Amrutvahini College of Engineering, Sangamner Department of Electronics and Telecommunication Engineering.

Ref/AE/ETC/2023-24/ 95/2

Date: 05/10/2023

To,

The Principal,

AVCOE, Sangamner.

Subject: Permission to organize One Week Short Term Training Program for Third Year Students on "Embedded Systems Using PIC Microcontroller" of E&TC, from8th Oct 2023 to 12th Oct 2023.

Respected Sir,

The Dept. of E&TC of AVCOE used to organize Workshops/STTP's/Guest Lectures/National level Seminars, etc. throughout the academic year frequently. We are planning to organize Five DaysShort Term Training Program for Third Year Students on "Embedded Systems Using PIC Microcontroller" of E&TC, from8th Oct 2023 to 12th Oct 2023.

Resource Person : Mr. Shridhar Sudharshan Dudam

Coordinators: Ms. S.B.Kawade and Dr. S.R. Jondhale

So,I request you to permit us for organizing this STTP.

Thanking you.

10

Yours sincerely,

Dr. Ms.R.P. Labade (HOD,E&TC) Amrutvahini Sheti & Shikshan Vikas Sanstha's

Amrutvahini College of Engineering, Sangamner

Sangamner, P.O:Sangamner S.K.-422 608, Dist: Ahmednagar (M.S.) India.

Web: www.avcoe.org E-mail: principal@avcoe.org Phone No.: (02425) 259096 Fax: (02425) 259016

Ref/AE/ETC/ 2023-24/ 85/3

Date: 05/10/2023

To.

Mr. Shridhar Sudarshan Dudam Technical Consultant Smart Logic Technologies Dhankwadi, Pune Email ID: shridhar.dudam@gmail.com

Sub: Invitation Letter for conducting One Week Short Term Training Program for Third Year Students on "Embedded Systems Using PIC Microcontroller" of E&TC, from 8th Oct 2023 to 12th Oct 2023.

Respected Sir,

Amrutvahini College of Engg. (AVCOE), Sangamner is one of the well known institutes affiliated to University of Pune. The Dept. of E&TC of Amrutvahini College of Engineering, Sangamner used to organize Workshops, STTP's, Guest Lectures, National level Seminars...etc throughout the academic year frequently.

Department of Electronics & Telecommunication organizing One Week Short Term Training Program for Third Year Students on "Embedded Systems Using PIC Microcontroller" of E&TC, from 8th Oct 2023 to 12th Oct 2023. We are happy to invite you as a resource person for this workshop/STTP. We are very much sure that this Workshop/STTP will definitely create an interest among the students about core electronics field and increase their knowledge.

It will be a pleasure to us to have you as a resource person for this workshop/STTP and I hope you would accept our invitation.

Thanking you,

With regards

Yours sincerely,

Dr. Ms. R.P. Labade (HOD, E&TC)

or and

Amrutvahini College of Engineering, Sangamner Department of Electronics & Telecommunication Engineering Short Term Training Program on "Embedded Systems Using PIC Microcontroller" <u>Attendance Sheet</u>

(8th Oct 2023 to 12th Oct. 2023)

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Mr. Shridhar Dudam

TO, Smart Logic Tech

Mr. S.B. Kawade

STTP Coordinator

Dr.Ms.R.P. Labade

Dept. of HOD EXTC)
Amrutvahini College Of Engineer
Sangamner, Dist.-Ahmednagar(

AMRUTVAHINI COLLEGE OF ENGINEERIG SANGMNER

Union Bank of India Statement of Account

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17/10/2023 15:06 Statement Date

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Statement From

AmrutvahiniSheti&ShikshanVikasSanstha's

Amrutvahini College Of Engineering

Sangamner, P.O:Sangamner S.K.– 422 608, Dist: Ahmednagar (M.S.) India. Web: www.avcoe.org E-mail: principal@avcoe.org Phone No.: (02425) 259096 Fax: (02425) 259016

Ref/AE/ETC/ 8582/2023-24

Date: 12/10/2023

To, The Principal, AVCOE, Sangamner.

Subject: Conduction Report of One Week Short Term Training Program for Third Year Students on "Embedded Systems Using PIC Microcontroller" of E&TC, from 8th Oct 2023 to 12th Oct 2023.

Respected Sir,

The Department of Electronics and Telecommunication under IEEE MTT's ,IEEE AP's student barch chapter conducted a workshop of One Week Short Term Training Program for Third Year Students on "Embedded Systems Using PIC Microcontroller" of E&TC, from 8th Oct 2023 to 12th Oct 2023. The Workshop was beneficial for all students to provide knowledge and understanding of fundamentals embedded systems design paradigms with respect to software and hardware.

The details of this STTP are as given below.

Resource Person: Mr. Shridhar Dudam (TO, Smart Logic Technologies, Pune)

Date of Conduction: 8th Oct 2023 to 12th Oct 2023.

Topic of STTP: "Embedded System using PIC Microcontroller"

Attendee: Third Year E&TC Students

Total No. of Studnts: 54

Objective:

- 1. To Understand Embedded System Design Flow & Architecture of Microcontroller.
- 2. To interface various Peripherals to PIC Microcontroller using Embedded C Programming Language.
- 3. To Study the serial communication protocols like UART/I2C/SPI.

Outcomes:

- 1. Analyze to understand what microcontroller architecture, core of the embedded system.
- 2. Students are able to become familiar with the installation of Device driver, compiling the code in MPLab software.
- 3. This workshop trained the students to start with PIC18F Microcontroller board and develops code to interface various Peripherals with PIC Microcontroller.
- 4. Students are hands-on to developed mini Project by using embedded c Language in MPLab software.

Coordinator of STTP: 1. Mr.S.B. Kawade 2) Dr. S.R.Jondhale

This is for your kind information. Thanking you,

With regards,

Prof. Dr.R.P.Labade (Head,E&TC Department)

Dept. Of Electronics & Telecom Franchini College Of Bagus Sangamner, Dist-Ahmednagar, Max. AmrutvahiniSheti&ShikshanVikasSanstha's

Amrutvahini College Of Engineering

Sangamner, P.O:Sangamner S.K.– 422 608, Dist: Ahmednagar (M.S.) India. Web: www.avcoe.org E-mail: principal@avcoe.org Phone No.: (02425) 259096 Fax: (02425) 259016

Ref/AE/ETC/ 25 82/2023-24

Date: 12/10/2023

To, Mr.Shridhar Dudam TO, Smart Logic Technologies, Pune

Subject: Expression of Gratitude.

Respected Sir,

We sincerely wish to thank for readily accepting our invitation and taking anSTTP on "Embedded System using PIC Microcontroller" underin associated with IEEE Microwave Theory and Techniques Society (IEEE MTT's) and IEEE Antennas Propagation Society (IEEE APS) students branch chapter.

Your STTP on "Embedded System using PIC Microcontroller" was received by all the students they were highly motivated with your inputs. The valuable exposure about the need, importance of Embedded System for Students presented by you will definitely help the students to achieve the following outcomes-

- 1. Students will be able to become familiar with embedded system flow, Architecture of microcontroller.
- 2. Students are hands-on to developed mini Project by using embedded c Language in MPLab software.

We thank you for sparing your valuable time to guide us for this STTP and we look forward the same favorable support in future. Thank you Once Again.

With regards Yours sincerely,

Dr. Prof.R.P.Labade

(Head, E&TCEngg. Department)

Dept. Of Electronics & Telecom. Engs Amrutvahini College Of Engineering Sangamner, Dist.-Ahmednad. 16



Amrutvahini Sheti and Shikshan Vikas Sanstha's, Amrutvahini College of Engineering, Sangamner Near Pune Nashik Highway, Ahmadnagar, Sangamner, Maharashtra 422608.

DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION

Extra-Curricular Activity Feedback

Details of Extra Curricular Activity:

Sr. No.							
Activity Title	STTP on Embedded System using PIC Microcontroller						
Resource Person Name	Mr. Shridhar Dudam						
Activity Date	8 th Oct 2023 to 12 th 2023						
Academic Year	2023-24						
Activity Coordinator Name and Associated Club	Mr. S.B. Kawade ,Dr. S.R. Jondhale IEEE APS and IEEE MTT's						
Program Outcome to be attained	PO1,PO5,PO9,PO11						
Course Objectives	To Understand Embedded System Design Flow & Architecture of Microcontroller.						
	To interface various Peripherals to PIC Microcontroller using Embedded C Programming Language.						
	To Study the serial communication protocols like UART/I2C/SPI.						
Course Outcomes	Analyze to understand what microcontroller architecture, core of the embedded system.						
	Students are able to become familiar with the installation of Device driver, compiling the code in MPLab software.						
	This workshop trained the students to start with PIC18F						
	Microcontroller board and develops code to interface various Peripherals with PIC Microcontroller.						
	Students are hands-on to developed mini Project by using						
	embedded c Language in MPLab software.						

> Feedback Filled By:

Gadekar Sanskar Rohidas							
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Sr	Questions	Excellent	Very Good	Good	Satisfactory	Poor
No		(5)	(4)	(3)	(2)	(1)
1	Do you think that you understand the course objectives and course outcomes planned for this STTP?	V				
2	Do you feel comfortable to present the content covered in this STTP confidently in front of technical audience?					
3	Do you feel comfortable in dealing with engineering problems associated with this STTP topic?		V			
4	Rate your ability to confidently search current state of art research trends or activities related with this STTP topic?	-				
5	Are you able to apply principles, concepts, and knowledge of science and mathematics learnt in this STTP to solve relevant problems of this domain?					
6	Are you able to design and develop solutions for required specifications based on knowledge gained during this STTP?	*				
7	If you want to give any other suggestions regarding this STTP, please write in the next box.		Mil			

Dept. Of Electronics & Telecom Amrutyehini College of Engine-Sangamner, Dist.-Ahmednagar(MS)



AMRUTVAHINI COLLEGE OF ENGINEERING, SANGAMNER Department of Electronics & Telecommunication Engineering Report of STTP on "Embedded Systems Using PIC Microcontroller" for TE Students

Details of Program Attended

- 1. Program title: One Week STTP on "Embedded Systems Using PIC Microcontroller"
- 2. Date / Period of the event:- 08/10/2023 & 12/10/2023
- 3. Venue: C.V. Raman Hall, AVCOE, Sangamner
- 4. Name of the Organizer: E& TC Department, AVCOE, Sangamner

Course Objectives

- 1. To Understand Embedded System Design Flow & Architecture of Microcontroller.
- 2. To interface various Peripherals to PIC Microcontroller using Embedded C Programming Language.
- 3. To Study the serial communication protocols like UART/I2C/SPI.

Course Outcomes

- 1. Analyze to understand what microcontroller architecture, core of the embedded system.
- Students are able to become familiar with the installation of Device driver, compiling the code in MPLab software.
- 3. This workshop trained the students to start with PIC18F Microcontroller board and develops code to interface various Peripherals with PIC Microcontroller.
- 4. Students are hands-on to developed mini Project by using embedded c Language in MPLab software.

Brief description of event and discussions:-

The Department of Electronics and Telecommunication under IEEE MTT's ,IEEE AP's student branch chapter conducted a workshop of One Week Short Term Training Program for Third Year Students on "Embedded Systems Using PIC Microcontroller" of E&TC, from 8th Oct 2023 to 12th Oct 2023.

The Workshop was beneficial for all students to provide knowledge and understanding of fundamentals embedded systems design paradigms with respect to software and hardware.

The valuable exposure about the need, importance of Embedded System for Students presented by trainer will definitely help the students. During the Session, students took part in an interaction & participated in hands-on to developed mini Project by using embedded c Language in MPLab software. Along with the trainers a group of 03 students was also trained to start with PIC18F Microcontroller board and develops code to interface various Peripherals with PIC Microcontroller. Additionally the installation of Device driver, compiling the code in MPLab software was covered. The coordinating of this workshop & concluding speech was given by Mr. S.B. Kawade Asst. Professor of E& TC Department of AVCOE, Sangamner.

Mr. S.B. Kawade

STTP Coordinator

Dr. Ms. R.P. Labade

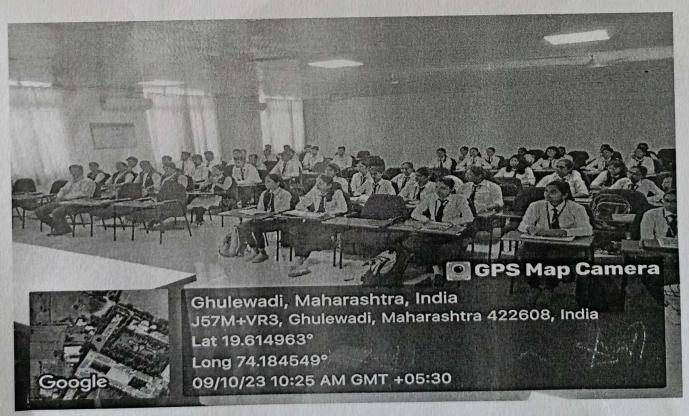
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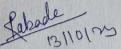
Dept. Of Electronics & Telecom. Engg Amrutvahini College Of Engineering, Sangamner, Dist.-Ahmednagar(MS) Dr. M.A. Venkatesh

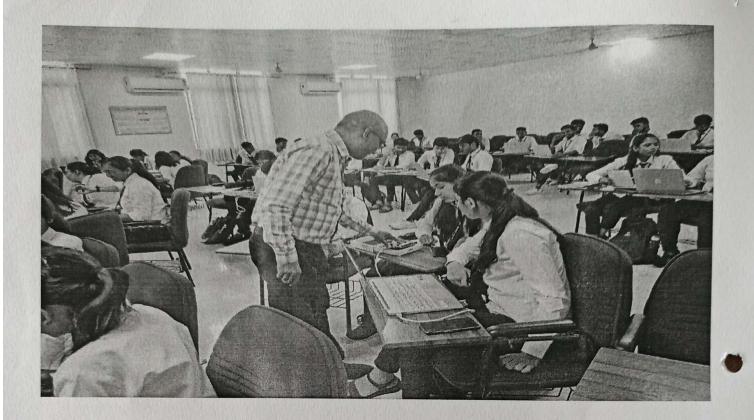
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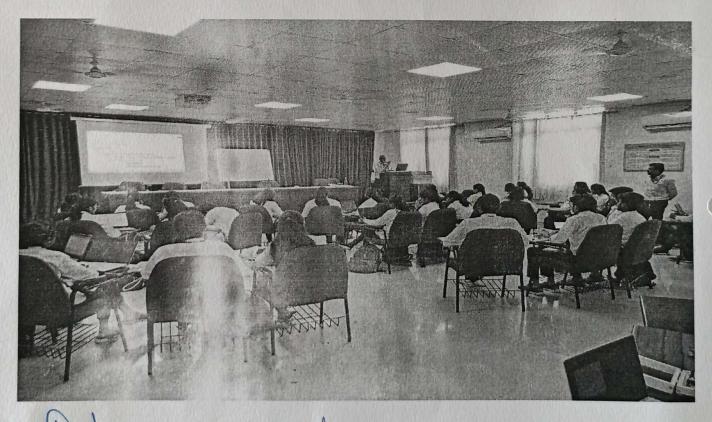
Photograph of Session:











Mr. S.B. Kawade

STTP Coordinator

Dr. Ms. R.P. Labade

(HOD, E&TGEngg.)

Dept. Of Electronics & Telecom. Engo Amrutvahini College Of Engineering, Sangamner, Dist. Ahmeonagar (MS)

Dr. M.A. Venkatesh

Principal