

# SIES Graduate School of Technology

## Department of Electronics and Telecommunication

Presents

### 5 days Hands on Training on Embedded Systems - ARM Mbed Platform and Node MCU

24th-28th June 2019, 9.30 AM to 4.00 PM

There is difference between education and knowledge. Education provides learning. While knowledge translates that learning into a career that earns a living. But the truth is, our education system is largely structured around academic learning, leaving the task of turning it into a career to the individual. For the less-privileged though, the only barrier that stands between them and a technocrat is knowledge of practical aspects of technology.

This course is meant to be a hands-on type course, giving students a chance to hear and read about embedded system topics, and then put those concepts to work by developing and debugging embedded system hardware and firmware

#### Objectives

- Learn about Embedded systems and ARM Mbed platform
- Interfacing various devices like 7 segment display, LCD display.
- Interfacing various sensors like accelerometer, LDR, temperature sensor etc.
- Learn basics of Node MCU and its interfacing with sensors and
- Learn IOT application designing using Node MCU.

#### Course Contents

**Module 1:** Introduction to microprocessor and microcontroller, Introduction to Embedded systems, Introduction to ARM Mbed platform.

**Module 2:** Simple programs like LED blinking, use of BusOut and PwmOut function.

**Module 3:** Basics of 7 segment display and LCD and their interfacing with freedom board.

**Module 4 :** Basics of accelerometer, LDR, potentiometer and its interfacing with freedom board.

**Module 5:** Basics of Node MCU, its interfacing with various Sensor, Designing of IOT applications based on Node MCU.

#### Who Should Attend

Any student from SE (EXTC/IT/CE) - First come first serve (Seat available only for 20 students- 10 groups with 2 members each)

#### Registration Fees and Faculty

Course Fees: FREE

(Cost of certificate will be applicable)

Faculty : Pushkar S., Vaishali M., Pranjali T.

#### Contact for Registration

Prof. Pushkar S.

Mobile: 9870630637

Email: pushkar.sathe@siesgst.ac.in