

Office of Dean – Research & Innovation

Major Equipment Available for Research and Consultancy

1. Computerized VCR Engine Test Rig / APex



2. Ultrasonicator / Labman



3. Acquisition System / Keysight



4. Microwave Sintering Machine / Nanotech



5. Wear and friction Monitor / Wear and friction Mointor TR20LE



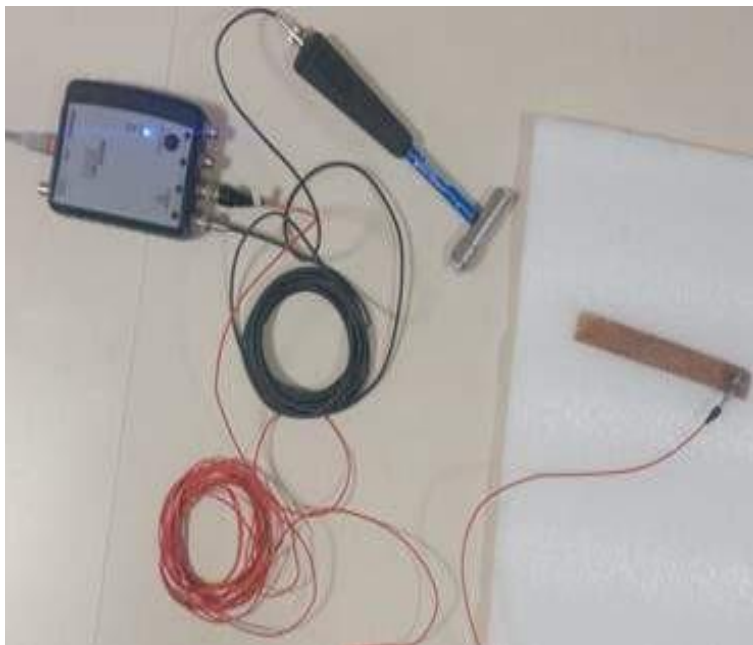
6. Hydraulic Power Unit & Actuator / Load Capacity 25kN, 50kN and 150kN



7. Instron-Impact Test / Ranging from 50 - 500J



8. FFT Analyser / Four Channel FFT Analyzer



9. MQL Set up / 50 mL/hour of lubricant



10. Lathe Tool Dynamometer / IEICOS Type Lathe Tool Dynamometer



11. Light Optical Microscope / Magnification PL 40x



12. Cryogenic Treatment Chamber / -60 degree celsius chamber



13. FANUC Industrial Robot / 6-Axis Robot Arm



14. Triaxial Compression Test Equipment / Constant Pressure System, Oil Water Type with Single Cell



15. Tile Flexural Test Equipment / Rollers with 40mm dia or 12 mm dia as per relevant standards test requirement with capacity of 200 kg



16. CBR Test Equipment / Motorised with three speed (MS Mould)



17. Standard Penetration Test Equipment / Split spoon sampler with 63.5 kg weight falling freely through a height of 750 mm



18. Compression Testing Machine / Analogue & Digital 2000 kN capacity



19. Rapid Chloride Concrete Permeability Testing Apparatus / 3 Cell Model for 150 mm cube with compressor



20. Universal Testing Machine / Digital 1000 kN capacity with data acquisition system



21. Loading Frame / Hydraulic remote type jack, hydraulic power pack with hose (100KN), control panel with 50 tonne capacity, load cell (100 KN) with digital indicator



22. Impact Echo Apparatus / Impact Echo System a with wireless



23. Atomic Absorption Spectrophotometer (AAS) / Elico with Single Beam including 12 lamps (Nickel, Zinc, Lead, Iron, Cobalt, Manganese, Copper, Mercury, Cadmium, Silver, Aluminium, Chromium)



24. Tubular Furnace with Hot Zone / 1110& Indfurr



25. Double Beam UV-VIS Spectrophotometer / Elico



26. Electrochemical Work Station / CHI 600 C - CH instruments



27. Industrial IoT Lab Equipmental kit with Smart sensors with IO Link and Sensors for Object detection/ TP1312, TP1311 & Festo



28. Wireless Differential Pressure Transmitter / LW2RM2510 & Rosemount



29. Mini heat Exchanger Process Controller / Vi micro systems



30. Chroma 62100H 600S DC Power Source S/N 62100EC0208, Choroma Thermal Interface Model



**31. Hand Held Solar Irradiation Sensor Meter / Make: Seaward
Model:PV200 Multifunction Irradiation Meter**



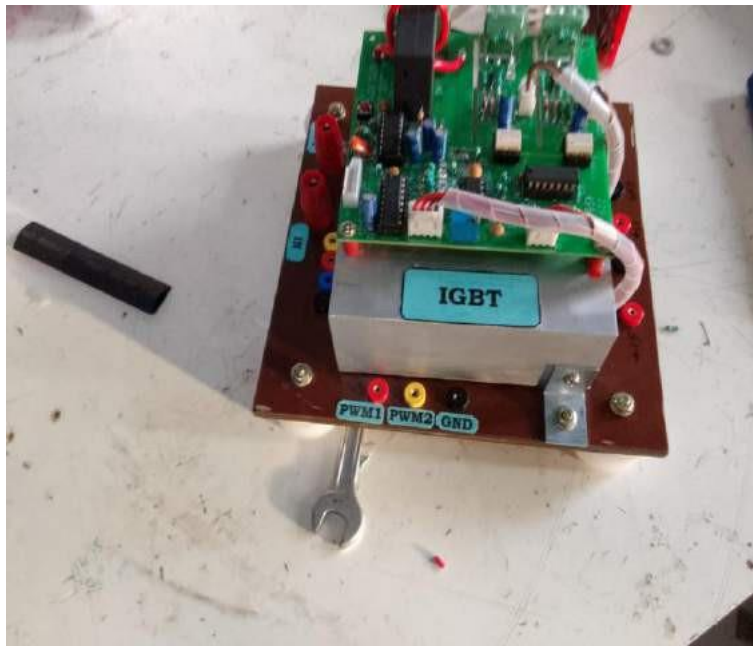
32.3 Phase Power Quality and Energy Analyser (Fluke 435-II, With Accessories)



33. Thermal Imager Camera / Flir T420BX (1200 Degree Celsius)



34. Dual IGBT Module with Current Sensor & Protection / IGBT Rating @ 600v/40a.



**35. MOSFET Module with Current Sensor & Protection / MOSFET Rating
@600v/40a.**



36. Raspberry Pi 4 with accessories



37. Automated Piano / Janatics India Pvt. Ltd.



38. Do it Yourself Kids (4 Numbers) / Janatics India Pvt. Ltd.



39. EPS Fuel Pump Test Bench



40. CNC Simulator



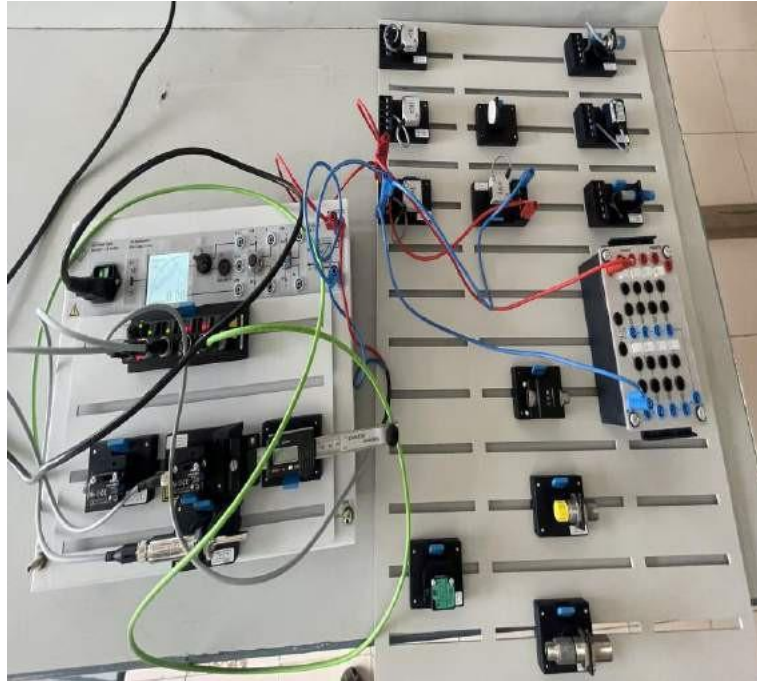
41. Pick and Place Mechanism



42. Automation Trainer Kit



43. Smart Sensors with IO Link



44. MTAB - CNC Turning and Machining Center



45. FANUC - CNC Turning Center



46. Grinding Machine



47. FANUC – Drill Tap Center



48. Gear Shaping Machine



49. Minarc Tig Evo 200 MLP/ Kemppi India Private Limited



50. Master Tig Mls 3003/ Kemppi India Private Limited



51. FAST MIG Pulse 350 / Kemppi India Private Limited



52. Hi Arc M400i / Kemppi India Private Limited



53. Digital Ultrasonic Flaw Detector and Accessories / Modsonic Instruments Manufacturing Co (P) Ltd



54. Aura Welding Simulator / Skillveri



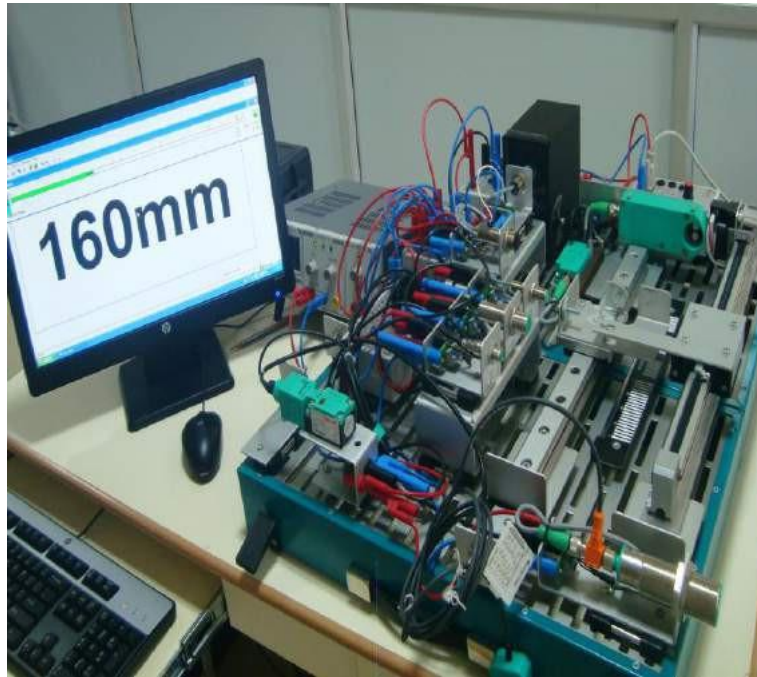
55. Hydraulics and Pneumatics Stations



56. MTX



57. Sensorics



58. Mobile Hydraulics



59. Modular Mechatronics System



60. IoT Enabler



61. MLD & VFD



62. PLC_HMI_SCADA



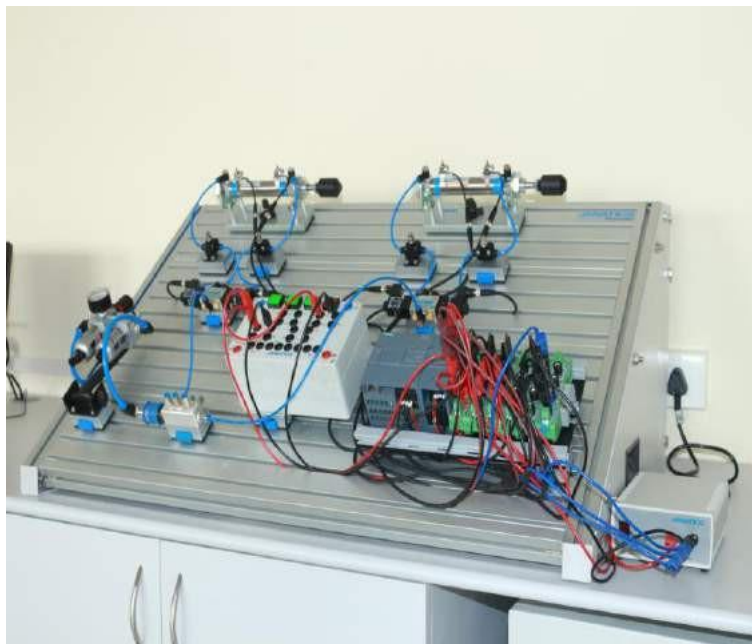
63. Handling System



64. PLC Controller



65. PLC Trainer Kit



66. Digital Oscilloscope



67. i9 - Lenovo ThinkStation P3 Workstation (IT Stream)



68. Mobile Workstation and Colour VU Camera, NVR, POE switch, HDD, POE injector & Power adapter

69. Cadence University PG Bundle

70. Mentor Graphics Back End –HEP1 (30 User)-IC Nanometer Design Tools