# **Course Number and Name**

BEE6L1 & Microprocessor and Microcontroller Laboratory

### **Credits and Contact Hours**

2 & 45

### **Course Coordinator's Name**

Mr.K.S.Prasad

#### **Text Books and References**

### **Text Books:**

- 1. Lab Manual
- 2. http://nptel.ac.in/courses/108107029/

### **Course Description**

To gain knowledge in programming microprocessor and microcontroller and to learn about various Interfacing concepts.

Prerequisites	Co-requisites					
Nil	Microprocessor and Microcontroller					
required, elective, or selected elective (as per Table 5-1)						

#### Required

# **Course Outcomes (COs)**

- CO1: Write Assembly Language Programmes for various operations using 8085 microprocessor.
- CO2: Able to perform 8051 programming.
- CO3: Execute Interface Programs in 8085 microprocessor.
- CO4: Execute Interface Programs in 8051 microcontroller.
- CO5: Able to apply the concepts of microprocessor and microcontroller to perform related projects.

Student Outcomes (SOs) from Criterion 3 covered by this Course												
COs/SOs	а	b	c	d	e	f	g	h	i	j	k	1
CO1	Н	Μ		Η	L							Η
									М			
CO2	Н	М		Н	L							Н
									М			
CO3	М	М		Н	М				М			Н
CO4	М	М		Н	М				Н			Н

CO5	Μ	M	ŀ	H	М							Н
									Н			
List of Topics Covered												
LIST OF EXPERIMENTS:												
8085 Programming												
1 (a) 8 bit Addition. (b) 8 bit Subtraction.												
2 (a) Multiplication. (b) Division.												
3 (a) 16 bit Addition (b) 16 bit Subtraction.												
4 (a) Largest Element in an array. (b) Smallest Element in an array.												
5 (a) Ascending order. (b) Descending order.												
8085 Interfacing												
6. Traffic Light control												
7. Keyboard Interface.												
8.8251 USART interface												
8051 programming												
9. Demonstration of basic instructions with 8051 micro controller execution including												
Conditional jumps, looping and calling subroutines.												
8051 Interfacing												
10. Stepper motor control.												
11	11. A/D & D/A Interface.											