MAKER'S DAY

20 JANUARY 2018

1. 3D Printer- Felix PRO 1, Ultimaker 2exd
2. WILDTHUMPER - A remotly controlled vehicle
3. DJI Inspire 1 & Phantom 4
4. GCC Laser cutter
5. Virtual Reality Oculus
5. TableTop CNC
6. Component library
7. Ferrofluid
8. Shape memory alloy
9. Microcontroller-Arduino,

:::ROS

GET HANDS-ON @ RESEARCH LAB P001

SolidWorks

LabVIEW — NATIONAL INSTRUMENTS

Softwares
1. AutoCAD
2. Solidworks
3. Ansys
4. LabView

GET HANDS-ON @ CAD CAE LAB J201

Dr. K. M. Vasudevan Pillai Campus, 10, Sector 16, New Panvel, Navi Mumbai, Maharashtra 410206

Inspection Instruments:
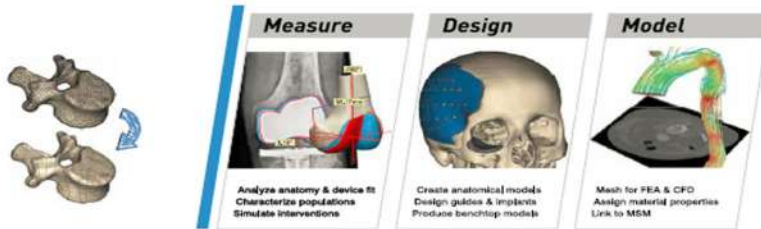Verniers,guages,micrometers and
comparators(mechanical and optical)

GET HANDS-ON @ METROLOGY AND QUALITY CONTROL J202

1.Multipurpose M6-Used for turning
and drilling of small products.
2.CNC Turning and milling
3.Shake Hand with Yourself

GET HANDS-ON @ CAM LAB - R002

Measure	Design	Model
Analyze anatomy & device fit Characterize populations Simulate interventions	Create anatomical models Design guides & implants Produce benchtop models	Mesh for FEA & CFD Assign material properties Link to MSM

1.Complete Tool box
2.Gear box
3.Batteries
4.Multifuel engines

GET HANDS-ON @ AUTOMOTIVE LAB - WORKSHOP SHED

1.Universal Testing Machine
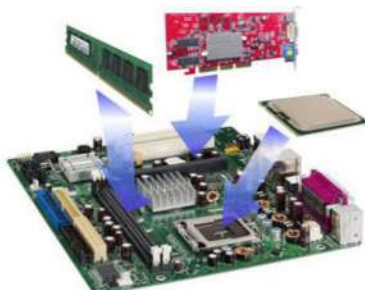2.Impact testing
3.Hardness testing

GET HANDS-ON @ STRENGTH OF MATERIAL LAB - J001

1.Metallurgical Microscope with camera
2. Polishing machine(to prepare clean metallic surface)
3. Mounting resin-to make metallographic samples
4. Density measurement for any solid/porous object
5.Muffle furnace(upto 1000°C)

GET HANDS-ON @ Material Technology Lab- J101
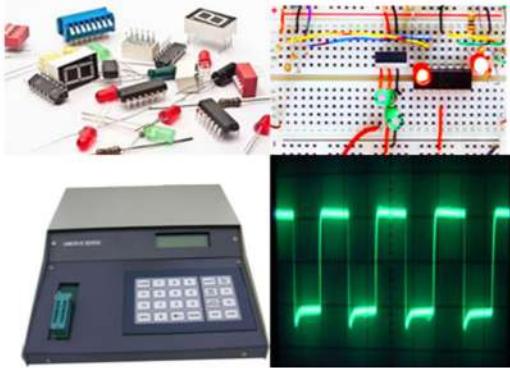
1.Learn assembling and disassembling of PC

GET HANDS-ON @ PC Assembling & Debugging- S103

1.SCR, DIAC, TRIAC, IGBT, MOSFET trainer kit
2.Load cell, Induction motors
3.Tachometer
Applications: Design Speed Controller,
rectifier, inverter,Rotational speed measurement
systems

GET HANDS-ON @ MEASUREMENT AND INSTRUMENT LAB - J104

1.Digital logic implementation Kit
2.Gate IC's
3.IC Testing
Application: Counters, Shift registers,
Home Security System, Converters,
Digital Bank Token Number Display

GET HANDS-ON @DIGITAL ELECTRONICS LAB - T301

1.Atmel 89v51RD2
2.PIC Microcontrollers
3.Various Interfacing devices like DC Motor,
Stepper Motor, ADC/DAC converter, LCD,
Keypad, Traffic signal.
Applications: Calculators,Games machine,
Traffic light Control, Counters, Shift registers.

GET HANDS-ON @ MICROPROCESSOR AND CONTROLLER -T401

1.Analog modulation and Demodulation kits.
2.Digital Modulation and Demodulation Kits
Various Antennas, Digital signal Processing Kits.
Application: Filter Designing as per cut off value,
Designing of antenna for various gain, GSM
Based wireless controller

GET HANDS-ON @ ADVANCED COMMUNICATION LAB - T403

1.LPC 2148, Xbox, Wireless camera
2.Microcontroller 8051 and AVR 8056
All kind of development tools and
software's are available.
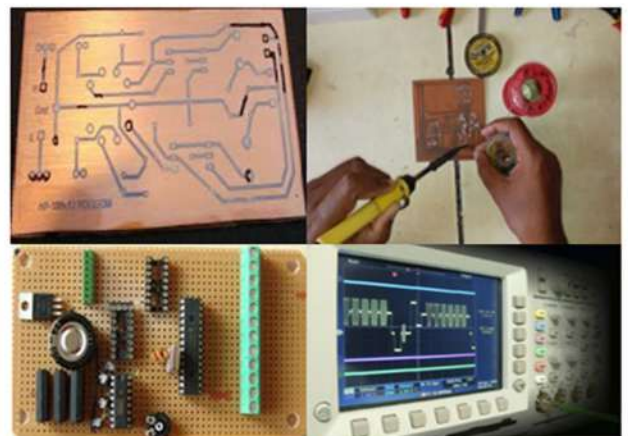Application: Robot available for aplication
development

GET HANDS-ON @ ROBOTICS LAB - R003

1.Circuit Design
2.PCB soldering
3.Testing
Application: Design Amplifiers,
Oscillators, power amplifier, Converters,
Clampers and Clippers

GET HANDS-ON @ ANALOG ELECTRONICS - T302

1.Specialized networking hardware like CISCO routers, switches, WAN controller, NICcards, cables etc

2.Softwares -

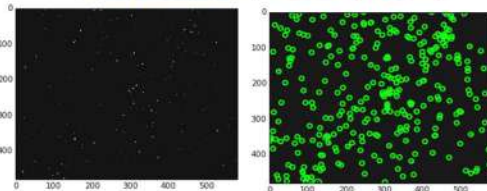**ZTI IP Traffic Test And Measure** - For complete network testing.

QualNet Simulator - Advanced network and protocol simulator.

GNS3 - A network software emulator which can simulate complex networks with virtual and real Cisco devices.

Packet Tracer - Network simulator by Cisco to simulate computer networks.

GET HANDS-ON @ ADVANCED NETWORKING LAB - S101

1.Image Processing to find no of stars.

2.Web development

3.Data Visualization

4.Data Science

GET HANDS-ON @ Python & its applications- S105

1.The Lab contains Data Mining and Big Data tools like Weka, Hadoop, NoSQL Databases and MapReduce.

2.These tools can be used to work on any Big Data Analytics project and research work.

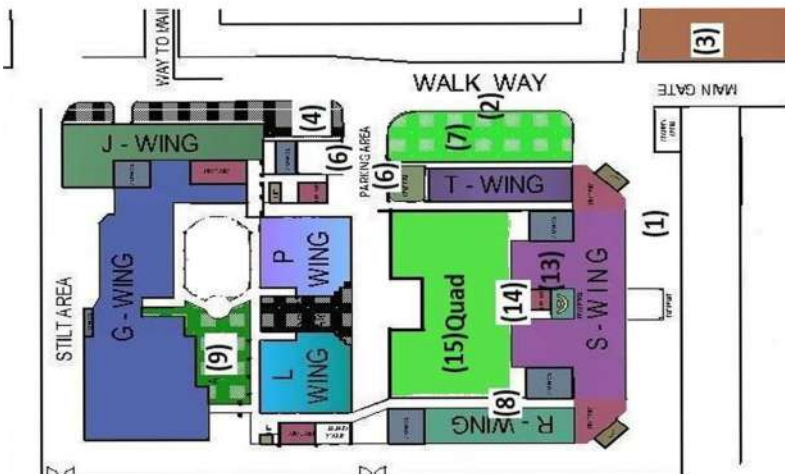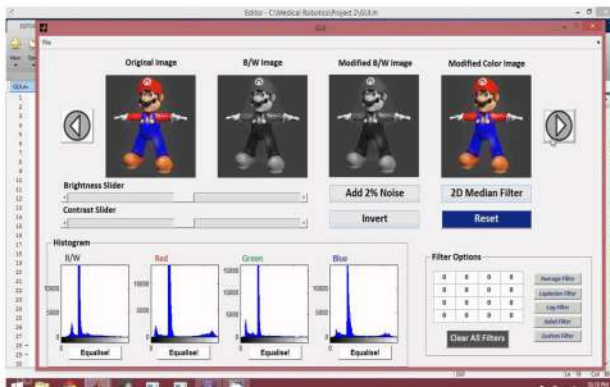3.Software testing tools like Selenium, Test link & TestRail.

GET HANDS-ON @ BIG DATA AND SOFTWARE TESTING LAB - R101

Rational Software Architect

1.Creating forensic duplicates using FTK imager.

2.File system analysis using the slueth kit-Autopsy.

3.Data acquisition and file recovery using ferensic tools-ProDiscover Basic,Access data FTK.

4.Data hiding using Steganography tools-S Tool

5.Log & traffic capturing and analysis tools-wireshark

6.Email and Mobile forensic tools- AccessData FTK

7.MATLAB-GUI

GET HANDS-ON @ DIGITAL FORENSIC LAB - S201

Code for location e.g P-201

P: Wing Name (Alphabets viz; P, J, T, S)

2: Second Floor (single digit numeral indicates the floor. 'Zero' implies ground)

01: Lab Number (double digit numeric)

LOCATION MAP