MAKER'S DAY 21 JANUARY 2017
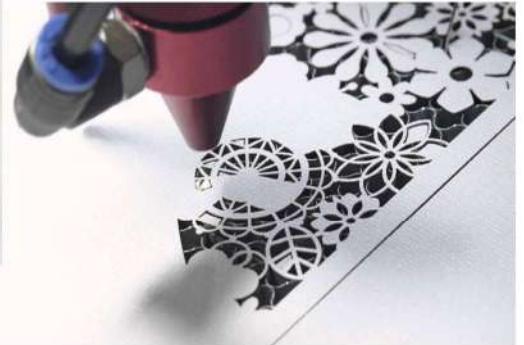
1. 3D Printer- Felix PRO 1, Ultimaker 2exd
2. WILDTHUMPER - A remotly controlled vehicle
3. DJI Phantom 4
4. GCC Laser cutter
5. TableTop CNC
6. Component library
7. Ferrofluid
8. Shape memory alloy
9. Microcontroller-Arduino, Raspberry Pi

GET HANDS-ON @ RESEARCH LAB P001

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. BOSCH cutters

GET HANDS-ON @ CAM LAB - R002

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

URBAN EXPANSION OBSERVATORY IN COLLABORASION WITH NEWYORK UNIVERSITY

1. Digitisation of satelite images.
2. Remote Monitoring of global urbanization
3. Data bank for planned smart cities.
4. Statistical anylysis of physical spaces vis a vis population density.
5. Statistical analysis on the presence of key infrastructure or the lack of it to the monitored spaces.
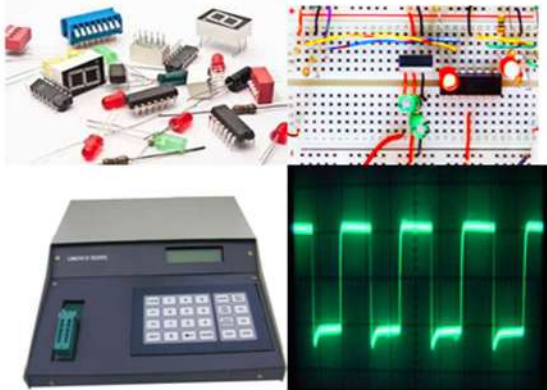
LIVE DEMO @ GROUND FLOOR P-WING - STUDY ROOM

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.

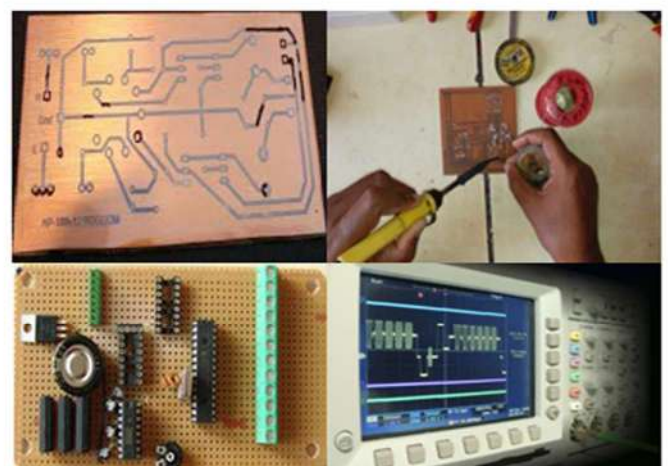## GET HANDS-ON @ MICROPROCESSOR AND CONTROLLER -T401

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 - P601

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 -

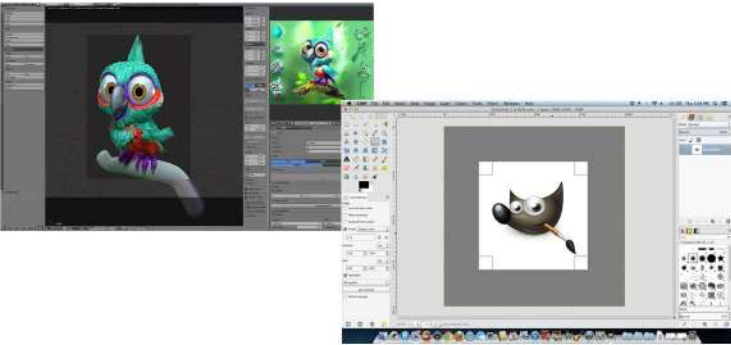**ZTI IP Traffic Test And Measure** - For complete network testing.

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.Blender-A free and open source 3D creation suite used for creating animated films, visual effects, art, 3D printed models, interactive 3D applications and video games.

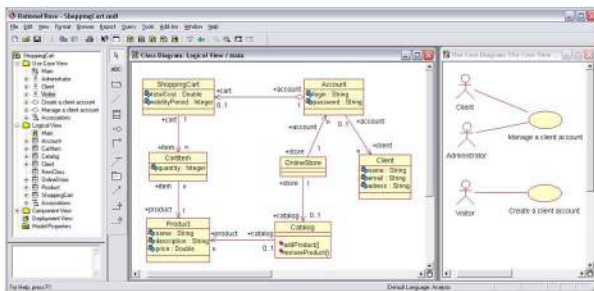2.GIMP - GNU Image Manipulation Program

GET HANDS-ON @ GRAPHICS LAB - S101

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.

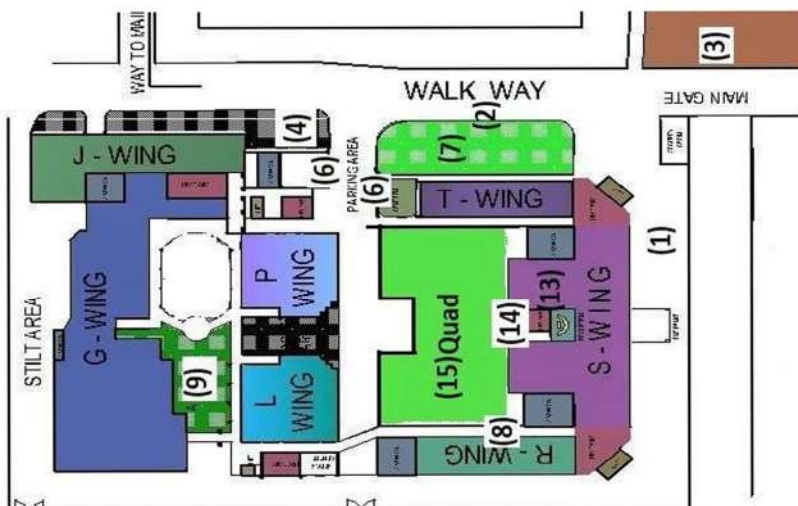## GET HANDS-ON @ BIG DATA AND ANALYTICS LAB - R101

Rational Software Architect

1.Uses the Unified Modeling Language (UML) for designing architecture for C++ and Java EE (JEE) applications and web services.

2.It provides an integrated design and development tool with UML Support.

3.Artificial Intelligence and Image Processing-Prolog and Matlab

GET HANDS-ON @ SYSTEM SOFTWARE 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