

Department of Electronics and Communication Engineering

Embedded System Lab

An embedded system is basically an electronic system that can be programmed or non-programmed to operate, organize, and perform single or multiple tasks based on the application. In the real time embedded systems, all the assembled units work together based on the program or set of rules or code embedded into the microcontroller.

In this lab students are given introduction of different Universal Microcontroller Development Board , 8051 Daughter Board, ARM 7 Daughter Board , AVR Daughter Board,Arduino Daughter Board,Resberry PI 2B and 3B,FPGA Spartan3E Nano board with USB,STM32 V Discover etc.

In Embedded system lab is equipped with computer with the simulation software loaded. Students work individually and maintain individual laboratory notebooks and submit individual reports

Various Experimental Kits :

Universal Microcontroller Development Board : -18,

a) 8051 Daughter Board:-18

b) ARM 7 Daughter Board:- 5

c) AVR Daughter Board:-5

d)Arduino Daughter Board:-5

Raspberry PL Board:-5

a) Wi fi adapter:-5

Zig Bee Interface – End Device:- 3

GPS Module:- 3

GSM Interface:- 3

RFID Interface:- 3

Bluetooth Interface:- 3

DTMF based interface:- 3

RF 433 MHZ Interface:- 3

Traffic Light Interface:- 3

Accelerometer Sensor:- 3

Touch Screen:- 3

Micro SD Card Interface:- 3

Pressure Sensor:- 3

FPGA Spartan3E Nano board with USB:-2

Humidity sensor:-3

Humidity sensor+IR Sensor interface:-15

IR based interface:-3

Resberry PI 3B Original (model no 3B):-

Digital Storage Oscilloscope:-2

Digital Multimeter:-4

ST- Link/ V2:-24

STM32 F4 Discover:-5

STM32 F3 Discover:-5

STM32- L -Discover:-5

STEVAL – MKI 1249 V1:-10

STEVAL – MKI 124 V1:-5

STEVAL – MKI 132 V1:-5

STEVAL – MKI 120 V1:-5

STEVAL – MKI 1333 V1:-5

STM3240G – EVAL:-2

STM3320G – EVAL:-10

STM3210 – EVAL:-10

STM32 V Discover:-30

Name of Software:-

MEMS Pro – 5.1:-15 User