

Course Code	Course Title	L	T	P	C
1151EC303	MICROPROCESSOR AND MICROCONTROLLER LAB	0	0	2	1

a) Course Category

Program core

b) Preamble

The course objective is to introduce the basic concepts of microprocessor and to develop students in the assembly language programming skills and real time applications of Microprocessor as well as microcontroller.

c) Prerequisite

Nil

d) Related Courses

RTOS Lab, System on Chip

e) Course Outcomes

Upon the successful completion of the course, students will be able to

CO Nos.	Course Outcomes	Skill Level (Based on Dave's Taxonomy)
CO1	Develop and Implement assembly language program for performing basic mathematical manipulation using 8085&8086 microprocessor	S3
CO2	Develop and Implement assembly language program for Performing real time interfacing using 8085&8086 microprocessor	S3
CO3	Develop and Implement assembly language program for performing basic mathematical manipulation using 8051Microcontroller.	S3
CO4	Develop and Implement assembly language program for Performing real time interfacing using 8051 microcontroller	S3

CO5	Develop and Implement C program for performing real time interfacing using 8051 microcontroller	S3
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f) Correlation of COs with POs

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	M	M	-	-	-	-	-	-	-	-	-	-	-	-
CO2	M	M	-	-	-	-	-	-	-	-	-	-	-	-
CO3	M	M	L	-	-	-	-	-	-	-	-	-	-	-
CO4	M	M	L	-	-	-	-	-	-	-	-	-	-	-
CO5	M	M	L	-	L	-	-	-	-	-	-	L	-	M

g) Course Content:

List of Experiments

EXP NO	EXPERIMENT NAME	CO
1	Program for ALU operations-8 bit (8085)	CO1
2	Real time clock generation (8085)	CO2
3	Traffic light interfacing (8085)	CO2
4	Program for ALU operation-16 bit (8086)	CO1
5	Program for square root and square of the given input (8086)	CO1
6	Interfacing of stepper motor with 8086.	CO2
7	Program for ALU operations (8051).	CO3
8	Program for bit manipulation and masking for the given input (8051).	CO3
9	ADC & DAC Interfacing with 8051.	CO4
10	Keyboard and Display Interface with 8051.	CO4
11	Interfacing of DC motor with 8051.	CO4
12	Timer programming using keil C.	CO5
13	Serial port programming using keil C.	CO5
14	Interrupt program using keil C.	CO5