

A ONE WEEK WORKSHOP  
On  
PCB DESIGN AND APPLICATIONS

Organized by  
Department of EEE

Netaji Subhas Institute of Technology  
Approved by AICTE and Affiliated to AKU, Patna



September 18-24, 2019

Cheif Patron

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Mr. Krishna Murari, Registrar, NSIT

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Coordinators

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Mr. Amarjeet Kumar, NSIT Patna

Resource Person

Mathan Kumar M, Director

Power Integrated Solutions, Tamilnadu

**ABOUT NSIT BIHAR PATNA**

Netaji Subhas Institute of Technology established in 2007, with first batch started in 2008 has its magnificent campus at Amhara in the district of Patna, Bihar, The nearest railway station is Bihta about 2 kilometres from the institute campus and about 25 KM from Patna A railway junction the state capital and major business and Educational hub of the state. Bihta is the industrial hub and blessings nerve centre of the entire state of Bihar. SIT, A Degree level Engineering Institute has become a "An effective source of Technocrats to the nation". with its unique infrastructural facilities of 4,00,000 Sq.Ft. of built up area on approximately 18 acres of green lustre land at Amhara, Bihta, Patna, Ambience at the campus serve and Ashram like. The college offers 4 yaers B.Tech courses in CSE, ECE, EEE, ME and CE.

**ABOUT DEPARTMENT OF EEE**

The Department of EEE has a team of well qualified, experienced and dedicated faculty members with rich academic, industrial and research background. The department is fully equipped with modern electronics equipment systems with latest software. . The EEE has the intake of 120 students and approved by AICTE and affiliated to AKU, Patna

**DEPARTMENT VISION**

To produce Electrical Engineers with energetic well rounded personalities flexible to cope escalating demands of budding technologies concerning analytical and practical skills.

**DEPARTMENT MISSION**

To extend the department as a prominent academic centre of learning in the discipline of electrical engineering.  
To set up research and development hub of status so as to promote active participation with industry by staff and students to take on practical problems of industry and to provide feasible solutions.  
To develop simple, suitable technologies, this will be helpful in up-liftment of rural society.

**OBJECTIVE**

This is a basic course for designing of PCB using software. PCB (Printed Circuit Board) designing is an integral part of each electronics products and this program is designed to make students capable to design their own projects PCB up to industrial grade.

**WORKSHOP CONTENTS**

- ❖ Introductions to PCB Software
- ❖ Introductions to ALTIUM Designer
- ❖ Schematics Design
- ❖ Selecting Components and Creating Libraries.
- ❖ Footprints, 3D Models and Starting a New PCB
- ❖ Variants &BOMs
- ❖ Checking Libraries and Schematics
- ❖ Create a PCB Layout
- ❖ Generating output documentation

**Registration Fee**

The participation fees Rs 1000/- only

Mode of registration :- Spot

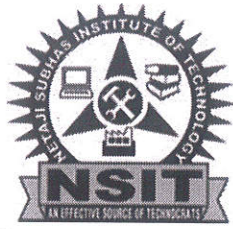
For More Information Contact us on :-  
7781020349, 7781020361, 9102403261

**Registration Form**

Name:.....  
Designation:.....  
Organization:.....  
Gender:.....  
Edu. Qualification:.....  
Address:.....  
Mobile Number:.....  
E-Mail:.....



**Director**  
Netaji Subhas Institute of Technology  
Amhara, Bihar  
PIN-801106



# NETAJI SUBHAS INSTITUTE OF TECHNOLOGY

APPROVED BY AICTE, NEW DELHI AND DEPT OF SCIENCE & TECHNOLOGY, GOVT. OF BIHAR

AFFILIATED TO ARYABHATTA KNOWLEDGE UNIVERSITY, PATNA

AMHARA, BIHTA, PATNA-801118, BIHAR

Session 2019-2020 (Odd Semester)

## Notice

Date : 6-09-2019

All students of Electrical & Electronics Engineering (EEE) Department and Electronics & Communication Engineering (ECE) Department are here by informed that a certificate course on “ **PCB Design by ALTIUM Designer and Applications**” is going to be organized by EEE Department in association with Power Integrated Solution, Trichy from 18<sup>th</sup> September 2019 to 24<sup>th</sup> September 2019. The registration fees is Rs. 1000 /-. The interested student should register their name on or before 13<sup>th</sup> September 2019.

*J Dalei*  
*06/09/19*

Dr. J Dalei

(HOD, EEE Department)

**Head of Department**

Department of Electrical & Electronics Engineering  
Netaji Subhas Institute of Technology



Copy to:

1. Principal, NSIT
2. Notice Board

*J Dalei*  
Director

Netaji Subhas Institute of Technology  
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**PCB DESIGN AND APPLICATIONS SYLLABUS.**

S.NO	CONTENTS	DURATION
1.	<ol style="list-style-type: none"> <li>1. INTRODUCTION TO PCB SOFTWARE.</li> <li>2. INTRODUCTION TO ALTIUM DESIGNER.</li> <li>3. STARTING A NEW PROJECT.</li> <li>4. SCHEMATICS DESIGN</li> </ol>	4 HOURS
2	<ol style="list-style-type: none"> <li>1. SELECTING COMPONENTS AND CREATING LIBRARIES.</li> <li>2. FOOTPRINTS, 3D MODELS AND STARTING A NEW PCB</li> </ol>	4 HOURS
	<ol style="list-style-type: none"> <li>1. VARIANTS &amp; BOMS</li> <li>2. CHECKING LIBRARIES AND SCHEMATICS</li> </ol>	3 HOURS
3.	<ol style="list-style-type: none"> <li>1. ANNOTATING A SCHEMATICS.</li> <li>2. SCHEMATIC CALLIBRATION.</li> </ol>	3 HOURS
4	<ol style="list-style-type: none"> <li>1. CREATE A PCB LAYOUT.</li> <li>2. MANUPRINTING A COMPONENTS FROM SCHEMATICS TO PCB.</li> <li>3. CHANGING THE PCB SETTINGS IN PCB LAYOUT.</li> </ol>	4 HOURS
5	<ol style="list-style-type: none"> <li>1. ARRANGING A COMPONENTS.</li> <li>2. DESIGNING A SINGLE LAYER PCB.</li> <li>3. CREATE A PCB CUTOUT.</li> <li>4. CREATE A DRILLING HOLES AT EACH CORNER.</li> </ol>	5 HOURS
6	<ol style="list-style-type: none"> <li>1. SAVE THE FILES IN PROPER EXTENSION.</li> <li>2. CREATE A GERBER AND DRILL FILES.</li> </ol>	3 HOURS
7	1. CREATE A NON-EDITABLE PCB FILE	2 HOURS
8	PROJECT EXPO	3 HOURS
	TOTAL	31 HOURS

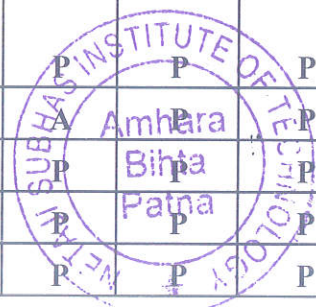
  
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**NETAJI SUBHAS INSTITUTE OF TECHNOLOGY, BIHTA**  
**Session 2019-2020**  
**Add on Course on "PCB Design and its Applications"**  
**Attendance Sheet**

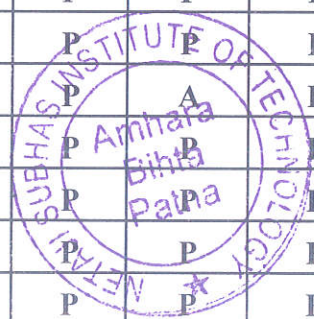
Sr.No	Name of Student	18-Sep	19-Sep	20-Sep	21-Sep	22-Sep	23-Sep	24-Sep
1	APARNA CHAUDHARY	P	P	P	P	P	P	P
2	SHAI SHAI PRIYA	P	P	P	P	P	P	P
3	SRISHTI SUMAN	P	A	P	P	P	P	P
4	ANU KUMARI PAL	P	P	P	P	P	P	P
5	ADITYA KUMAR	P	P	P	P	P	P	P
6	SATYAM KUMAR SINHA	P	P	P	P	A	P	P
7	NIKHIL TIWARY	P	P	P	P	P	P	P
8	HIMANSHU RAJ	P	P	P	P	P	P	P
9	ABHISHEK RAJ	P	P	P	P	P	P	P
10	CHANDAN KUMAR	P	P	P	P	P	P	P
11	AMRIT KUMAR SAURAV	P	P	P	P	P	P	P
12	VISHAL KISHOR	P	P	P	P	P	P	P
13	JASON PAUL	P	P	P	P	P	P	P
14	ABHINAV KUMAR	P	P	P	P	P	P	P
15	DEEPAK KUMAR YADAV	P	P	P	P	P	P	P
16	CHITRASEN PRASAD RAJ	P	P	P	P	P	P	P
17	GOKUL RAJ	P	P	P	P	P	P	P
18	RITESH KUMAR SINGH	P	P	P	P	P	P	P
19	ANKIT KUMAR JHA	P	P	P	P	P	P	P
20	Ved Praksh Singh	P	P	P	P	P	P	P
21	Sumit Kumar	P	P	P	P	P	P	P
22	Prachi Kumari	P	P	P	P	P	P	P
23	Mansi kumari	P	P	P	P	P	P	P

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24	Shubham Shashwat	P	P	P	P	P	P	P
25	Soumya	P	A	P	P	P	P	P
26	Pushkar Singh	P	P	P	P	P	P	P
27	Binanjay Kumar	P	P	P	P	P	P	P
28	Madhuwala Kumari	P	P	P	P	P	P	P
29	Anku Kumar singh	P	P	P	P	P	P	P
30	Abhishek Kumar	P	A	P	P	P	P	P
31	Sonam Priya	P	P	P	P	P	P	P
32	Ajeet Kumar	P	P	P	P	P	P	P
33	Pawan Kumar	P	P	A	P	P	P	P
34	Utsav Bhardwaj	P	P	P	P	P	P	P
35	Pratyush Parag	P	P	P	P	P	P	P
36	Sonu Kumar	P	P	P	P	P	P	P
37	Mohit Kumar	P	P	P	P	P	P	P
38	Kumar Rishabh	P	P	P	P	P	P	P
39	Anish Kumar	P	P	P	P	A	P	P
40	Vikash kumar	P	P	P	P	P	P	P
41	Amrita Chandra	P	P	P	P	P	P	P
42	Shubham Kumar Mishra	P	P	P	P	P	P	P
43	ANKIT KUMAR	A	P	P	P	P	A	P
44	Saurabh Shekhar	P	P	P	P	P	P	P
45	PUNYA	P	P	P	P	P	P	P
46	Kaushlesh Mishra	P	P	P	P	P	P	P
47	MD SAIFEE	P	P	P	P	P	P	P
48	SUMIT KUMAR	A	P	P	P	P	P	P
49	ANAMIKA KUMARI	P	P	P	P	P	P	P
50	JUHI SINGH	P	P	P	P	P	P	P
51	MAN KUMAR SINHA	P	P	P	P	P	P	P
52	RAJ SAGAR	P	P	P	P	P	P	P
53	Ashish Kumar	P	P	P	P	P	P	P
54	KUMARI NISHA	P	A	P	P	P	P	P
55	SHASHANK KUMAR	P	P	P	P	P	P	P
56	HISHEK KUMAR SINHA	P	P	P	P	P	P	P
57	NEHA PRAKASH	P	P	P	P	P	P	P
58	ANJALI BHARTI	P	P	A	P	P	P	P
59	ADITYA KUMAR JHA	P	P	P	P	P	P	P
60	SONAL KUMARI	P	P	P	P	P	P	P
61	NALINI	P	P	P	P	P	P	P
62	ANAND KUMAR	P	P	P	P	P	P	P

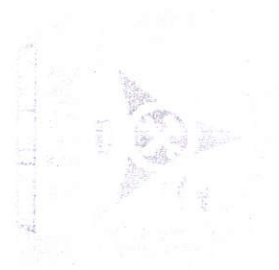
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63	NEERAJ RAJ	P	P	A	P	P	P	P
64	ALOK RANJAN	P	P	P	P	P	P	P
65	SUPRIYA BASU	A	P	P	p	P	P	p
66	ABHISHEK SONAL	P	P	P	P	P	P	P
67	AMITABHA RANJA	P	P	A	P	P	P	P
68	SANJANA KUMARI	P	P	P	P	P	P	P
69	Akash Nigam	P	P	P	P	P	A	P

11/11





Approved By All India Council for Technical Education (AICTE), New Delhi

(Affiliated to Aryabhata Knowledge University, Patna)

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# Certificate of Participation

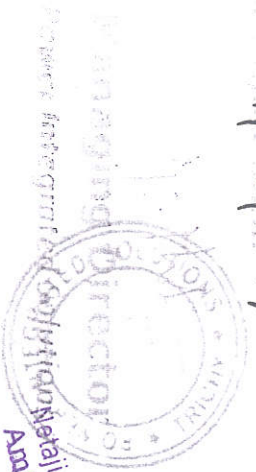
We do hereby certify that Mr./Ms. **Deepak Kumar Yadav**

Reg. No. **18110103016**

has successfully completed the course

of **Workshop/Seminar in "PCB design & Application"** conducted by **Department of Electrical & Electronics Engineering** at **Netaji Subhas Institute of Technology, Bihra Patna** in association with **Power Integrated Solutions, Trichy** held from **18 Sept to 24 Sept, 2019**

Date: **24/09/2019**



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*Tridevi*

HOD

EEE, NSIT



*[Signature]*

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# Certificate of Participation

I hereby certify that Mr./Ms. Anu Kumari Pal

Reg. No. 18104103005

has successfully completed the course of work workshop/Seminar in "PCB design & Application" conducted by the Department of Electrical & Electronics Engineering at Netaji Subhas Institute of Technology, Bihta Patna in association with Power Integrated Solutions, Trichy held from 18<sup>th</sup> Sept to 24<sup>th</sup> Sept, 2019.

Date: 24/09/2019



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