

।। <mark>नहि ज्ञानेन सदृशं पवित्रमिह विद्यते ।।</mark> DR. VITHALRAO VIKHE PATIL FOUNDATION'S

Dr. VITHALRAO VIKHE PATIL COLLEGE OF ENGINEERING

Affiliated to SPPU, Pune (ID. No. PU/AN/Engg./027/(1983) & recognized by A.I.C.T.E., New Delhi & Govt. of Maharashtra Accredited by NAAC, Bangalore

Ref.No. CEA/E&TC/2019/521(P)/1

STORY THE RESTREET

Date:- 15/02/2019

To,

Akash Dane,

Model based Developer,

Synapse system,

Pune

Subject: Request for conducting 3 day workshop on topic "Embbedded system , IOT, Arduino" from 21th February 2019 to 23th February 2019

.Dear Sir,

It gives us immense pleasure to state that the Department of Electronics & Telecommunication Engineering of our institute organizes a 3 day workshop for students.

As per discussion with Prof. C.K.Kalawade , Assistant Professor, Department of Electronics & Telecommunication Engineering , We would like to invite you to conduct a 3 day workshop on topic "Embbedded system , IOT, Arduino" from 21^{th} February 2019 to 23^{th} February 2019

Kindly accept our invitation to deliver lecture and give your consent.

Thanking you.

Yours sincerely,

(Dr. Uday P. Naik)

Principal

STANDARY OF ENGINEERS

PRINCIPAL
Dr. Vithalrao Vikhe Patil
College of Engineering
Ahmednagar



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Ref.No. CEA/E&TC/2019/52/(A)/1

Date: 15/02/2019

To,

Sumedh Saptarshi,

Senior Engineer,

Synapse system,

Pune

Subject: Request for conducting 3 day workshop on topic "Embbedded system, IOT, Arduino" from 21th February 2019 to 23th February 2019

Dear Sir.

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(Dr. Uday P. Naik)

Principal

PRINCIPAL Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar

Dr.Vithalrao Vikhe Patil College of Engineering, Ahmednagar Department of Electronics & Telecommunication Engineering

NOTICE

Date 18/02/2019

All the faculty and students of T.E., B.E. are hereby informed that workshop on "Embedded System, Arduino, IOT" by Mr.Sumedh Saptarshi & Mr Akash Dane is scheduled on 21/02/2019 to 23/02/2019. Students should register their names to student coordinator for the workshop

Prof .Dr.A.K.Patil

Head of Electronics & Telecommunication Dept.
P.D.V.V.P. College of Engineering
Vilad Ghat, Ahmednagar-414111

College of Engineering
Ahmednagar



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Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar DTE College Code: EN-5161



Department of Electronics & Telecommunication Engineering

Title of Workshop:-

Three days workshop on Embedded Systems and Arduino

TOI.

Conducted By:-

Synapse system, Pune

Date :-

21/02/2019-23/022019

Students from:-

(S.E., T.E. Students)

Total Number Of Students = 39

Name of the expert:

Sumedh Saptarshi

(Senior Engineer at Synapse system, Pune)

Akash Dane

(Director Of Synapse system, Pune)

Venue: class room ETC13 & ETC 11

Convener:-

Prof.Dr.A.K.Patil

Co-ordinator:- Prof.C.K.Kalawade

Workshop Objective:

- 1)To get familiar with various concept of Embedded systems &IOT
- 2) To introduce Arduino micro-controller & its programming
- 3) To introduce different sensors for inter-facings with Arduino micro-controller

Workshop Outcomes:

- 1)Student will be able to understand the concept of Embedded systems & IOT
- 2) Students have hands on practice on Arduino micro-controller board & its programming
- 3) Student can use different sensors & inter-facings with Arduino micro-controller

in their projects

Head of Electron

P.D.Y.V.P. College of Engineering Vilad Ghat, Ahmednagar-414111







Report On Three Days Workshop By Alumini

Topic: Three Days Workshop on Embedded Systems, Ardiuno and IOT

Date: 21/02/2019 to 23/02/2019

Venue: Department of E&TC -Computer Lab-I (DVVPCOE, Ahmednagar)

Organized by
Department of Electronics and Telecommunication
Dr. Vithalrao Vikhe Patil College of engineering Ahmednagar

Details of the session:

Tree Days Workshop on Embedded Systems, Ardiuno and IOT

Details of the Event:

- Date of the Workshop: 21/02/2019 to 23/02/2019
- **Time** :9.30.00am to 5.00pm
- Title: "Embedded Systems, Ardiuno and IOT"
- Name of the expert: Er. Akash Dane, Director Synapse Systems,
 Ahmednagar and Sumedh Saptarshi (Alumni of E &TC)
- Organization- Synapse Systems, Ahmednagar
- Classes attended: SE & TE students
- Number of students attended: 39

Venue: Department of E&TC –Computer Lab-I (DVVPCOE, Ahmednagar)

- Event Incharge: Prof. Vaishali A. Dhawale.
- Student Co-ordinators: Sukrut Kulkarni, Pankaj Kokane and Gadhe Shubham
- Objective:
 - To get familier with various conceps of Embedded systems and IOT
 - To have hands on practice on Ardiuno board.
 - To learn Interfacing of various devices with Ardiuno board.
 - To explore students with the real world interfacing.
 - To apply this knowledge in their mini and major projects.

Head of Electronics & Telecommunication Dept P.D.V.V.P. College Engineering

Vilad Ghat

of Engineering magar-414111 Principal
Dr.Vithalrao Vikhe Patil
College of Engineering
Ahmednagar

Page 2 of 5

• Topics Covered

- 1. Introduction to Embedded Systems and Ardiuno.
- 2. Ardiuno IDE Introduction and installation.
- 3. Interfacing with sensors, motors and various I/O devices.
- 4. Communication protocol with Ardiuno.
- **5.** IOT (Internet of Things) Introduction, Need, setting up Server, DAS and Data base Management.

llege

6. Projects - IOT based Smart Agriculture System and

- Smart Stick for Blind.

Head of Electronics & Telecommunication Dept.

P.D.V V.P. College of Engineering Vitao Chat, Ahmednagar-414111

irrincipal
Dr.Vithatrao Vikha Patil
Color of Engineering

To,

Principal,

PDVVP COE,

Ahmednagar.

Subject: About three days practical oriented workshop on Embedded System, Arduino and IOT.

Respected Ma'am,

With reference to the above subject matter, we want to conduct the 3 Days Practical oriented Work Shop on "Arduino and IOT" for your students. We are sending here with a proposal including Workshop Content (Syllabus).

You are requested to go through the same and contact us for any further clarification. With Regards,

Nega

Yours faithfully

Akash Dane

Director

Synapse Systems

P.D.V.V.P. College of Engineering

Vilad Chat, Almeonagar-414111

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Or Vithelrao Vikhe Patil College of Engineering

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Workshop Content:

Sr No	Topics	Duration
1	Introduction	1hrs
	Brief Introduction to Embedded systems Introduction to Arduino.	
2	Getting Started With Arduino	2hrs
	 Intro to Arduino IDE Installation of library and basic commands. Installation of drivers. Basics of Embedded C 	
3	Working With GPIOs	4hrs
	 Interfacing LED Interfacing Buzzer Working With Motors Working With Inputs LCD Working with Analog Sensors Working with Digital Sensors 	
5	Communication Protocols on Arduino	3hrs
	SerialSPII2C	4
6	IOT	4hrs
0	 Introduction to Internet Of Things Need of IOT Setting Up Server Data Acquisition on Server. Data Base Management. 	
7	Project Project	4hrs
	 IoT based Smart Agriculture system. Smart Stick for Blind 	

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Head of Electronics & Telecommunication Dept P.D.V.V.P. Control on incering

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Dr. Vithaliaa Vikhe Patil Oellege of Engineering Ahmednegar



Total 18hrs

Workshop material provided to the student-

- 1) A Manual for understanding Arduino and Sensors.
- 2) Kit containing Arduino and Sensors
- 3) Programming Software.

Students Benefit:

- Updated to new technology.
- Knowledge about programming.
- Knowledge about interfacing with microcontrollers.
- Knowledge related to project building.

Required support Services from the college:

Computer Labs.

Registration fees:

- Fees for each student will be Rs500.
- Minimum 30 Students required for conducting Workshop.
- Discount if the fees if number of students exceed 50.

Contact us:

Email Id: synapse.systems75@gmail.com

Phone Number: 7588884886

Our Branches: Pune, Ahmednagar.

Head of Electronics & Telecommunication Dept.
P.D.V.V.P. College of Engineering
Vilad Ghat, Ahmednagar-414111



Principal Dr.Vithalrao Vikhe Patil College of Engineering Anniednagar



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IoT WORKSHOP EVALUATION FORM

Name: Shinde	Nikhil Ravindro		Tiger	GRP)
Branch: EdTC	Mobile No: 9657368959	_		
Email ID:				

For the following areas, please indicate your rating:

A. Content	1 Fair ◆	2	3	4 Excellent
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Practical to my needs and interests		to a stranger	\	
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Well paced				1
Presented at the right level				
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B. Presentation				
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Instructor's presentation style			V	
Instructor covered material clearly	ali b	and a supplementation of		~
Instructor responded well to questions	-144			
Instructor facilitated interactions among participants well				

C. How could this workshop be improved?	
D. Any other comments or suggestions?	

E. Overall, how would you rate this workshop?

POOR

] FAIR

] GOOD

Head of Electronics & Telecommunication Dept.
P.D.V.V.P. College of Engineering

Vilad Ghat, Ahmaonagar-414111



College of Engineering



Effective activities

B. Presentation

participants well

Instructor's knowledge

Useful visual aids and hand-outs

Instructor's presentation style
Instructor covered material clearly
Instructor responded well to questions
Instructor facilitated interactions among

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IOT WORKSHOP EVALUATION FORM

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IoT WORKSHOP EVALUATION FORM

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POOR

E. Overall, how would you rate this workshop?

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ARDUINO AND IOT WORKSHOP

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Dr. Vitthalrao Vikhe Patil Foundation's

Dr. Vithalrao Vikhe Patil College of Engineering Ahmednagar



3 days workshop on

Embbedded system, IOT, Arduino Department of Electronics & Telecommunication

Certificate

This is to certify that,

Mr./Ms. Lade Shubham B. has successfully completed 3 days workshop on "Embbedded system, IOT, Arduino" from 21 February 2019 to 23 February 2019

Co ordinator

HOD E&TC

Principal



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Ref. No. CEA/E&TC/2019/ 595 (A) 2

Date: - 23/02/2019

LETTER OF THANKS

Dear Sir,

On behalf of Dr. Vithalrao Vikhe Patil College of Engineering, Ahmednagar, we take this opportunity to extend our heartfelt gratitude & huge "Thank you" for delivering 3 day workshop on "Embbedded system, IOT, Arduino" for Electronics & Telecommunication Engineering students from 21th February 2019 to 23th February 2019

Let us maintain and cherish these relations for mutual benefit hence and forever. We shall remain obliged for sparing valuable time with us.

(Dr. Ms.A.K.Patil)

HOD, E&TC

(Dr. Uday P. Naik)

Principal

To, Sumedh Saptarshi, Senior Engineer, Synapse system,

TERING OF THE PROPERTY OF THE

Dr. Vithairao Vikhe Patil College of Engineering Ahmednagar

Pune



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(Dr. Ms.A.K.Patil)

HOD, E&TC

(Dr. Uday P. Naik)

Principal

Phone: - 0241-2777296 / 2779496

E-mail :- principal@enggnagar.com

Website:- http://www.enggnagar.com

To,
Akash Dane,
Model based Developer,
Synapse system,

OHOR THAN THE

PRINCIPAL
Dr. Vithalrao Vikhe Patil
College of Engineering
Ahmednagar

Pune