

COURSE TITLE : EMBEDDED SYSTEMS LAB

COURSE CODE : 5049
COURSE CATEGORY : A
PERIODS/WEEK : 4
PERIODS/SEMESTER : 52
CREDITS : 2

## **LIST OF EXPERIMENTS**

On completion of the course, the student will be able:

## 1.0 To Familiarization of kit (AtMega32)

## 2.0 To implement assembly language Programs using kit

- 2.1 Time Delay
- 2.2 Code Conversion
- 2.3 Serial Communication
- 2.4 Timer programming

## 3.0 To simulate Interface Programs in embedded C using AVR Studio

- 3.1 LED Interface (output)
- 3.2 Switch Interface (input)
- 3.3 4x 4 Matrix Keyboard interface
- 3.4 Relay interface
- 3.5 Seven segment LED display interface
- 3.6 Character based LCD interface
- 3.7 DC motor interface
- 3.8 Stepper motor interface
- 3.9 ADC Interfacing
- 3.10 DAC Interfacing
- 3.11 Temperature sensor