ECE Laboratory Facilities

S. No	Name of the Laboratory	Name of the major equipment
1	Communication Lab	• 3 GHZ Spectrum Analyzer, HMS 3010 HAMEG • DSB/SSB Transmitter Trainer ST2201 • DSB/SSB Receiver TrainerST2202 • FM Modulation and Demodulation ST2203 • PAM/PPM/PWM Trainer ST2110 • Function Generator SM5078 • Digital Multimeter • TDM PCM Transmitter Trainer ST2103 • Data Formatting & Carrier Modulation Trainer 2106 • FDM/Demultiplexing Trainers ST2211 • DSO –Tektronix 60 MHZ TDS 1002 • TDM PCM Receiver Trainer ST2104 • Delta Sigma Modulation/Demodulation ST2105 • Data Formatting & Carrier Demodulation ST2107 • Multiple Power Supply 0-30v, 5v, +_15 volts, • GFSK/GMSK Modulation/Demodulator Kit • CDMA Mobile Communication Trainer CDMA • GSM Mobile Trainer EB-115 • 3 GHZ Spectrum Analyzer GSP830 GWinstek • Klystron Power supply • Solid State Klystron power supply • Klystron mount with klystron tube • Isolator-4, Frequency meter • Variable attenuator • Slotted section • VSWR meter • Gunn power supply • Gunn Oscillator • PIN modulator • Digital Nano-meter • Digital Pico-ammeter • Analog Oscilloscope (30 MHZ)
2	VLSI Lab	• Cadence Standard Bundle 6.1.8 (EDA) • Xilinx Vivado Design Suite • CPLD Student Project Board • CPLD card (Xilinx 9572 pc 84 adaptor) • Universal Trainer Board • FPGA Development board • FPGA Card • USB Programmer Adapter • Universal Programmer (Uni Pro 12) • FPGA (Nexys 4TM Board) _ Artix TM • Desktop HCL i3 • Desktop Acer i5
3	Electronique Design Center	• STM32 Black pill Development Board • NUCLEO-64 BOARD • Arduino UNO R3 DIP • LORA 433 MHz wireless transmitter and receiver rf module • SEED STUDIO 1.28 INCH ROUND TOUCH DISPLAY FOR XIAO • HC-12 433 SI4463 WIRELESS SERIAL MODULE • Drone kit

		• Arduino nano RP 2040 • ESP 32 OLED Module • ESP 32 development board • DFRobot 5V Solar Manager • Soldron 8898 portable dual hot air soldering station • Wanptek WPS3010h Adjustable power supply • Bosch Cordless Rotary Tool GRO 12v-35 • Dewalt Cordless DCD771S2 18v 13mm • IDSXX00103-ids Ultrasonic cleaner • Infiniivision 1000x_series Oscilloscope, 2Ch , 50 MHz • Infiniivision 1000x_series Oscilloscope, 4Ch , 70 MHz • Digital multimeter Fluke - 17B+ • Digital multimeter Fluke - 106 • Function Generator • Tol 1029 8509 Antistatic Hot Air Desoldering station • Tol 2028 ADB8S Electronics Microscope • Sensor kit • Ender 3D Printer • PLC Trainer Kit • BLE Gateway • BLE Development kit • Weather Monitoring Sensor System
4	IoT Innovation Lab	• Acer desktop • Arduino MKR1000 Board • STMicroelectronics development board 511-STM32 (BL475E-IoT01A1) • IoT development kit
5	Measurements and Virtual Instrumentation Lab	• ELVIS II Board • LabView Academic site license software • Desktop computer • Potentiometer as an error detector kit • PID controllers • DC positional servo system • AC positional servo system • Synchro Set (Transmitter -Receiver)
6	Signal Processing Lab	• MATLAB 2024 Software • MATLAB 7.0 • MATLAB (2013b) • Desktop HCL-i3 • Acer-i5 • TMS320C6748 DSP Development Kit • DSP Starter Kit (DSK) TMS320C6713 with CCS • DSP Starter Kit (DSK) TMS320C6416 with CCS • Interfacing Card 16 Channel Audio • Interfacing Card DSK_COMM4 • DM6437 Digital Video Development
7	Larva Lab	• Laser cutting Machine • Truth Table of logic gates kits • Flip-Flop kits • Half added & full adder using EX-OR And gate,7483 kits • Mux- Demux kits • Counter kits • Shift Registers kits • Analog/Digital Trainer with Breadboard kits • Decode driver kits • Arithmetic Logical Unit (ALU) kit • Digital Multimeter 4000 counts,10MHz Frequency Counter kits • Multi – Vibrator kits • Low frequency TTL clock using NAND gate kits

8	Electronics Circuits Lab	• DSO, 2- Channel 50 MHz • PN junction diode kit • Transistor characteristics kit • LED characteristics kit • MOSFET characteristics kit • Photodiode characteristics kit • Solar cell characteristics kit • FET characteristics kit • Multiple output power supply • DSO 2 Channel 50 MHZ • Digital Multimeter Function Generator • DSO 2 Channel l100 MHZ • DC power supply • Transistor CE(Characteristics) • Transistor Biasing kits • FET Characteristics trainer kits • MOSFET Characteristics kits • Half wave and Full wave rectifier • Multiple output power supply • Class A, AB, Class B push pull amplifier • Mosfet as Switch • Mosfet as amplifier • Two Stage RC Coupled Amplifier • Diode as Clipper,Clamper Circuits • Complementary Symmetry Amp • Negative Feedback Amp • DC power supply
9	Embedded System Lab	• STM32 L476 microcontroller • Beaglebone Black Development board • Analog oscilloscope (30 MHz) • Raspberry Pi 3 • Raspberry Pi Camera • USB camera Logitech • GSM module SIM900A • Intel Galileo Gen-2 • Raspberry Pi 7" touch screen display • Mbed NXP LPC1768 microcontroller • NFC reader ST25R3911B Nucleo expansion board • MEMS internal and environmental Nucleo expansion board • BLE Nucleo expansion board • LED6001 LED driver Nucleo expansion board
10	Eureka Lab	• All-in-one Desktops: 07