

SCHOOL OF ELECTRICAL ENGINEERING

Value Added Courses (2020-2021)

COURSE ON PCB DESIGN AND PRODUCT DEVELOPMENT(Online)

Course Objective

This course examines the principles of PCB design and product development. Students will learn application development on the PCB design and fabrication process. Topics will include Schematic and Layout design flow using Electronic Design Automation (EDA) Tools. Students are expected to work on a project that produces a professional-quality. Projects will be deployed in real-world applications. Course work will include project conception, design, implementation, and Layout design flow using Electronic Design Automation Tools.

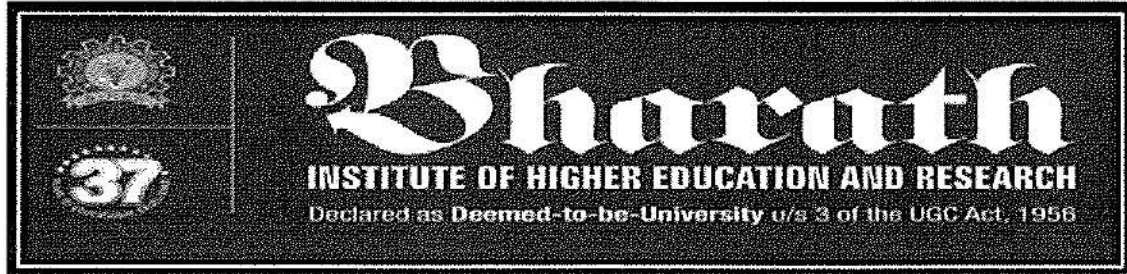
Resource Persons :

- 1.Ms.M.Philomina
- 2.Ms.BeulahHemalatha
- 3.Ms.S.Arulsevi

Convener

Dr.M.Sundararajan

HOD/ECE



CIRCULAR

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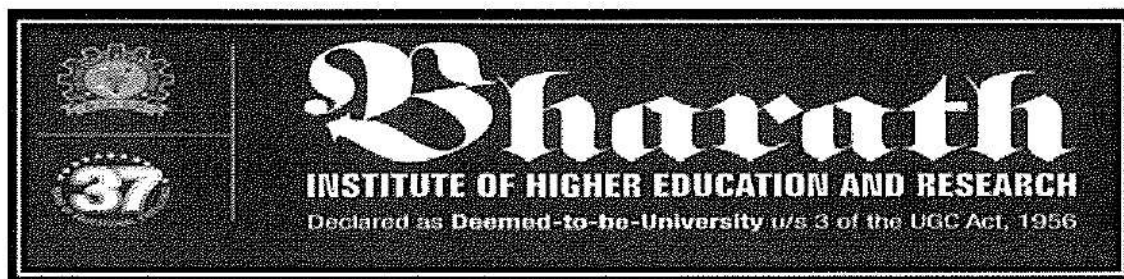
Date: 28.02.2021

The course on "COURSE ON PCB DESIGN AND PRODUCT DEVELOPMENT" is planned by School of Electrical Engineering which commences on 07-03-2021. In this regard the students are requested to give their willingness to Course Coordinator. It is instructed to actively participate and get benefitted for the certified course.

Course Coordinator: Ms.BEULAH HEMALATHA
Contact No:9840976989
Email id : beulah.ece@bharathuniv.ac.in

(Dr.M.Sundararajan)
HOD/ECE

To,
Copy to ECE Department,
Copy to EEE Department,
Department Notice Board



SCHOOL OF ELECTRICAL ENGINEERING

PCB DESIGN AND PRODUCT DEVELOPMENT

SCHEDULE

Contact Hours : 31hrs

DATE	SESSION	Contact Hours	TOPICS	Resource person
07-03-2021	FN	9.00 am to 12.30 pm	Introduction to PCB Definition and Need/Relevance of PCB Background and History of PCB Types of PCB Classes of PCB Design	Ms.Beulah Hemalatha
	AN	1.30 pm to 4 pm	PCB Design Process Terminology in PCB Design Different Electronic design automation (EDA) tools and comparison	Ms.S. Arulseivi
08-03-2021	FN	9.00 am to 12.30 pm	PCB Design Process PCB Design Flow, Placement and routing Steps involved in layout design Artwork generation Methods - manual and CAD General design factor for digital and analog circuits	Ms.Beulah Hemalatha
	AN	1.30 pm to 4 pm	PCB Design Process "Layout and Artwork making for Single-side, double-side and Multi-layer Boards. Design for manufacturability Design-specification standards"	Ms.M.Philomina

09-03-2021	FN	9.00 am to 12.30 pm	PCB Design Process PCB Fabrication techniques-single, double sided and multilayer Etching: chemical principles and mechanisms.	Ms.S. Arulselvi
	AN	1.30 pm to 4 pm	PCB Design Process Post operations- stripping, black oxide coating and soldermasking PCB component assembly processes	Ms.M.Philomina
10-03-2021	FN	9.00 am to 12.30 pm	Transmission Line: Transmission lines and its effects Significance of Transmission line In Board design And their Types	Ms.Beulah Hemalatha
	AN	1.30 pm to 4 pm	Transmission Line: The crosstalk in transmission lines Crosstalk control in PCB design parts, planes, tracks, connectors, terminations Minimization of crosstalk.	Ms.S. Arulselvi
11-03-2021	FN	9.00 am to 12.30 pm	Transmission Line: Schematic Design: Familiarization of the Schematic Editor, Schematic creation, Annotation, Netlist generation	Ms.M.Philomina
	AN	1.30 pm to 5 pm	Transmission Line: Layout Design: Familiarization of Footprint Editor, Mapping of components, Creation of PCB layout Schematic Create new schematic components Create new component footprints.	Ms.S. Arulselvi

VALUE ADDED COURSE
SCHOOL OF ELECTRICAL ENGINEERING
COURSE ON PCB DESIGN AND PRODUCT DEVELOPMENT

List Of Participants

Date:07-03-2021

Sl.no	REG.NO	NAME OF THE CANDIDATE
1	U13EC001	ABINAYA P
2	U13EC002	AKHIRUL ISLAM
3	U13EC003	ANAND RAHUL
4	U13EC004	ANGEL M
5	U13EC005	ANJALI KUMARI
6	U13EC006	ARAVIND V
7	U13EC008	ASHIQUE ALAM
8	U13EC009	ASHVATHAMAN K
9	U13EC010	BABLOO KUMAR
10	U13EC011	BALRAM YADAV
11	U13EC012	CLIFFORD JOSEPH A
12	U13EC013	DAMODARAN M
13	U13EC014	DEEPAK KUMAR
14	U13EC015	DEEPAN R
15	U13EC016	DEEPSHIKHA KUMARI
16	U13EC017	DEVENDRA PRIYANKA SUNDER
17	U13EC018	ELVIS RYNTONG
18	U13EC019	G RAHUL REDDY

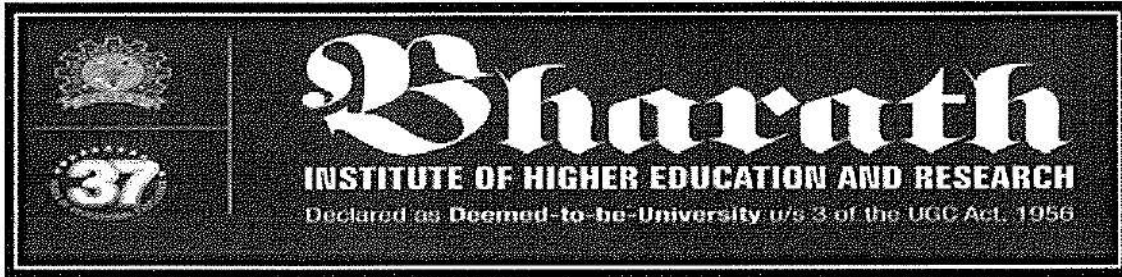
19	U13EC020	ISWARYA S
20	U13EC021	JAYED AHMED LASKAR
21	U13EC023	KUMARI PRIYANKA
22	U13EC024	MD ANIS
23	U13EC025	MURALITHARAN N
24	U13EC026	NABIL NAIDU S
25	U13EC027	NADAR PAVITRA KESHAVAN
26	U13EC028	NAVEEN KANNAN N
27	U13EC029	NIRAJ KUMAR
28	U13EC030	P PRAVEEN
29	U13EC031	PRAVEEN KUMAR V
30	U13EC032	RAHUL KUMAR
31	U13EC033	RAKESH V
32	U13EC034	RAMYA S
33	U13EC035	RAVIKANT SINGH
34	U13EC036	SAGNATI VAISHNU VERMA RAJU
35	U13EC038	SHRUTHI T S
36	U13EC039	SHUBHAM KUMAR
37	U13EC040	SUKANTO SHARAN
38	U13EC041	THIYAGARAJAN V
39	U13EC042	UTTAM KUMAR
40	U13EC043	VARSHA KUMARI
41	U13EC044	VIJAYKIRAN J
42	U13EC045	VIVEKANAND SINGH
43	U13EC046	YAMINISHA K

44	U13EC047	ZAHID AHMED
45	U13EC048	BHUVANAPRIYA R
46	U13EC049	RITESH KUMAR
47	U13EC051	LAICHIMA BRAHMA
48	U13EC052	ARUN K
49	U13EE571	MOHAMMED KARIMULLAH.A
50	U13EE572	B.M.BALAJI
51	U13EE046	SUJEETH KUMAR
52	U13EE047	SUNNY DWIVEDI
53	U13EE048	SURYAKANT KUMAR
54	U13EC504	VIGNESH M
55	U13EC507	THAMIZH THENDRAL R



(Dr.M.Sundararajan)

HOD/ECE



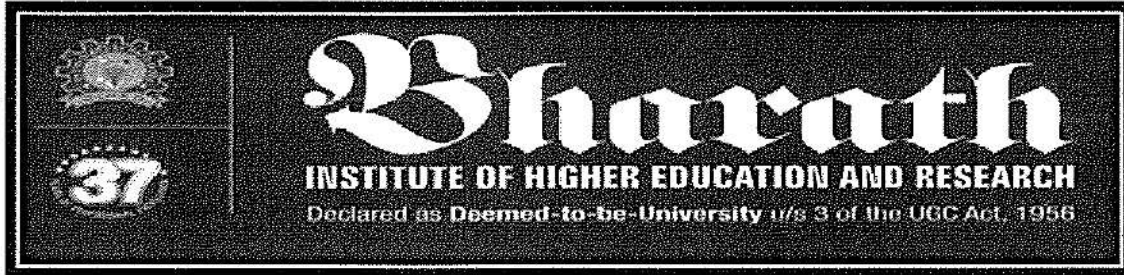
SCHOOL OF ELECTRICAL ENGINEERING

VALUE ADDED COURSE

COURSE ON PCB DESIGN AND PRODUCT DEVELOPMENT

FEED BACK FORM		Date: 11-03-2021			
Name	Vignesh - M				
Register number	V13 Ec 504				
	Poor	Fair	Good	Very Good	Excellent
Overall Program				/	
The Speaker					/
Audio, Visual Aids Technology used			/		
Presentation hand outs		/		/	


Student Signature



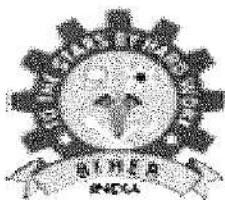
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VALUE ADDED COURSE

COURSE ON PCB DESIGN AND PRODUCT DEVELOPMENT

FEED BACK FORM		Date: 11-03-2021			
Name	G. Laksh Reddy				
Register number	U13EC019.				
	Poor	Fair	Good	Very Good	Excellent
Overall Program			✓		
The Speaker				/	
Audio, Visual Aids Technology used			/		/
Presentation hand outs			✓	/	


 Student Signature



Bharath

INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as deemed to be university under section 3 of UGC Act 1956, vide notification No.F.9-52000-U.3)

SCHOOL OF ELECTRICAL ENGINEERING

CERTIFICATE OF PARTICIPATION

This is to certify that Mr. / Ms ARAVIND.V(U13EC006) has attended Value Added Course On **"PCB DESIGN AND PRODUCT DEVELOPMENT"** Organized by the School of Electrical Engineering, BIHER conducted From 07-03-2021 to 11-03-2021.

S.PHILOMINA
COURSE COORDINATOR

Dr.M.SUNDARARAJAN
CONVENOR