power Supply.
39	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	THERMAL AND FLUID ENGINEERING	POST GRADUATE	FLUID MECHANICS LAB	Francis Turbine Test Rig, Flow visualisation water channel, Pelton Turbine Test Rig

40	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	MECHANICAL ENGINEERING	UNDER GRADUATE	FLUID POWER LAB	F R Module,3/2 solenoid valve, 5/2 solenoid valve,single acting cylinder,double acting cylinder
41	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	GEOINFORMATICS AND EARTH OBSERVATION	POST GRADUATE	GEODESY LAB	DGPS, Total station, Drones
42	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	THERMAL AND FLUID ENGINEERING	POST GRADUATE	HEAT & MASS TRANSFER LAB	Heat & Mass Transfer Lab
43	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	COMPUTER SCIENCE AND ENGINEERING (ARTIFICIAL INTELLIGENCE)	UNDER GRADUATE	INTERNET LAB	
44	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	CYBERSECURITY SYSTEMS AND NETWORKS	POST GRADUATE	IOT ENABLING AND SECURITY RESEARCH LAB	Servers, Worksttion, Switches, Printers, Computers, Laptops etc
45	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	MECHANICAL ENGINEERING	UNDER GRADUATE	ISRO LAB	Processor:Intel(R)Core(TM)i5-3470CPU@3.20GHzinstld memry RAM:8.00GB Systemtype:64-bit OS x64-proces
46	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	MECHANICAL ENGINEERING	UNDER GRADUATE	KINEMATICS LAB	KINEMATICS KITS
47	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	WIRELESS NETWORKS AND APPLICATIONS	POST GRADUATE	LANDSLIDE SIMULATION LAB	Landslide Simulator testbed, Honda soil compactor
48	ENGINEERING AND TECHNOLOGY	FIRST YEAR/OTHER	FIRST YEAR/OTHER	UNDER GRADUATE	LANGUAGE LAB	
49	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	MECHANICAL ENGINEERING	UNDER GRADUATE	MACHINE DYNAMICS LAB	Machine Dynamics Lab

50	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	MECHANICAL ENGINEERING	UNDER GRADUATE	MANUFACTURING LAB	Universal Milling Machine, Pinacho Conventional Lathe 11 nos Slotting machine, Shaping machine,
51	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	MECHANICAL ENGINEERING	UNDER GRADUATE	MATERIAL TESTING LAB	Universal Testing Machine, Torsion Testing Machine
52	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	MECHANICAL ENGINEERING	UNDER GRADUATE	MEASUREMENT LAB	DIFFUSED LIGHT RESEARCH POLARISCOPE,PC based Temp measur RTD and Thermocouple,PC displacement LVDT
53	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	MECHANICAL ENGINEERING	UNDER GRADUATE	METALLURGY LAB	Trinocular Inverted Metallurgical Microscope
54	ENGINEERING AND TECHNOLOGY	ELECTRONICS & COMMUNICATION ENGG	ELECTRONICS & COMMUNICATION ENGG	UNDER GRADUATE	MICRO PROCESSOR LAB	Microprocessor kit
55	ENGINEERING AND TECHNOLOGY	ELECTRICAL AND ELECTRONICS ENGINEERING	ELECTRICAL AND COMPUTER ENGINEERING	UNDER GRADUATE	MICROPROCESSOR AND MICOCONTROLLER LAB	PIC DVB with PICKit2Programmer,ARM processor embed prototyping kit,DsPIC Demo board,c2000 Launch Pad
56	ENGINEERING AND TECHNOLOGY	ELECTRONICS & COMMUNICATION ENGG	ELECTRONICS & COMMUNICATION ENGG	UNDER GRADUATE	MICROWAVE LAB	MICROWAVE Test Bench
57	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	MECHANICAL ENGINEERING	UNDER GRADUATE	MIS RESEARCH LAB.	Humanoid Robot,3D Printer
58	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	COMPUTER SCIENCE AND ENGINEERING	UNDER GRADUATE	MULTIMEDIA LAB	Digital Camcorder

59	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	COMPUTER SCIENCE AND ENGINEERING	POST GRADUATE	NETWORK OPERATION CENTRE	Power Edge R910 Rack Mount Server Radware Linkproof 108 Dell™ Power Edge™ R810 Rack Mount Server
60	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	CYBERSECURITY SYSTEMS AND NETWORKS	POST GRADUATE	NETWORK SECURITY LAB	PowerEdge R520, PowerEdge R720 Computers
61	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	CYBERSECURITY SYSTEMS AND NETWORKS	POST GRADUATE	NETWORKING LAB	Palo Alto Networks PA - 500 Lab Unit
62	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	CYBERSECURITY SYSTEMS AND NETWORKS	POST GRADUATE	OPERATING SYSTEMS LAB	Computers
63	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	COMPUTER SCIENCE AND ENGINEERING	POST GRADUATE	PG LAB 1	Lay out Kint mentor graphics software
64	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	GEOINFORMATICS AND EARTH OBSERVATIONS	POST GRADUATE	PG LAB 2	Network items and other
65	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	ROBOTICS AND AUTOMATION	POST GRADUATE	PNEUMATICS & HYDRAULICS LAB	Pneumatic Training kit, Hydraulic training kit (Manual Type), Hydraulic Training kit (Electronic typ
66	ENGINEERING AND TECHNOLOGY	ELECTRICAL AND ELECTRONICS ENGINEERING	ELECTRICAL AND ELECTRONICS ENGINEERING	UNDER GRADUATE	POWER ELECTRONICS & ELECTRICAL DRIVES LAB	Power analyser, four channel DSO, Programmable dc power supply, Electronics load, PMSM Motor control
67	ENGINEERING AND TECHNOLOGY	ELECTRICAL AND ELECTRONICS ENGINEERING	ELECTRICAL AND ELECTRONICS ENGINEERING	UNDER GRADUATE	POWER SYSTEM LAB	COMPUTERS, NETWORK SWITCH, NETWORK ITEMS AND OTHERS

68	ENGINEERING AND TECHNOLOGY	ELECTRICAL AND ELECTRONICS ENGINEERING	ELECTRICAL AND ELECTRONICS ENGINEERING	UNDER GRADUATE	POWER SYSTEMS AND SIMULATION LAB	Relay Panel, Mipower Simulation Software package, ETAP Software, PSCAD/EMTDC Software, Bucholtz Relay
69	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	ARTIFICIAL INTELLIGENCE	POST GRADUATE	RESEARCH ALB	PADS Layout 225 Kit mentor graphics Software (9,54,180), 235MHz State, 512K Memory Depth (7,50,000),
70	ENGINEERING AND TECHNOLOGY	ELECTRICAL AND ELECTRONICS ENGINEERING	POWER AND ENERGY ENGINEERING	POST GRADUATE	RESEARCH AND COMPUTATION LAB	Programmable Load, Proteus 8, Microchip MPLab MINIDI 8.2, LT Spice, MATLAB
71	ENGINEERING AND TECHNOLOGY	ELECTRICAL AND ELECTRONICS ENGINEERING	ELECTRICAL AND COMPUTER ENGINEERING	UNDER GRADUATE	RESEARCH AND COMPUTATIONAL LAB	Programmable load
72	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	COMPUTER SCIENCE AND ENGINEERING	POST GRADUATE	RESEARCH PG	Semi automatic pick and place system 220 v for standard and fine pitch components
73	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	SMART SENSING COMMUNICATION AND NETWORKING TECHNOLOGIES	POST GRADUATE	SECURITY IN WIRELESS NETWORKS	NI PXIe National Instruments 3 pieces
74	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	WIRELESS NETWORKS AND APPLICATIONS	POST GRADUATE	SMART ENERGY SYSTEMS LAB	Schneider and Maxim Smart Meters
75	ENGINEERING AND TECHNOLOGY	ELECTRICAL AND ELECTRONICS ENGINEERING	POWER AND ENERGY ENGINEERING	POST GRADUATE	SMART GRIDS AND ELECTRIC VEHICLES RESEARCH LAB	Experimental setup for analysing communication protocols such as USART, I2C, SPI and CAN bus communication
76	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	CYBERSECURITY SYSTEMS AND NETWORKS	POST GRADUATE	SOPHOS NETWORK SECURITY LAB	Cyberoam CR100ING Unified Threat Management appliances x 4



77	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	CYBERSECURITY SYSTEMS AND NETWORKS	POST GRADUATE	SUSTAINABLE COMPUTING LAB	Workstations, SourceMeter, ChipWhisperer, Arduino and Raspberry PI boards, Spartan 6 FPGA
78	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	MECHANICAL ENGINEERING	UNDER GRADUATE	THERMAL ENGINEERING LAB	Steam Boiler, Steam Turbine Test Rig, Twin Cylinder 4 stroke, Three Cylinder 4 stroke
79	ENGINEERING AND TECHNOLOGY	ELECTRONICS & COMMUNICATION ENGG	VLSI DESIGN	POST GRADUATE	VLSI LAB	COMPUTERS, NETWORK ITEAMS AND OTHERS
80	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	THERMAL AND FLUID ENGINEERING	POST GRADUATE	WIND TUNNEL LAB	Subsonic Wind Tunnel
81	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	WIRELESS NETWORKS AND APPLICATIONS	POST GRADUATE	WINSOC LAB	
82	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	BIOMEDICAL INSTRUMENTATION AND SIGNAL PROCESSING	POST GRADUATE	WIRELESS COMMUNICATIONS	Emona DATEx Telecommunication Board for ELVIS
83	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE AND ENGINEERING	WIRELESS NETWORKS AND APPLICATIONS	POST GRADUATE	WIRELESS MULTIMEDIA LAB	Smart Board, Xbox Kinect, DJI Mavic Pro drone, DJI Tello drone

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