

I Year I Semester
Code: 17ES111

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EMBEDDED C- LAB

1. The students are required to write the programs using C-Language according to the hardware requirements such as 8051/PIC Micro controllers or any ARM processor developer kits.
2. The following experiments are required to develop the algorithms, flow diagrams, source code and perform the compilation, execution and implement the same using necessary hardware kits for verification. The programs developed for the implementation should be at the level of an embedded system design.
3. The students are required to perform at least EIGHT experiments.

List of Experiments:

LED Blinking.

ASCII to Decimal vice versa conversion.

Basic Arithmetic operations.

PWM(Motor application).

Serial Communication(USART).

ADC and DAC implementation.

JTAG Debugger.

Seven segment display interfacing.

LCD display interfacing.

3x4 keyboard interfacing.

Memory Device interfacing (Reading or Writing a file from external memory).

Temperature sensor/4 way Road control/Elevator.

Lab Requirements:

Software:

- (i) Keil Micro-vision IDE or Eclipse IDE for C and C++ (YAGARTO Eclipse IDE)
- (ii) LINUX Environment for the compilation using Eclipse IDE & Java with latest version.

Hardware: The development kits of 8051/PIC Micro controllers or any ARM processor