

SCHOOL OF ELECTRICAL ENGINEERING

Value Added Courses (2019 -2020)

Certificate Course on Preparatory Course for Semiconductor Test Engineering

Course Objective

To provide an in-depth training in use of Semiconductors are essential technology enablers that power many of the cutting-edge digital devices we use today. The global semiconductor industry is set to continue its robust growth well into the next decade due to emerging technologies such as autonomous driving, artificial intelligence (AI), 5G and Internet of Things, coupled with consistent spending on R&D and competition among key players.

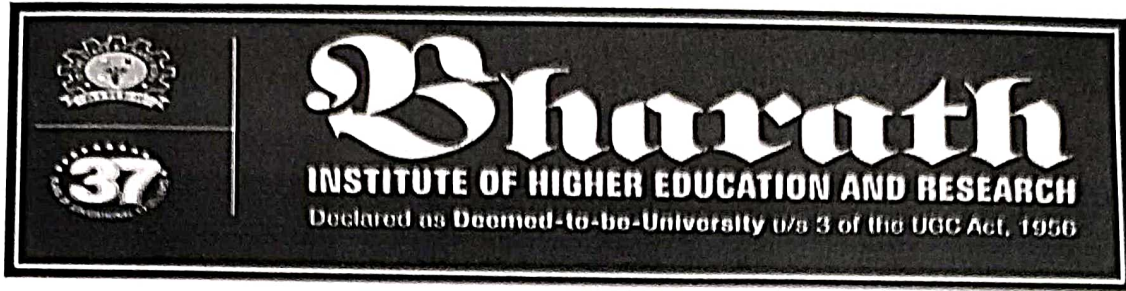
**Resource Persons:**

1. Dr.S.Arulselvi
2. Dr.B.Karthik
3. Ms.M.Sowmiya Manoj

Convener

**Dr.M.Sangeetha**

**HOD/ECE**



Requisition Letter

Date: 02.01.2020

From

The HOD,  
ECE Department,  
Bharath Institute of Higher Education and Research,  
Selaiyur, Chennai.

To

The Dean Engineering,  
Bharath Institute of Higher Education and Research,  
Selaiyur, Chennai.

Respected Sir,

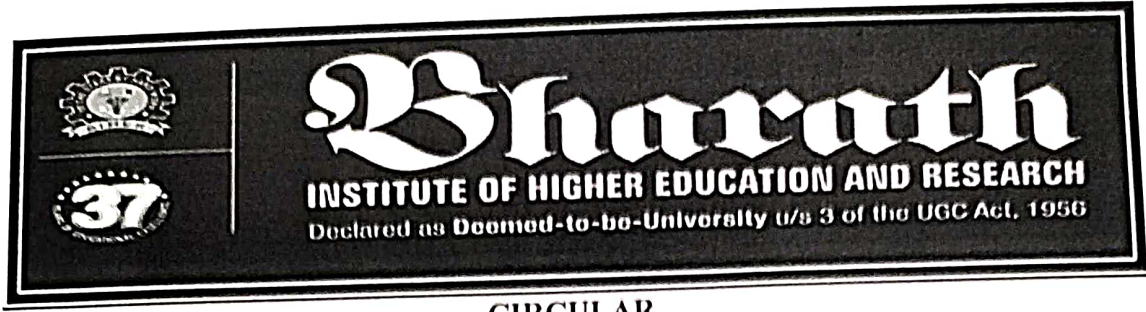
SUB: Requisition for conducting Value Added Course-Regd

School of Electrical Engineering has planned to conduct Value added Course on "Certificate Course on "Preparatory Course for Semiconductor Test Engineering" on 20.01.2020. In this regard we kindly request you to grant permission for the same.

Thanking you

HOD/ECE

Dean Engineering



CIRCULAR

SCHOOL OF ELECTRICAL ENGINEERING

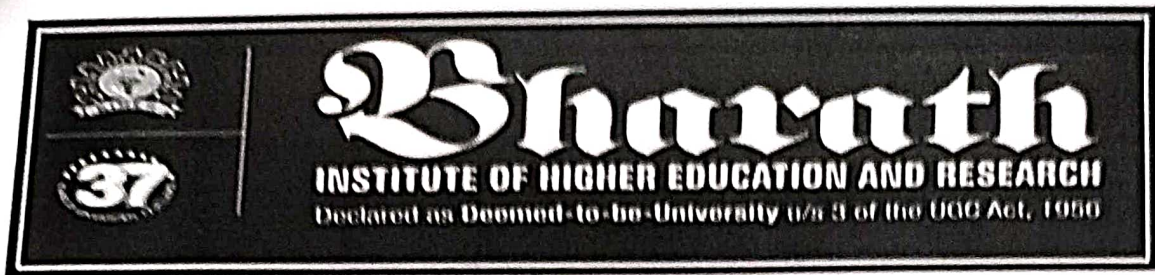
Date: 08.01.2020

The course on "Certificate Course on Preparatory Course for Semiconductor Test Engineering" is planned by School of Electrical Engineering which commences on 20-01-2020(Monday). 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.G.Jeyalakshmi  
Contact No: 9840976989  
Email id: jeyalakshmi.ece@bharathuniv.ac.in

(Dr.M.Sangeetha)  
HOD/ECE

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



**SCHOOL OF ELECTRICAL ENGINEERING**

**Certificate Course on Preparatory Course for Semiconductor Test Engineering**

**SCHEDULE**

**Contact Hours: 32 hrs**

DATE	SESSION	Contact Hours	TOPICS	Resource person
20-01-2020	FN	9.00 am to 12.30 pm	Free electron theory, Density of states and energy band diagrams, Krooni-Penny model (to introduce origin of band gap), Energy bands in solids, E-k diagram, Direct and indirect band gaps.	Dr.S.Arulselvi
	AN	1.30 pm to 4 pm	Types of electronic materials: metals, semiconductors, and insulators, Density of states, Occupation probability, Fermi level, Effective mass, Phonons.	Ms.M.Sowmiya Manoj
21-01-2020	FN	9.00 am to 12.30 pm	Dependence of Fermi level on carrier-concentration and temperature (equilibrium carrier statistics), Carrier generation and recombination,.	Dr.S.Arulselvi
	AN	1.30 pm to 4 pm	Carrier transport: diffusion and drift, p-n junction, Metal-semiconductor junction (Ohmic and Schottky), Semiconductor materials of interest for optoelectronic devices..	Dr.B.Karthik
22-01-2020	FN	9.00 am to 12.30 pm	Optical transitions in bulk semiconductors: absorption, spontaneous emission, and stimulated emission; Joint density of states, Density of states for photons. Transition rates (Fermi's golden rule), Optical loss and gain; Photovoltaic effect, Exciton, Drude model.	Ms.M.Sowmiya Manoj
	AN	1.30 pm to 4 pm	Transition rates (Fermi's golden rule),	Dr.B.Karthik

			Optical loss and gain; Photovoltaic effect, Exciton, Drude model.	
23-01-2020	FN	9.00 am to 12.30 pm	Four-point probe and van der Pauw measurements for carrier density, resistivity, and hall mobility; Hot-point probe measurement, capacitance-voltage measurements	Dr.S.Arulselvi
	AN	1.30 pm to 5 pm	Parameter extraction from diode I-V characteristics, DLTS, band gap by UV-Vis spectroscopy, absorption/transmission.	Ms.M.Sowmiya Manoj
24-01-2020	FN	9.00 am to 12.30 pm	Density of states in 2D, 1d and 0D (qualitatively). Practical examples of low-dimensional systems such as quantum wells, wires, and dots.	Dr.B.Karthik
	AN	1.30 pm to 5 pm	Design, fabrication, and characterization techniques. Heterojunctions and associated band-diagrams	Ms.M.Sowmiya Manoj

VALUE ADDED COURSE

SCHOOL OF ELECTRICAL ENGINEERING

Certificate Course on Preparatory Course for Semiconductor Test Engineering

List Of Participants

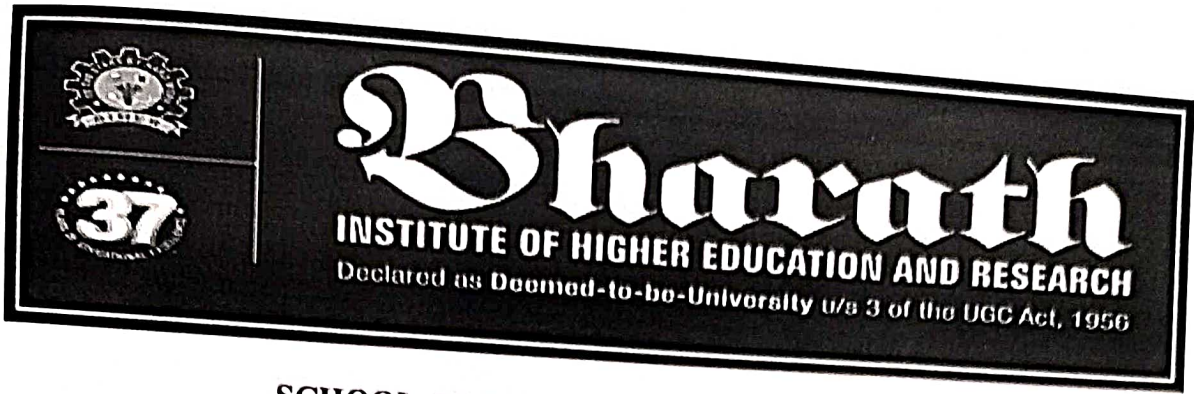
Date: 20-01-2020

S No	Register No	Name of the Student
1	U16EC023	THATIKONDA PREM SAI .
2	U16EC024	DASINENI ANUSHA ANUSHA
3	U16EC025	KOLLUMALLA SHYAM NAGA SRI KIRAN
4	U16EC027	HIMAVANTH J P
5	U16EC028	THIRIVEEDI SUBBAMMA SUBBAMMA
6	U16EC029	PEMMASANI KAVYA KAVYA
7	U16EC030	KAMASANI JYOTHI PRAKASH REDDY .
8	U16EC031	PEDINEEDI NAGARJUNA
9	U16EC032	YANAMALA SREEKANTH REDDY .
10	U16EC033	MOTE KEERTHI KEERTHI
11	U16EC034	ADDALA KRISHNA VAMSI .
12	U16EC035	GOKARAJU AJAY BABU .
13	U16EC036	MANE CHANDRAKANTH CHANDRAKANTH
14	U16EC037	SANNUTHI VINAY NAGA PRANEETH .
15	U16EC038	TELLAMEKALA PRADEEP KUMAR .
16	U16EC039	MATTAPALLI SAI SRIKANTH YADAV .
17	U16EC040	PULI NAGANATH REDDY .
18	U16EC041	KOTTRA ANUSHA GOUD .
19	U16EC042	RADHAKRISHNA K
20	U16EC043	KAPULURI MARUTHI RAO .
21	U16EC044	RAMPRASATH T
22	U16EC045	KAPULURI VENKATESWARLU
23	U16EC047	VEMULA SIVA SANKAR VARAPRASAD .
24	U16EC085	AJITH A K
25	U16EC513	BUSETTY LIKITHESH
26	U16EC701	RAHUL K
27	U16EC702	ESWARCHANDRA PRASAD T
28	U16EC048	GUDLURU SUMANTH
29	U16EC049	KUCHULA SAIKUMAR REDDY
30	U16EC050	KOTA VENKATA SIVA PRASAD REDDY
31	U16EC051	GANGASANI SAI NANDA GOPAL REDDY
32	U16EC052	POKALA SUDHARSHAN REDDY .
33	U16EC053	CHINTALA GANESH
34	U16EC054	TAMATAM HARSHAK REDDY .
35	U16EC055	DURGAPRASAD M

36	U16EC056	YANDRA SAI VENKAT .
37	U16EC057	AKASH KUMAR C
38	U16EC058	BHASHAKARLA GOPIKRISHNA
39	U16EC059	MADDIBOINA GIRI BABU .
40	U16EC060	MASANAM TARUN
41	U16EC061	ANIL KUMAR N E
42	U16EC062	KALLURI RAMA KSRISHNA .
43	U16EC063	YALAMANDALA SANDHYA
44	U16EC064	RACHARLA VENKATNARAYAN
45	U16EC065	MAHESH .
46	U16EC066	MARAMREDDY MURALI MOHAN .
47	U16EC067	JIJARAPU SHIVA
48	U16EC068	DINESH D
49	U16EC069	BURLA MALLIKHARJUNA REDDY .
50	U16EC070	KATNAM SAIKUMAR .
51	U16EC071	YANAMALA VASU
52	U16EC074	VEMIREDDY NARASA REDDY .
53	U16EC075	MANGISHETTI RAVALI
54	U16EC076	KOMMINENI DHARANI
55	U16EC077	KAVALA HARI HARSHAVARDHAN .
56	U16EC078	VEMULA BHARATH
57	U16EC079	POTHURAJU VENKATA NAGA SUBRAMANYAM .
58	U16EC080	SEELAM VISWANATH
59	U16EC082	ABHISHEK RANJAN
60	U16EC084	VISHNU K
61	U16EC087	MOHAMMED MARUF KHAN A
62	U16EC088	TAMILARASAN N
63	U16EC089	SARASWATHI REDDY SREE PHANI MONISH
64	U16EC501	Nordipati Ajay Reddy .
65	U16EC502	Sudharsan R
66	U16EC503	JEEVAN SAI KUMAR REDDY
67	U16EC504	HANIKANTH. P KARTHI
68	U16EC505	GUMMALLA SAI ANEESH CHOWDARY
69	U16EC506	Jean Paul
70	U16EC507	ARVINDH R
71	U16EC508	POTHURI SUMANTH
72	U16EC509	MD MAAZ FARZAN B
73	U16EC510	RAJASHREE E R
74	U16EC511	BHUMIREDDY VENKATA RAMANA REDDY
75	U16EC512	SATHVIKA MOHAN

(Dr.M.Sangeetha)

HOD/ECE



SCHOOL OF ELECTRICAL ENGINEERING

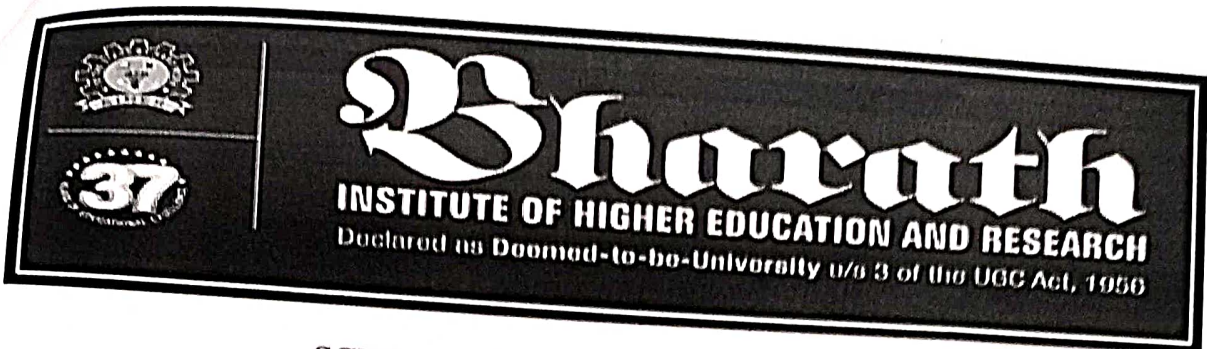
VALUE ADDED COURSE

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FEED BACK FORM						Date: 29.1.2020
Name	HIMAVANTHI P					
Register number	U16ECO27					
	Poor	Fair	Good	Very Good	Excellent	
Overall Program				✓		
The Speaker				✓	✓	
Audio, Visual Aids Technology used				✓		
Presentation hand outs				✓		

Himavathi  
Student Signature





**SCHOOL OF ELECTRICAL ENGINEERING**

**VALUE ADDED COURSE**

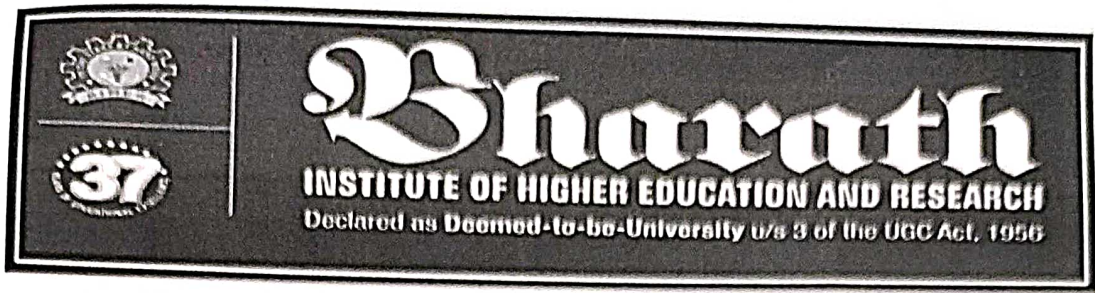
**Certificate Course on Preparatory Course for Semiconductor Test Engineering**

**FEED BACK FORM**

Date 24.1.2020

<b>Name</b>	Ajith. A.K				
<b>Register number</b>	U16REC085				
	<b>Poor</b>	<b>Fair</b>	<b>Good</b>	<b>Very Good</b>	<b>Excellent</b>
<b>Overall Program</b>				✓	
<b>The Speaker</b>				✓	
<b>Audio, Visual Aids Technology used</b>					✓
<b>Presentation hand outs</b>				✓	

  
 Student Signature



## SCHOOL OF ELECTRICAL ENGINEERING

Course on "Certificate Course on Preparatory Course for Semiconductor Test Engineering  
dated on 20-01-2020 conducted by school of Electrical Engineering





**BSRH**  
INSTITUTE OF HIGHER EDUCATION AND RESEARCH  
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)



**ABET**

SCHOOL OF ELECTRICAL ENGINEERING

**CERTIFICATE OF PARTICIPATION**

This is to certify that Mr/Ms. **POTHURI SUMANTH** has attended Values added

Course on "Preparative Course for Semi-Conductor Test Engineering"

Organized by the School of Electrical Engineering, BIHER conducted on

21.01.2020 to 24.01.2020

Ms. JEYALAKSHMI G  
COURSE COORDINATOR

D. ANASANGETHA  
CONVENOR