

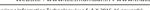
Zagdu Singh Charitable "Trust's (Regd.)

THAKUR COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by AICTE, Govt. of Maharashtra & Affiliated to University of Mumbai*) (Accredited Programmes by National Board of Accreditation, New Delhi**)

A - Block, Thakur Educational Campus, Shyamnarayan Thakur Marg, Thakur Village, Kandivali (East), Mumbai - 400 101.

Tel.: 6730 8000 / 8106 / 8107 Fax : 2846 1890 Email : tee'@htakureducation.org Website : www.tcetmumbai.in • www.thakureducation.org





Revision: B

**Permanent Affiliated UG Programmes: * Computer Engineering * Electronics & Telecommunication Engineering * Information Technology (w.e.f.:A.Y. 2015-16 onwards)

**Ist time Accredited UG Programmes: * Computer Engineering * Electronics & Telecommunication Engineering * Information Technology

**2nd time Accredited UG Programmes: * Computer Engineering * Electronics & Telecommunication Engineering * Information Technology * Electronics Engineering (3 years w.e.f.:01-07-2016)

Semester Plan (Practical / Tutorials / Assignment)

Course: T.E EXTC Semester: V Batches: T.E A1/A2

A3/A4

Subject: Microcontroller and Applications Class: T.E EXTC- A Batch size: 20 Students

Laboratory faculty in charge: Ms. Rupali Mane . Teaching Assistant: Mr. Dinesh Kanswal

Note: Experiment planned as per University Curriculum

Basic Experiments:

TCET/FRM/IP-02/10

Sr. No.	TITLES Experiments / Tutorials / Assignment (Planning with use of Technology)	Batches	Planned Date	Comple tion Date	Remark s
	Write an assembly language program in	A1	24/07/17		
1.	8051 to perform arithmetic operations	A2	24/07/17		
	a) Add two 8 bit numbers	A3	25/07/17		
	b) Subtract two 8 bit numbers	A4	25/07/17		
2.	Write an assembly language program in 8051 to perform multiplication	A1	31/07/17		
		A2	31/07/17		
		A3	1/08/17		
	and division of two 8 bit numbers.	A4	1/08/17		
3.	Write an assembly language program in 8051 to arrange numbers in ascending &	A1	7/08/17		
		A2	7/08/17		
		A3	8/08/17		
	descending order.	A4	8/08/17		
4.	Write an assembly language program in 8051 to find smallest & largest numbers from an array of 5 numbers.	A1	14/08/17		
		A2	14/08/17		
		A3	5/09/17		
	from an array of 3 numbers.	A4	5/09/17		
5	Write an assembly language program to add two 64 bit nos. using ARM7	A1	11/09/17		
		A2	11/09/17		
		A3	19/09/17		
	processor.	A4	19/09/17		
6.	***	A1	18/09/17		
	Write an assembly language program to	A2	18/09/17		
	find largest no. among the array of 10 nos. using ARM7 processor	A3	26/09/17		
	nos. using AKWI/ processor	A4	26/09/17		

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Design	n Experiments:					
			A1	11/09/17		
7.	Design a migragentraller besed	avetom	A2	11/09/17		
	Design a microcontroller based to blink LED using ARM7 processing to blink LED using ARM7 processing to the blink LED using	A3	19/09/17			
		A4	19/09/17			
8.		A1	4/09/17			
	Design a microcontroller based	A2	4/09/17			
	to generate a square wave	A3	12/09/17			
	of 2KHz using 8051 microcontr	A4	12/09/17			
		A1	4/09/17			
_	Design a microcontroller based	A2	4/09/17			
9.	to rotate the stepper motor in cland anticlockwise direction	A3	12/09/17			
	and anticlockwise direction	A4	12/09/17			
	Mini Project: Design a microcontrollo		A1	25/09/17		
	ı		A2	25/09/17		
10	based system to interface ARM? Segment Displayand display 0 to	A3	3/10/17			
	numbers	A4	3/10/17			
11	Case Study: Recent trends in microcontrollers and embedded	As per slot given	As per slot given			
studen (Total The ar Resea	Minor Projects Objective: To get at choice in the following areas. (3 120 Hrs) reas are: arch 2. Core 3. Interdisciple Major project: As per University	30 Hrs / S		lent).	geets with i	espect to
S.No	Project Title/Group Size	Class	Type / Project Hours	Modes of Learning	Reference	
1.	Smart Ordering System for Restaurants	T.E EXTC	Applicatio n	Project Based Learning		

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2.	Density based traffic light control		T.E EXT		Applicatio n	Project Based Learning			
3.	RFID based library system with GSM module			T.E EX		Applicatio n	Project Based Learning		
	Planned	Complete d		Plar	nned	Completed		Planned	Complete d
No. of Prac	Basic Exp: 06 Design Base Exp: 03 Group Learnin g: 2 Major Project: 00 Mini Project: 03		No. of Assign ments	02			No. of Tutorial	00	
DOSL	DOSLNE:				DOSLE (engaged in some other dates):				

Group activities are required to be added with the practical related to course to enhance the learning activity of the student in the course. Group activity includes: Group presentation, new experiment design, mini projects etc.

Note

- 1. The practical plan date and completion date shall be in compliance. For any non-compliance reason(s) required to be stated
 - in remark column.
- 2. Learning objective and outcome shall be clearly stated with each of experiments/ tutorials/ assignments and are required to

be mapped at the end of the semester.

3. Entry for DOSLE (engaged on some other date) shall be done with proper mapping to DOSLNE.

Sd- Sd- Sd
(Mrs. Rupali Mane) (Dr. Vinitkumar Dongre) (Dr. R. R. Sedamkar)

(Mr. Nishant Kumar)

Name & Signature of Faculty Signature of HOD Signature of Principal / Dean Academic

Date: 20/07/2017 Date: 20/07/2017 Date: 20/07/2017

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