RAAK

COLLEGE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, New Delhi & Affiliated to Pondicherry University)

From

01/08/2019

Ms. P. Vishnupriya

Assistant professor/ ECE

RAAK College of Engineering and Technology

Puducherry -110

To

The Principal

RAAK College of Engineering and Technology

Puducherry -110

Respected Sir,

Sub: Requisition for Approval to Conduct Skill Development program / Value added Course on **"19ECE01-Internet of Things"**-reg.

This is to bring to your kind notice that the Skill Development Team is planning to conduct a Program on **"19ECE01-** Internet of Things **."** for all the Final Year Electronics and Communication Engineering students from 09-08-2019 to 14-08-2019.

The main focus of this program is to provide a better exposure to our students on the Internet of Things The syllabus and course plan structured are not listed in the Pondicherry University Curriculum and the same have been verified and approved by the Principal/HoD/Professors and Skill development team.

Hence, I kindly request you to approve event planned. The details and the necessary proofs are attached with this letter.

Thanking you,

Yours faithfully,

Ms. P. Vishnupriya

AP/ECE

RAAK College of Engineering & Technology

Dr. S. SEENUVASAMURTHI, M.E., Ph.D.
PRINCIPAL
RAAK College of Engineering & Technology
No.1, Muthupillai Palayam Road,
Sulthanpet Post,
Puducherry - 605 110

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RAAKCET/PRINCIPAL/CIR/AUG2019 **02/08/2019**

:

CIRCULAR

This is to inform that the Skill Devlopment Team is planning to conduct a value added course on **"19ECE01-Internet of Things"** for all the Final Year ECE Department students from 09-08-2019 to 13-08-2019. Students are asked to utilize this opportunity and improve their skills.

PRINCIPAL

Circulation to:

1. All Students
2. All Faculty & Staff Members
3. All HoDs

Copy to:

1. All HoDs
2. Office

Dr. S. SEENUVASAMURTHI, M.E., Ph.D.
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NO:1, MUTHUPILLAI PALAYAM ROAD, G.N. PALAYAM, VILLIYANUR, PUDUCHERRY - 605 110

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

PRESENTS

VALUE ADDED COURSE ON

INTERNET OF THINGS

2019-2020

DATE: 09/08/2019 to 13/08/2019

VENUE: RAAKCET

TIME: 09 am to 04 pm

Resource Person:

Dr. KH. Sathimurugan
Assistant Professor,
Sri Vengateshwara college of Engg & Tech.

For Registration Contact:

Mr. S. Dhinesh , AP/ ECE.,
9985654548.

HOD

Mr. Ayyapasamy

PRINCIPAL

Dr. A. Sivakumar

Dr. S. SEENUVASAMURTHI, M.E., Ph.C.
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RAAK College of Engineering & Technology
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raakengg@mail.com
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VALUE ADDED COURSES

2019-2020

Department of Electronics and Communication Engineering

19ECE01-Internet of Things

Syllabus

Duration: 30 hours

Course Objective:

- To understand basics of an IOT System, IoT sensors, IoT hardware and communication protocols, data storage, data analysis and use them for real time IoT enabled domains.

Course Outcome:

Upon successful completion of the course students able to

- Understand Basic Premise Of An IOT System
- Be Familiar With The Sensors Available For Iot Applications
- Learn The Front-End Hardware Platforms And Communication Protocols For Iot.
- Understand Cloud Storage, Data Analysis And Management

Module 1: **(9 Hours)**

Functional blocks of an IoT system (Sensors, Data Ingress, Data Aggregation Point Communication point back to the cloud, Analysis, Decision making, Actuation) Basic of Physical and logical design of IoT (IoT protocols, communication models) IoT enabled domains

Module 2: **(9 Hours)**

Passive and active sensors, differences, Different kinds of sensors (Temperature, humidity, pressure, obstacle, water flow, accelerometer, colour, gyro, load cell, finger print, motion, ultrasonic distance, magnetic vibration, eye blink, hear beat, PPG, glucose, body position, blood pressure), Multi-sensors, Pre-processing (sampling, filtering, ADC, size of data, local memory, compression), IoT front end hardware (Raspberry Pi, Arduino, Galileo, beagle bone equivalent platforms)

Module 3: **(9 Hours)**

Infrastructure (6LowPAN, IPv4/IPv6, RPL), Identification (EPC, uCode, IPv6, URIs), Communication/ Transport (Wi-Fi, Bluetooth, ZigBee, LPWAN), Data Protocols (MQTT, CoAP, AMQP, Websocket, Node)

Module 4: **(9 Hours)**

Collecting data from sensors,Data Ingress, Cloud storage, IoT cloud platforms (Amazon AWS, Microsoft Azure, Google APIs), Data analytics for IoT, Softwareand management tool for IoT, Dashboard design

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Module 5: **(9 Hours)**

Business models for IoT, smart cities, agriculture, healthcare, industry. Case studies/Mini projectsfor the real time IoT applications.

Course Designed By **Approved By** **PRINCIPAL**

RAAK College of Engineering & Technology

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CO - ATTAINMENT MAPPING

Sl. No	Register Number	Student Name	CO1	CO2	CO3	CO4
1	16TC2201	ARIPREETHA D	✓	✓	✓	✓
2	16TC2202	SIVAGAMI S	✓	✓	✓	✓
3	16TC2203	THULASI K	✓	✓	✓	✓

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VALUE ADDED COURSES
2019-2020

Department of Electronics and Communication Engineering

19ECE01-Internet of Things

COURSE PLAN

S.no	Date	Hours	Time	Topic	Faculty details
DAY -1					
1	09.08.19	1.2	9AM -11AM	Functional blocks of an IoT system	Ms.PUNITHA LAKSHMI.R & Mr.K.VIVEK
2		3,4	11.15AM – 1.15 PM	Basic of Physical and logical design of IoT	Ms.PUNITHA LAKSHMI.R
3		5.6	2 PM -4PM	IoT enabled domains	Mr.K.VIVEK
DAY 2					
4	10.08.19	7,8	9AM -11AM	Passive and active sensors	Ms.PUNITHA LAKSHMI.R
5		9,10,	11.15AM – 1.15 PM	Multi-sensors, Pre-processing	Mr.K.VIVEK
6		11,12	2 PM -4PM	IoT front end hardware	Ms.PUNITHA LAKSHMI.R
DAY -3					
7	11.08.19	13,14	9AM -11AM	Infrastructure	Mr.K.VIVEK
8		15,16	11.15AM – 1.15 PM	Identification	Ms.PUNITHA LAKSHMI.R
9		17,18	2 PM -4PM	Communication/ Transport	Mr.K.VIVEK
DAY -4					
10	12.08.19	19,20	9AM -11AM	Data Protocols	Ms.PUNITHA LAKSHMI.R
11		21,22	11.15AM – 1.15 PM	Collecting data from sensors,Data Ingress	Mr.K.VIVEK
12		23,24	2 PM -4PM	Cloud storage, IoT cloud platforms	Ms.PUNITHA LAKSHMI.R
DAY -5					
13	13.08.19	25,26	9AM -11AM	Data analytics for IoT, Softwareand management tool for IoT, Dashboard design	Mr.K.VIVEK
14		27,28	11.15AM – 1.15 PM	Business models for IoT, smart cities, agriculture, healthcare, industry.	Ms.PUNITHA LAKSHMI.R

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Puducherry - 605 110

15		29,30	2 PM -4PM	Case studies/Mini projectsfor the real time IoT applications.	Mr.K.VIVEK
ASESSMENT EXAM WILL BE CONDUCTED AFTER ONE WEEK OF COURSE COMPLETION *					

BREAK TIME: 11.00 TO 11.15 AM **LUNCH BREAK: 1.15 PM TO 2.00 PM**

COURSE DESIGNED BY
Ms. P. VISHNUPRIYA

APPROVED BY
SKILLDEVELOPMENTTEAM

PRINCIPAL

RAAK College of Engineering & Technology

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VALUE ADDED COURSE

2019-2020

Department of Electronics and Communication Engineering

EVENT REPORT

Name of the Course 19ECE01-Internet of Things

Name of the Instructors: Ms.Punitha Lakshmi.R & Mr.K.Vivek

Year/ Branch: IV/ECE

Duration of Course: 30 Hours (09-08-2019 to 13-08-2019)

Assessment Date: 20.08.2019

Post Event Summary:

The course was inaugurated on 09-08-2019 at 9.30 A.M. by our respectable principal and sessions were continued as per the schedule. Students were enriched their knowledge by attending the course. Finally, the course concluded by vote of thanks.

On 20.08.2019 assessment was conducted and feedbacks were collected from all the participants.

CO - Attainment:

CO1: Understand basic premise of an iot system

CO2 : Be familiar with the sensors available for iot applications

CO3 : Learn the front-end hardware platforms and communication protocols for iot.

CO4 : Understand cloud storage, data analysis and management.

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Value Added Course On Internet Of Things 2019-20

Data analytics for IoT, Softwareand management tool for IoT, Dashboard design on 13.08.19

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01/08/2019

From

Mr. Krishnadass

Assistant professor/ECE

RAAK College of Engineering and Technology

Puducherry -110

To

The Principal

RAAK College of Engineering and Technology

Puducherry -110

Respected Sir,

Sub: Requisition for Approval to Conduct Skill Development program / Value added Course on **"19ECE02- Cognitive radio"**- reg.

This is to bring to your kind notice that the Skill Development Team is planning to conduct a Program on "**19ECE02- Cognitive radio**" for all the Third Year Electronics Communication Engineering students from 09-08-2019 to 13-08-2019.

The main focus of this program is to provide a better exposure to our students on the Cognitive radio

The syllabus and course plan structured are not listed in the Pondicherry University Curriculum and the same have been verified and approved by the Principal/HoD/Professors and Skill development team.

Hence, I kindly request you to approve event planned. The details and the necessary proofs are attached with this letter.

Thanking you,

Yours faithfully,

Mr. Krishnadass

AP/ECE

Dr. S. SEENUVASAMURTHI, M.E., Ph.D.
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RAAKCET/PRINCIPAL/CIR/AUG2019 **02/08/2019**

CIRCULAR

This is to inform that the Skill Devlopment Team is planning to conduct a value added course on **"19ECE02- Cognitive radio"** for all the Third Year ECE Department students from 09-08-2019 to 14-08-2019. Students are asked to utilize this opportunity and improve their skills.

PRINCIPAL

Circulation to:

1. All Students
2. All Faculty & Staff Members
3. All HoDs

Copy to:

1. All HoDs
2. Office

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING PRESENTS

VALUE ADDED COURSE ON

COGNITIVE RADIO

2019-2020

DATE: 09/08/2019 to 13/08/2019

VENUE: RAAKCET

TIME: 09 am to 04 pm

Resource Person:

Mr. S. Parthiban
Assistant Professor,
Sri Vengateshwara college of Engg & Tech.

For Registration Contact:

Ms. R. Arputhavalli, AP/ ECE.,
7652687654.

HOD

Mr. Ayyapasamy

RAAK College of Engineering & Technology

PRINCIPAL

Dr. A. Sivakumar

Dr. S. SEENUVASAMURTHI, M.E., Ph.D.
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VALUE ADDED COURSES

2019-2020

Department of Electronics and Communication Engineering

19ECE02- Cognitive radio

Syllabus

Duration: 30 hours

Course Objective:

- This subject introduces the fundamentals of multi rate signal processing and cognitive radio.

Course Outcome:

Upon successful completion of the course students able to

- Gain Knowledge On Multi-Rate Systems.
- Develop The Ability To Analyse, Design, And Implement Any Application Using Fpga.
- Be Aware Of How Signal Processing Concepts Can Be Used For Efficient Fpga Based System Design.
- Understand The Rapid Advances In Cognitive Radio Technologies.

Module 1: **(9 Hours)**

Filter banks-uniform filter bank. Direct and DFT approaches. Introduction to ADSL Modem. Discrete multi-tone modulation and its realization using DFT.QMF. STFT. Computation of DWT using filter banks.

Module 2: **(9 Hours)**

DDFS- ROM LUT approach. Spurious signals, jitter. Computation of special functions using CORDIC. Vector and rotation mode of CORDIC. CORDIC architectures.

Module 3: **(9 Hours)**

Block diagram of a software radio. Digital down converters and demodulators Universal modulator and demodulator using CORDIC. Incoherent demodulation - digital approach for I and Q generation, special sampling schemes. CIC filters. Residue number system and high speed filters using RNS. Down conversion using discrete Hilbert transform. Under sampling receivers, Coherent demodulation schemes.

Module 4: **(9 Hours)**

Concept of Cognitive Radio, Benefits of Using SDR, Problems Faced by SDR, Cognitive Networks, Cognitive Radio Architecture. Cognitive Radio Design, Cognitive Engine Design.

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Puducherry - 605 110

Module 5: **(9 Hours)**

. A Basic OFDM System Model, OFDM based cognitive radio, Cognitive OFDM Systems, MIMO channel estimation, Multi-band OFDM, MIMO-OFDM synchronization and frequency offset estimation. Spectrum sensing to detect Specific Primary System, Spectrum Sensing for Cognitive OFDMA Systems

COURSE DESIGNED BY **APPROVED BY** **PRINCIPAL**

RAAK College of Engineering & Technology

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No.1, Muthupillai Palayam Road,
Sulthanpet Post,
Puducherry - 605 110

CO - ATTAINMENT MAPPING

Sl. No	Register Number	Student Name	CO1	CO2	CO3	CO4
1	17TC2204	ANITHA R	✓	✓	✓	✓
2	17TC2205	DEEPA M	✓	✓	✓	✓
3	17TC2206	DEEPIKA M	✓	✓	✓	✓
4	17TC2207	DEIVAYANAI V	✓	✓	✓	✓
5	17TC2208	IYYAPPAN K	✓	✓	✓	✓
6	17TC2209	KALAIYARASI G	✓	✓	✓	✓
7	17TC2210	KEERTHANA K	✓	✓	✓	✓
8	17TC2211	KEERTHANA K	✓	✓	✓	✓
9	17TC2213	NILAVARASI R	✓	✓	✓	✓
10	17TC2212	MUTHULAKSHMI N	✓	✓	✓	✓
11	17TC2215	NITHIYAKUMARI J	✓	✓	✓	✓

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VALUE ADDED COURSES

2019-2020

Department of Electronics and Communication Engineering

19ECE02- Cognitive radio

COURSE PLAN

S.no	Date	Hours	Time	Topic	Faculty details
DAY -1					
1	09.08.19	1.2	9AM -11AM	Filter banks-uniform filter bank. Direct and DFT approaches.	Mr.John Bosco & Dr.N.Saranya
2		3,4	11.15AM – 1.15 PM	Modem. Discrete multi-tone modulation Introduction to ADSL	Mr. John Bosco
3		5.6	2 PM -4PM	DFT.QMF. STFT. Computation of DWT using filter banks	Dr.N.Saranya
DAY 2					
4	10.08.19	7,8	9AM -11AM	DDFS- ROM LUT approach. Spurious signals, jitter	Mr. John Bosco
5		9,10,	11.15AM – 1.15 PM	. Computation of special functions using CORDIC. Vector and rotation mode of CORDIC. CORDIC architectures.	Dr.N.Saranya
6		11,12	2 PM -4PM	Block diagram of a software radio. Digital down converters and demodulators Universal modulator	Mr. John Bosco
DAY -3					
7	11.08.19	13,14	9AM -11AM	Demodulator using CORDIC. Incoherent demodulation - digital approach for I and Q generation, special sampling schemes.	Dr.N.Saranya
8		15,16	11.15AM – 1.15 PM	CIC filters. Residue number system and high speed filters using RNS. Down conversion using discrete Hilbert transform	Mr. John Bosco

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Saithanpet Post,
Puducherry - 605 110

9		17,18	2 PM -4PM	Under sampling receivers, Coherent demodulation schemes. Concept of Cognitive Radio,	Dr.N.Saranya
DAY -4					
10	12.08.19	19,20	9AM -11AM	Benefits of Using SDR, Problems Faced by SDR, Cognitive Networks,	Mr. John Bosco
11		21,22	11.15AM – 1.15 PM	Cognitive Radio Architecture. Cognitive Radio Design, Cognitive Engine Design,	Dr.N.Saranya
12		23,24	2 PM -4PM	A Basic OFDM System Model, OFDM based cognitive radio,	Mr. John Bosco
DAY -5					
13	13.08.19	25,26	9AM -11AM	Cognitive OFDM Systems, MIMO channel estimation, Multi-band OFDM, MIMO-OFDM	Dr.N.Saranya
14		27,28	11.15AM – 1.15 PM	synchronization and frequency offset estimation.	Mr. John Bosco
15		29,30	2 PM -4PM	Spectrum sensing to detect Specific Primary System, Spectrum Sensing for Cognitive OFDMA Systems	Dr.N.Saranya
ASESSMENT EXAM WILL BE CONDUCTED AFTER ONE WEEK OF COURSE COMPLETION *					

BREAK TIME: 11.00 TO 11.15 AM **LUNCH BREAK: 1.15 PM TO 2.00 PM**

COURSE DESIGNED BY
Mr. KRISHNADASS

APPROVED BY
SKILL DEVELOPMENT TEAM

PRINCIPAL

RAAK College of Engineering & Technology

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VALUE ADDED COURSE

2019-2020

Department of Electronics and Communication Engineering

EVENT REPORT

Name of the Course 19ECE02-Cognitive radio

Name of the Instructors: Mr.John Bosco & Ms.Punitha Lakshmi.R

Year/ Branch: III/ECE

Duration of Course: 30 Hours (09-08-2019 to 13-08-2019)

Assessment Date: 20.08.2019

Post Event Summary:

The course was inaugurated on 09-08-2019 at 9.30 A.M. by our respectable principal and sessions were continued as per the schedule. Students were enriched their knowledge by attending the course. Finally, the course concluded by vote of thanks.

On 20.08.2019 assessment was conducted and feedbacks were collected from all the participants.

CO - Attainment:

CO1: Gain Knowledge On Multi-Rate Systems.

CO2: Develop The Ability To Analyze, Design. And Implement Any Application Using FPGA.

CO3: Be Aware Of How Signal Processing Concepts Can Be Used For Efficient FPGA Based System Design.

CO4: Understand The Rapid Advances In Cognitive Radio Technologies

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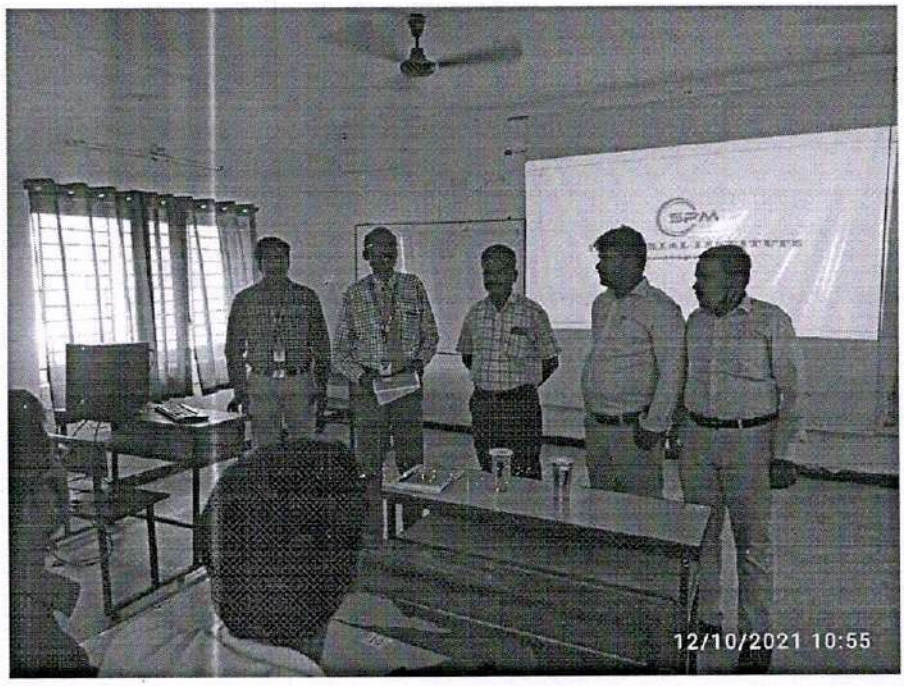
Value Added Course on Cognitive radio 2019-20



Demodulator using CORDIC. Incoherent demodulation - digital approach for I and Q generation, special sampling schemes On 11.08.19

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01/08/2019

From

Mr. S. Karthik

Assistant professor/ECE

RAAK College of Engineering and Technology

Puducherry -110

To

The principal

RAAK College of Engineering and Technology

Puducherry -110

Respected Sir,

Sub: Requisition for Approval to Conduct Skill Development program / Value added Course on **"19ECE03- PCB Design and Fabrication"** -reg.

This is to bring to your kind notice that the Skill Development Team is planning to conduct a Program on "19ECE03- PCB Design and Fabrication." for all the Second Year Electronics and communication Engineering students from 09-08-2019 to 13-08-2019.

The main focus of this program is to provide a better exposure to our students on the PCB Design and Fabrication.

The syllabus and course plan structured are not listed in the Pondicherry University Curriculum and the same have been verified and approved by the Principal/HoD/Professors and Skill development team.

Hence, I kindly request you to approve event planned. The details and the necessary proofs are attached with this letter.

Thanking you,

Yours faithfully,

Mr. S. Karthik

AP/ECE

RAAK College of Engineering & Technology

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RAAKCET/PRINCIPAL/CIR/AUG2019 **02/08/2019**

CIRCULAR

This is to inform that the Skill Devlopment Team is planning to conduct a value added course on **"19ECE03- PCB Design and Fabrication."** for all the Second Year ECE Department students from 09-08-2019 to 13-08-2019.studendts are asked to utilize this opportunity and improve their skills.

PRINCIPAL

Circulation to:

1. All Students
2. All Faculty & Staff Members
3. All HoDs

Copy to:

1. All HoDs
2. Office

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING PRESENTS

VALUE ADDED COURSE ON

PCB DESIGN AND FABRICATION

2019-2020

DATE: 09/08/2019 to 13/08/2019

VENUE: RAAKCET

TIME: 09 am to 04 pm

Resource Person:

Mrs. S. Kirthika
Assistant Professor,
Manakula Vinayagar Institute of Tech.

For Registration Contact:

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HOD

Mr. Ayyapasamy

PRINCIPAL

Dr. A. Sivakumar

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RAAK

COLLEGE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, New Delhi & Affiliated to Pondicherry University)

VALUE ADDED COURSES

2019-2020

Department of Electronics and Communication Engineering

19ECE03- PCB Design and Fabrication.

Syllabus

Duration: 30 hours

Course Objective:

- This course will teach teams of students how to design and fabricate PCB for prototyping as well as in Industrial Production environment. This will help students to innovate faster with electronics technology.

Course Outcome:

Upon successful completion of the course students able to

- Understand a single layer and multilayer PCB
- Create and fabricate a PCB
- Evaluate and test a PCB

(9 Hours)

Module 1:

Need for PCB, Types of PCBs : Single and Multilayer, Technology: Plated Through Hole, Surface Mount, PCB Material, Electronic Component packaging, PCB Designing, Fabrication, Production,

(9 Hours)

Module 2:

Electronic Design Automation Tools: Proprietary tools like Eagle, Ultiboard, Orcad and Open source tools like KiCad, Design Issues: Transmission line, Cross talk and Thermal management

(9 Hours)

Module 3:

Introduction to KiCad, Schematic entry / drawing, net listing, layering, component foot print library selection & designing, design rules, component placing

(9 Hours)

Module 4:

Manual & automatic, track routing: automatic & manual, rules: track length, angle, joint & size, Autorouter setup. IPC standards for schematic, designing, material and documentation

(9 Hours)

Module 5:

PCB Prototyping: CNC Machine, Photo-Lithography process, Screen Printing process and chemical etching. PCB Mass Manufacturing Process: Gerber Generation, CAM, panelization, cleaning, drilling, plating, screen printing, etching, automated optical inspection, tinning, solder resist, legend printing, pcb testing

Course Designed By

Approved By

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Principal

CO - ATTAINMENT MAPPING

Sl. No	Register Number	Student Name	CO1	CO2	CO3	CO4
1	18TC1201	ABITHA V	✓	✓	✓	✓
2	18TC1202	AGALYA B	✓	✓	✓	✓
3	18TC1203	ANITHA N	✓	✓	✓	✓
4	18TC1204	FOUSIA BEGAM Y	✓	✓	✓	✓
5	18TC1205	JOTHILAKSHMI A	✓	✓	✓	✓
6	18TC1206	KAMARUNISHA H	✓	✓	✓	✓
7	18TC1207	KAVITHA U	✓	✓	✓	✓
8	18TC1208	MATHIYARASI S	✓	✓	✓	✓
9	18TC1209	NASIRA BANU M	✓	✓	✓	✓
10	18TC1210	PAVITHRA S	✓	✓	✓	✓
11	18TC1211	PRIYADARSINI D	✓	✓	✓	✓
12	18TC1212	RAJALAKSHMI M	✓	✓	✓	✓
13	18TC1213	RAJESWARI P	✓	✓	✓	✓
14	18TC1214	SANGARI A	✓	✓	✓	✓
15	18TC1215	SANGEETHA K	✓	✓	✓	✓
16	18TC1216	SUVEDHA V	✓	✓	✓	✓
17	18TC1217	VASHUMATHY S	✓	✓	✓	✓
18	18TC1218	VISHNUPRIYA S	✓	✓	✓	✓

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19ECE03- PCB Design and Fabrication.

COURSE PLAN

S.no	Date	Hours	Time	Topic	Faculty details
DAY -1					
1	09.08.19	1.2	9AM -11AM	Need for PCB, Types of PCBs : Single and Multilayer	Dr.N.Saranya & Dr. P. Arunagiri
2		3,4	11.15AM – 1.15 PM	Technology: Plated Through Hole, Surface Mount, PCB Material,	Dr.N.Saranya
3		5.6	2 PM -4PM	Electronic Component packaging, PCB Designing,Fabrication, Production,	Dr. P. Arunagiri
DAY 2					
4	10.08.19	7,8	9AM -11AM	Electronic Design Automation Tools: Proprietary tools like Eagle,	Dr.N.Saranya
5		9,10,	11.15AM – 1.15 PM	Ultiboard, Orcad and Open source tools like KiCad, Design Issues:	Dr. P. Arunagiri
6		11,12	2 PM -4PM	Transmission line, Cross talk and Thermal management	Dr.N.Saranya
DAY -3					
7	11.08.19	13,14	9AM -11AM	Introduction to KiCad, Schematic entry / drawing, netlisting, layering,	Dr. P. Arunagiri
8		15,16	11.15AM – 1.15 PM	component foot print library selection & designing, design rules, component placing	Dr.N.Saranya
9		17,18	2 PM -4PM	Manual & automatic track routing	Dr. P. Arunagiri
DAY -4					
10	12.08.19	19,20	9AM -11AM	Automatic & manual,	Dr.N.Saranya

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10	12.08.19	19,20	9AM -11AM	Automatic & manual, rules: track length, angle, joint & size, Autorouter setup.	Dr.N.Saranya
11		21,22	11.15AM – 1.15 PM	IPC standards for schematic, designing, material and documentation	Dr. P. Arunagiri
12		23,24	2 PM -4PM	PCB Prototyping: CNC Machine, Photo-Lithography process,	Dr.N.Saranya
DAY -5					
13	13.08.19	25,26	9AM -11AM	Screen Printing process and chemical etching	Dr. P. Arunagiri
14		27,28	11.15AM – 1.15 PM	PCB Mass Manufacturing Process: Gerber Generation, CAM,	Dr.N.Saranya
15		29,30	2 PM -4PM	screen printing, etching, automated optical inspection, tinning, solder resist, legend printing, pcb testing	Dr. P. Arunagiri
ASESSMENT EXAM WILL BE CONDUCTED AFTER ONE WEEK OF COURSE COMPLETION *					

BREAK TIME: 11.00 TO 11.15 AM **LUNCH BREAK: 1.15 PM TO 2.00 PM**

COURSE DESIGNED BY
Mr. S. KARTHIK

APPROVED BY
SKILL DEVELOPMENT TEAM

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2019-2020

Department of Electronics and Communication Engineering

EVENT REPORT

Name of the Course 19ECE03-PCB Design and Fabrication.

Name of the Instructors: Dr.N.Saranya & Dr. P. Arunagiri

Year/ Branch: II/ECE

Duration of Course: 30 Hours (09-08-2019 to 13-08-2019)

Assessment Date: 20.08.2019

Post Event Summary:

The course was inaugurated on 09-08-2019 at 9.30 A.M. by our respectable principal and sessions were continued as per the schedule. Students were enriched their knowledge by attending the course. Finally, the course concluded by vote of thanks.

On 20.08.2019 assessment was conducted and feedbacks were collected from all the participants.

CO - Attainment:

CO1: Understand a single layer and multilayer PCB

CO2: Create and fabricate a PCB

CO3: Evaluate and test a PCB

CO4: Understand the nature of Simulation and simulate a study

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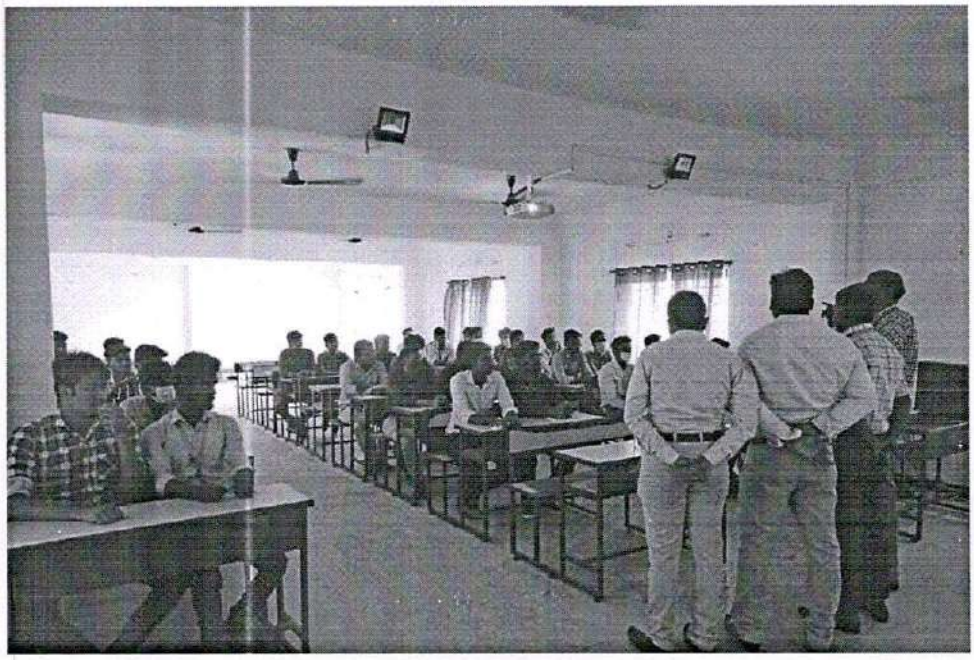
Value Added Courses On Pcb Design And Fabrication 2019-2020



Multiboard, or cad and Open source tools like Ki Cad, Design Issues on 10.08.19

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