

UP TO
₹. 20,000/-

KONGU ENGINEERING COLLEGE, PERUNDURAI, ERODE-638 060

AD-12-PP
REV.1
01.01.2021

PROGRAMME APPROVAL FORM

10263/2

Proposal Tracking No. KEC/9444/1495/2020-2021/02/0152

Dept. Ref. No. MT/2020-2021/009

Date: 03.02.2021

1.	Department:	Mechatronics			
2.	a). Name of the Programme	One Credit course on Design of Printed Circuit Board.			
	b). Norms under which it is proposed	One Credit Norms.			
3.	Dates:	From : 08.02.21	TO: 19.02.21	No. of Days	10
4.	Programme for:	Faculty	Students	Others (Specify)	
5.	Level:	State / National / International	Association	Institution / Dept. / Cell / General	
6.	Highlights of the Programme:	One credit course will be conducted by an Industry expert [Entho Technology, Coimbatore]			

1. Proposed Invitees:

S. No.	Purpose	Chief Guest	Speakers / Jury	Trust Member Invitees
1	To deliver course content	Mr. Balaji Mohan	-	-
2		Mr. Praveenkumar		

2. Agenda: Programme Agenda / Schedule Enclosed : Yes / No

3. Expenditure: ~~Nil~~

S.No.	Purpose	Proposed	Revised	Actual	Remarks
1	Honorarium	20,000/-			
2					
3					
4					
5					
6					
Total		20,000/-			

4. Source Amount collected from students Honorarium of Rs. 20,000/- will be given to Industry experts

40 x 500/- = 20,000/-

	Proposed	Actual
Budget Allotment	-	Sponsors -
Balance Amt. Available	-	KEC -
Expenses Proposed	-	Registration -
Balance	-	

Faculty (with Name)
(Dr. K. GOMATHI)

H.O.D

CCO(A)

PRINCIPAL

DESIGN OF PRINTED CIRCUIT BOARD

Programme & Branch	B.E. & Mechatronics Engineering	Sem.	Category	L	T	P	Credit
Prerequisites	Basics knowledge in Analog Devices and Digital Circuits	4	OCC	1	0	2	1

Preamble	This Course provides an understanding on design of Printed Circuit Boards which will help the learners to leverage their knowledge in electronics field. Course has been designed for undergraduates who might start their career in electronics field.						
----------	---	--	--	--	--	--	--

Theory							10
--------	--	--	--	--	--	--	----

Introduction to PCB: Introduction to Electronics - Passive Components and Active Components-Definitions of PCB- Introduction about PCB design tools-Process of PCB designs-Introduction to EDA- Introduction to Components and their Categories - Introduction to Industrial Design Tools & Specification - Library Standards - PCB Design Flow - Overview of PCB Terminology - Polygon process - Component Placement and Design - Basic Routing - PCB Design Flow - EAGLE Introduction - Tools function - Components Datasheet identification - Types of Tracks, Pads and Vias.

Design of PCB: Library Creation & Footprint generation for SMD and T.H components- Uses of Grids - Library searching and creation- Download the Library component and add into EAGLE - Importing another Gerber to EAGLE - Component Placement - Component Arrangement - Component Name and Value - Single Sided Design - Double Sided Design - Manual routing - Auto Routing - Auto Placement - Penalization - Net Connection - Boom Creation - Component list Creation - ERC Checking - DRC Checking.

List of Exercises / Experiments :

1.	Power Supply Circuit for 5 Volt
2.	Fire Alarm Circuit
3.	LED Chaser Circuit
4.	Automatic Street light controller using LDR
5.	Water Level Indicator
6.	Traffic light Controller

Lecture:10, Practical:10, Total:20

TEXT BOOK:

1.	Simon Monk " Make Your Own PCBs with EAGLE: From Schematic Designs to Finished Boards", McGraw Hill Education, 2017.
----	--

REFERENCES:

1.	S D Mehta, "Electronic Product Design", S. Chand Publishing, 2011.
2.	R S Khandpur "Printed Circuit Boards: Design - Fabrication" Tata McGraw Hill Education, 2017.

COURSE OUTCOMES:

On completion of the course, the students will be able to

		BT Mapped (Highest Level)
CO1	Extend the Knowledge of Electronics Components	Understanding (K2)
CO2	Understand the Electronics Project Design flow	Understanding (K2)
CO3	Design and develop their Own Product	Applying (K3)

Mapping of COs with POs and PSOs

COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3	3	3	3	3				2	2	2	3	3	3
CO2	3	3	3	3	3				2	2	2	3	3	3
CO3	3	3	3	3	3				2	2	2	3	3	3

1 - Slight, 2 - Moderate, 3 - Substantial, BT- Bloom's Taxonomy

[Signature]
3/2/21

[Signature]
3/2/2021
(HOD/MTS)



KONGU ENGINEERING COLLEGE (AUTONOMOUS)
PERUNDURAI ERODE -6380 060 TAMILNADU



DEPARTMENT OF MECHATRONICS ENGINEERING

ONE CREDIT COURSE ON DESIGN OF PRINTED CIRCUIT BOARD

BATCH-1

COURSE CONDUCTION DATE: 08.02.21 to 19.02.21

S.NO	ROLL NO.	NAME OF THE STUDENT	SECTION
1.	19MTL108	GOKUL ANAND.R	A
2.	19MTL110	GOWTHAM.A	A
3.	19MTL111	HARISH.P	A
4.	19MTL112	HARSHAD.P	A
5.	19MTL113	KAVINRAJ.G.R	A
6.	19MTL114	MANISH DAS.P.M	A
7.	19MTL116	NAVEED AHMED.N	A
8.	19MTL117	NAVEENKARTHIK.R	A
9.	19MTL118	NITHISH KUMAR.V	B
10.	19MTL128	VIGNESH.S	B
11.	19MTR001	ABI CHANDAR.K	A
12.	19MTR006	ARAVINDHAN.D	A
13.	19MTR009	ASWIN GUHAN.N	A
14.	19MTR010	BALAGURU.C	A
15.	19MTR011	DANY ROHINTH.R.S	A
16.	19MTR012	DEVADHARSINI.G	A
17.	19MTR013	DHANUSH CHAKARAVARTHY	A
18.	19MTR017	GOKUL.S	A
19.	19MTR021	GURU MOORTHIP	A
20.	19MTR031	KARTHIKEYAN.K	A
21.	19MTR032	KARUNYA.B.S	A
22.	19MTR038	KISHOR KUMAR.B	A
23.	19MTR043	LALU PRASANNA.S.B	A
24.	19MTR044	MAGESH.R	A
25.	19MTR046	MANOJ.J	A
26.	19MTR047	MEGAVARTHINI.M	A
27.	19MTR048	MITHELAASH YAADAV.D	A
28.	19MTR049	MOHAMED RAFIUDEEN.M.M	A
29.	19MTR050	MOHAMED THOWFIQ.N	A
30.	19MTR052	MOHAMMED JAHEERUDDIN J	A

Handwritten signature and date 25/2/21

31.	19MTR056	MURALIDHARAN.A	B
32.	19MTR058	NITESH KUMAAR.M	B
33.	19MTR060	PAVISH.P	B
34.	19MTR062	PRITHIVI RAJAN.N	B
35.	19MTR066	RAJKUMAR J	B
36.	19MTR073	ROHIT.A.C	B
37.	19MTR085	SRI SUDHARSANAM.C	B
38.	19MTR095	SURYA.B	B
39.	19MTR104	VIMAL.S	B
40.	19MTR105	VINOTHKANNA.S	B

[Signature]
25/12/2021
COURSE CO-ORDINATOR

[Signature]
25/12/2021
HOD/MTS



KONGU ENGINEERING COLLEGE, PERUNDURAI 638 060
DEPARTMENT OF MECHATRONICS ENGINEERING



ONE CREDIT COURSE ON DESIGN OF PRINTED CIRCUIT BOARD
BATCH I- ONLINE CLASS ATTENDANCE

S. NO	ROLL NO.	STUDENT NAME	8.2.21	9.2.21	10.2.21	11.2.21	12.2.21	15.2.21	16.2.21	17.2.21	18.2.21	19.2.21	Cumulative % Attendance
1	19MTL108	GOKUL ANAND R	P	P	P	P	P	A	P	P	P	P	90
2	19MTL110	GOWTHAM A	P	P	P	P	P	P	P	P	P	P	100
3	19MTL111	HARISH P	P	P	P	P	P	A	P	P	P	P	90
4	19MTL112	HARSHAD P	A	P	P	P	P	A	P	P	P	P	100
5	19MTL113	KAVINRAJ G.R	P	P	P	P	P	P	P	P	A	P	80
6	19MTL114	MANISH DAS P.M	P	P	A	P	P	P	P	P	P	P	100
7	19MTL116	NAVEED AHMED N	P	P	P	P	P	P	P	P	P	P	100
8	19MTL117	NAVEENKARTHIK R	P	P	P	P	P	P	P	P	P	P	90
9	19MTL118	NITHISH KUMAR V	P	P	P	P	P	A	P	P	P	P	90
10	19MTL128	VIGNESH S	P	P	P	P	P	A	P	P	A	P	80
11	19MTR001	ABI CHANDAR K	P	P	P	P	P	A	P	P	A	P	100
12	19MTR006	ARAVINDHAN D	P	P	P	P	P	P	P	P	A	P	90
13	19MTR009	ASWIN GUHAN N	P	P	P	P	P	P	A	A	P	P	80
14	19MTR010	BALAGURU C	P	P	P	P	P	P	A	P	P	P	100
15	19MTR011	DANY ROHINTH R.S	P	P	P	P	P	P	P	P	P	P	80
16	19MTR012	DEVADHARSINI G	P	P	P	P	A	A	P	P	P	P	100
17	19MTR013	DHANUSH CHAKRAVARTHY	P	P	P	P	P	P	P	P	P	P	80
18	19MTR017	GOKUL S	A	A	P	P	P	P	P	P	P	P	80
19	19MTR021	GURU MOORTHY P	P	A	P	A	P	P	P	P	A	P	90
20	19MTR031	KARTHIKEYAN K	P	P	P	P	P	P	P	P	A	P	100
21	19MTR032	KARUNYA B.S	P	P	P	P	P	P	P	P	P	P	100
22	19MTR038	KISHORE KUMAR B	P	P	P	P	P	P	P	P	P	P	90
23	19MTR043	LALU PRASANNA S.B	P	P	P	A	P	P	P	P	P	P	100
24	19MTR044	MAGESH R	P	P	P	P	P	P	P	P	P	P	90
25	19MTR046	MANOJ J	P	P	P	P	P	A	P	P	P	P	100
26	19MTR047	MEGAVARTHINI M	P	P	P	P	P	P	P	P	P	P	80
27	19MTR048	MITHELAASH YAADAV D	A	A	P	P	P	P	P	P	P	P	100
28	19MTR049	MOHAMED RAFIUDEEN M.M	P	P	P	P	P	P	P	P	P	P	100
29	19MTR050	MOHAMED THOWFIQ N	P	P	P	P	P	P	P	P	P	P	90
30	19MTR052	MOHAMMED JAHEERUDDIN J	P	P	P	P	P	A	P	P	P	P	80
31	19MTR056	MURALIDHARAN A	A	P	P	P	P	P	P	A	P	P	90
32	19MTR058	NITHESH KUMAAR M	P	P	P	P	P	A	P	P	P	A	90
33	19MTR060	PAVISH P	P	P	P	P	P	P	P	P	P	P	100
34	19MTR062	PRUTHIVI RAJAN N	P	P	P	P	P	P	P	P	P	P	80
35	19MTR066	RAJKUMAR J	P	A	A	P	P	P	P	P	P	P	90
36	19MTR073	ROHIT A.C	P	P	P	P	P	P	A	P	P	P	100
37	19MTR085	SRI SUDHARSANAM C	P	P	P	P	P	P	A	P	P	P	90
38	19MTR095	SURYA B	P	P	P	P	P	P	A	P	P	P	90
39	19MTR104	VIMAL S	P	P	P	P	P	P	A	P	P	P	90
40	19MTR105	VINOTHKANNA S	P	P	P	P	P	P	P	P	P	P	100

Dr. S. S. S. S.
25/2/2021

Dr. S. S. S. S.
25/2/2021



KONGU ENGINEERING COLLEGE(AUTONOMOUS)
PERUNDURAI ERODE -6380 060 TAMILNADU



DEPARTMENT OF MECHATRONICS ENGINEERING

ONE CREDIT COURSE-DESIGN OF PRINTED CIRCUIT BOARD
ASSESSMENT TEST ATTENDANCE

BATCH-A

S.NO	ROLL NO.	NAME OF THE STUDENT	Q. NO	22.02.21 SIGN	23.02.21 SIGN
1.	19MTL108	GOKUL ANAND.R	5		
2.	19MTL110	GOWTHAM.A	7		
3.	19MTL111	HARISH.P	8		
4.	19MTL113	KAVINRAJ.G.R	8		
5.	19MTL116	NAVEED AHMED.N	10		
6.	19MTL117	NAVEENKARTHIK.R	6		
7.	19MTL118	NITHISH KUMAR.V	2		
8.	19MTL128	VIGNESH.S	3		
9.	19MTR001	ABI CHANDAR.K	6		
10.	19MTR006	ARAVINDHAN.D	4		
11.	19MTR009	ASWIN GUHAN.N	4		
12.	19MTR011	DANY ROHINTH.R.S	5		
13.	19MTR012	DEVADHARSINI.G	2		
14.	19MTR021	GURU MOORTHY.P	3		
15.	19MTR031	KARTHIKEYAN.K	7		
16.	19MTR044	MAGESH.R	9		
17.	19MTR046	MANOJ.J	10		
18.	19MTR048	MITHELAASH YAADAV.D	9		
19.	19MTR049	MOHAMED RAFIUDEEN.M.M	6		
20.	19MTR050	MOHAMED THOWFIQ.N	1.		
21.	19MTR052	MOHAMMED JAHEERUDDIN.J	5		

25/2/2021

25/2/2021



KONGU ENGINEERING COLLEGE (AUTONOMOUS)
PERUNDURAI ERODE -6380 060 TAMILNADU



DEPARTMENT OF MECHATRONICS ENGINEERING
ONE CREDIT COURSE-DESIGN OF PRINTED CIRCUIT BOARD
ASSESSMENT TEST ATTENDANCE

BATCH-B

S.NO	ROLL NO.	NAME	Q. NO	22.02.21 SIGN	23.02.21 SIGN
1.	19MTL112	HARSHAD.P	6	P. VQ	P. VQ
2.	19MTL114	MANISH DAS.P.M	5	Manish	Manish
3.	19MTR010	BALAGURU.C	10	C. Balaguru	C. Balaguru
4.	19MTR013	DHANUSH CHAKRAVARTHY.M	7	Dh	Dh
5.	19MTR017	GOKUL.S	8	Gokul	Gokul
6.	19MTR032	KARUNYA.B.S	2	B.S. Karunya	B.S. Karunya
7.	19MTR038	KISHOR KUMAR.B	5	B. Kishor	B. Kishor
8.	19MTR043	LALU PRASANNA.S.B	7	L.P.	L.P.
9.	19MTR047	MEGAVARTHINI.M	5	M. Megavathi	M. Megavathi
10.	19MTR056	MURALIDHARAN.A	8	M. Murali	M. Murali
11.	19MTR058	NITHESH KUMAR.M	4	M. Nithesh	M. Nithesh
12.	19MTR060	PAVISH.P	6	P. Pavish	P. Pavish
13.	19MTR062	PRITHIVI RAJAN.N	9	N. Prithvi	N. Prithvi
14.	19MTR066	RAJKUMAR J	1	R. Rajkumar	R. Rajkumar
15.	19MTR073	ROHIT.A.C	3	A.C. Rohit	A.C. Rohit
16.	19MTR085	SRI SUDHARSANAM.C	3	S. Sri	S. Sri
17.	19MTR095	SURYA.B	1	B. Surya	B. Surya
18.	19MTR104	VIMAL.S	9	S. Vimal	S. Vimal
19.	19MTR105	VINOTHKANNA.S	6	S. Vinoth	S. Vinoth

[Signature]
COURSE CO-ORDINATOR

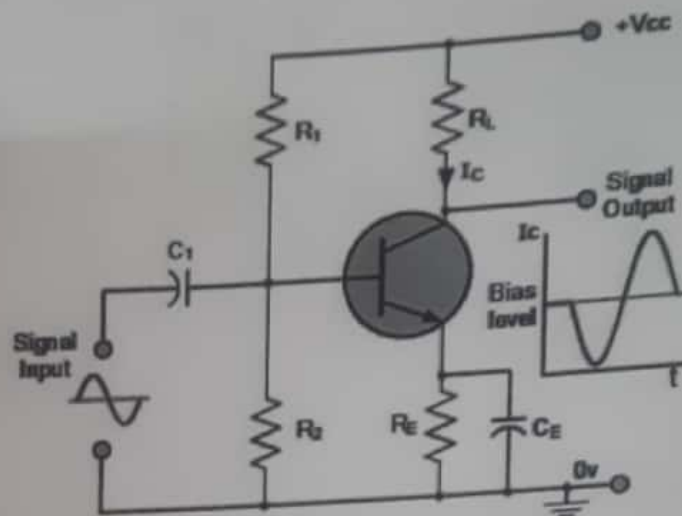
[Signature]
HOD/MTS

ONE CREDIT COURSE ON DESIGN OF PRINTED CIRCUIT BOARD

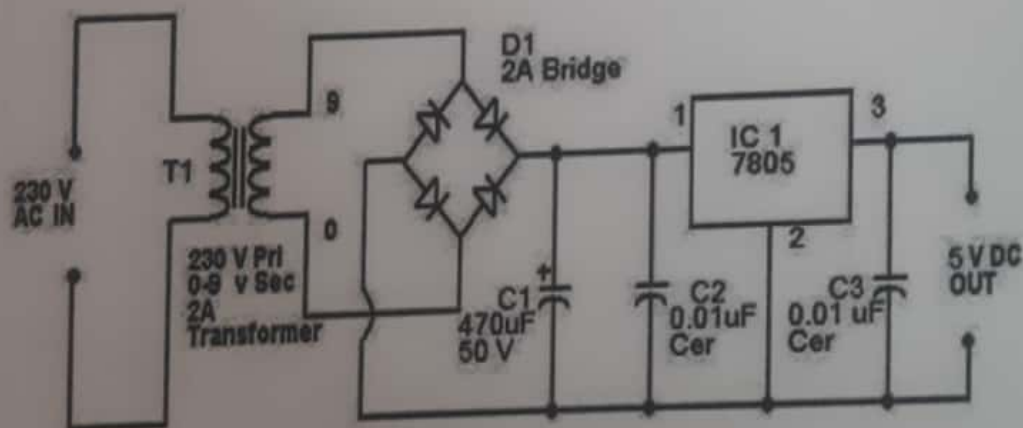
CREATION OF SCHEMATIC FILE - TEST 1

1. Design a PCB layout for Class A amplifier

- Class A



2. Design A PCB layout for Bridge Rectifier with voltage regulator IC 7805

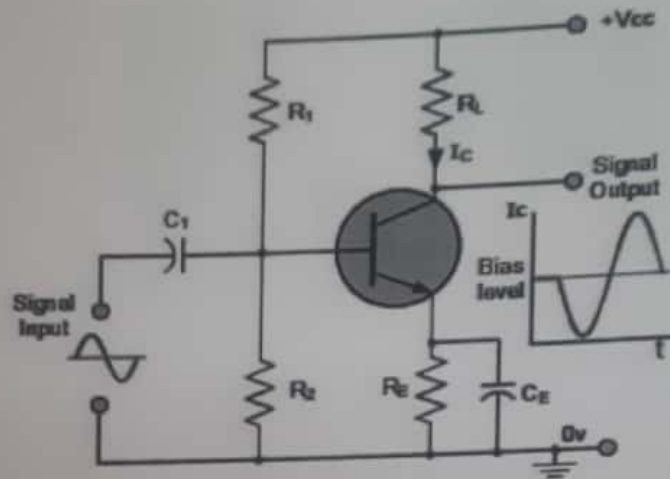


www.circuitstoday.com

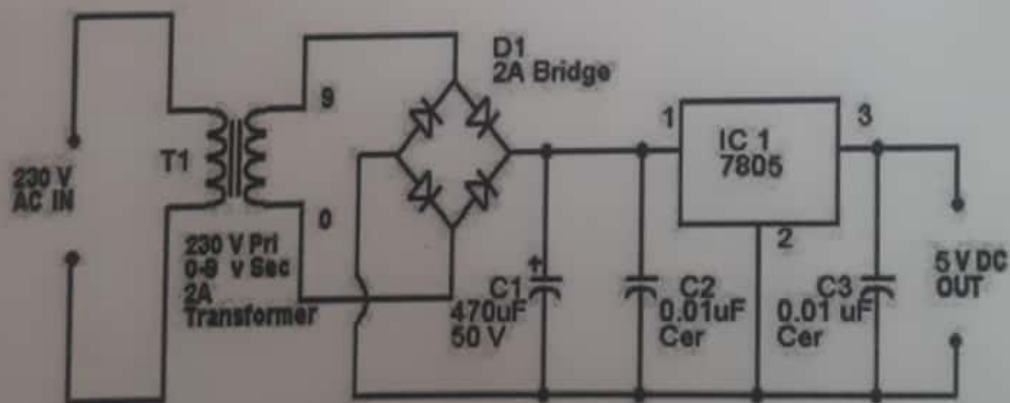
ONE CREDIT COURSE ON DESIGN OF PRINTED CIRCUIT BOARD
CREATION OF BOARD FILE - TEST - II

1. Design a PCB layout for Class A amplifier

- Class A



2. Design A PCB layout for Bridge Rectifier with voltage regulator IC 7805



www.circuitstoday.com



KONGU ENGINEERING COLLEGE(AUTONOMOUS)
PERUNDURAI ERODE -6380 060 TAMILNADU



DEPARTMENT OF MECHATRONICS ENGINEERING

ONE CREDIT COURSE ON DESIGN OF PRINTED CIRCUIT BOARD

ASSESSMENT TEST MARKS

DATE: 22.02.2021 & 23.02.2021

Sl.No	ROLL NO	NAME OF THE STUDENT	TEST 1 MARKS (50)	TEST 2 MARKS (50)	TOTAL MARKS (100)
1.	19MTR001	ABI CHANDAR.K	43	45	88
2.	19MTR006	ARAVINDHAN.D	44	45	89
3.	19MTR009	ASWIN GUHAN.N	41	46	87
4.	19MTR010	BALAGURU.C	46	47	93
5.	19MTR011	DANY ROHINTH.R.S	46	47	93
6.	19MTR012	DEVADHARSINI.G	45	46	91
7.	19MTR013	DHANUSH CHAKARAVARTHY	47	48	95
8.	19MTR017	GOKUL.S	44	43	87
9.	19MTR021	GURU MOORTHIL.P	46	43	89
10.	19MTR031	KARTHIKEYAN.K	47	40	87
11.	19MTR032	KARUNYA.B.S	46	45	91
12.	19MTR038	KISHORE KUMAR.B	48	48	96
13.	19MTR043	LALU PRASANNA.S.B	48	49	97
14.	19MTR044	MAGESH.R	42	45	87
15.	19MTR046	MANOJ. J	46	45	91
16.	19MTR047	MEGAVARTHINI.M	46	45	91
17.	19MTR048	MITHELAASH YAADAV.D	42	47	89

[Signature]
25/2/2021

[Signature]
25/2/2021

18.	19MTR049	MOHAMED RAFIUDEEN.M.M	45	44	89
19.	19MTR050	MOHAMED THOWFIQ.N	44	43	87
20.	19MTR052	MOHAMMED JAHEERUDDIN.J	47	44	91
21.	19MTR056	MURALIDHARAN.A	46	45	91
22.	19MTR058	NITHESH KUMAR	46	44	90
23.	19MTR060	PAVISH.P	42	43	85
24.	19MTR062	PRITHIVI RAJAN.N	48	47	95
25.	19MTR066	RAJKUMAR J	46	47	93
26.	19MTR073	ROHIT.A.C	47	49	96
27.	19MTR085	SRI SUDHARSANAM.C	48	45	93
28.	19MTR095	SURYA.B	44	45	89
29.	19MTR104	VIMAL.S	45	43	88
30.	19MTR105	VINOTHKANNA.S	44	46	90
31.	19MTL108	GOKUL ANAND.R	47	43	90
32.	19MTL110	GOWTHAM.A	47	44	91
33.	19MTL111	HARISH.P	48	46	94
34.	19MTL112	HARSHAD.P	30	28	58
35.	19MTL113	KAVINRAJ.G.R	48	46	94
36.	19MTL114	MANISH DAS.P.M	43	45	88
37.	19MTL116	NAVEED AHMED.N	45	44	89
38.	19MTL117	NAVEENKARTHIK.R	48	48	96
39.	19MTL118	NITHISH KUMAR.V	49	45	94
40.	19MTL128	VIGNESH.S	49	48	97

[Signature]
25/12/21
COURSE CO-ORDINATOR

[Signature]
25/12/2021
HOD/MTS

KONGU ENGINEERING COLLEGE
PERUNDURAI ERODE-638060
(AUTONOMOUS)

DEPARTMENT OF MECHATRONICS ENGINEERING

Date : 03.02.2021

DETAILS OF ONE CREDIT COURSE

1.	Academic Year	:	2020-2021		Semester : ODD / EVEN		
2.	Course Title	:	Design of Printed Circuit Board				
3.	Type of Course	:	Already Offered Course / Updated Course / New Course				
	• If "Already offered course",	:	Course Code: --	Version: --			
4.	Course Coordinator(s)	:	1.Dr.K.Gomathi 2.Dr.S.Sathiyavathi				
5.	Course offered by	:	Internal faculty / External experts				
6.	Name and designation of external resource persons	:	1.Mr.Balajee Mohan - Sr. Technical Manager 2. Mr.Praveen Kumar - Sr. Technical Engineer 3.Mr.Tamil Mukilan - Technical Engineer				
7.	Details about external organization	:	M/s.Enthu Technology Solutions India Pvt. Ltd. # 88 & 89, SSN Square Pudhur, Near RTO Office South, Peelamedu Pudur, Coimbatore - 641004.				
8.	Course fee for external experts		Max. number of students / Batch		Course fee / student		
	Batch I:	25,000.00	50		500.00		
	Batch II:	25,000.00	50		500.00		
9.	No. of days	Period		No. of hours		Venue	
		From	To	Lecture	Practical		Total
	10	08.02.2021	19.02.2021	10	10		20
	10	15.03.2021	26.03.2021	10	10	20	Online Mode
10.	Pre-requisites for offering the course	:	Basics of Analog Devices and Digital Circuits				
11.	Course offered to	:	Programme	Branch	Year/Semester	Regulations	
			B.E	Mechatronics Engineering	II Year / IV Sem	2018	

12.	Course Main Contents	:	<table border="1"> <tr> <td>Day 1</td> <td> • Electronics Introduction • Passive Components & Active Components • Definitions of PCB • Designing Tools for PCB </td> </tr> <tr> <td>Day 2</td> <td> • Introduction about PCB design tools • Process of PCB designs • Introduction to EDA • Components Introduction & their Categories </td> </tr> <tr> <td>Day 3</td> <td> • Introduction to Industrial Design Tools & Specification • Library Standards • PCB Design Flow • Overview of PCB Terminology </td> </tr> <tr> <td>Day 4</td> <td> • Polygon process • Component Placement & Design • Basic Routing • PCB Design Flow </td> </tr> <tr> <td>Day 5</td> <td> • EAGLE Introduction • Tools function • Components Datasheet identification • Types of Tracks, Pads, Vias </td> </tr> <tr> <td>Day 6</td> <td> • Library Creation & Footprint generation for SMD and T.H components • Uses of Grids • Library searching and creation </td> </tr> <tr> <td>Day 7</td> <td> • Download the Library component & add into EAGLE • Importing the another Gerbe to EAGLE • Component Placement • Component Arrangement </td> </tr> <tr> <td>Day 8</td> <td> • Component Name & Value • Single Sided Design • Double Sided Design • Manual routing </td> </tr> <tr> <td>Day 9</td> <td> • Auto Routing • Auto Placement • Penalization • Net Connection </td> </tr> <tr> <td>Day10</td> <td> • Boom Creation • Component list Creation • ERC Checking • DRC Checking </td> </tr> <tr> <td colspan="2"></td> <td> Assignment / Project / Case Study/Others: 1.Power Supply Circuit for 5 Volt 2.Fire Alarm Circuit 3.LED Chaser Circuit 4Automatic Street light controller using LDR 5.Water Level Indicator 6.Traffic light Controller </td> </tr> </table>	Day 1	• Electronics Introduction • Passive Components & Active Components • Definitions of PCB • Designing Tools for PCB	Day 2	• Introduction about PCB design tools • Process of PCB designs • Introduction to EDA • Components Introduction & their Categories	Day 3	• Introduction to Industrial Design Tools & Specification • Library Standards • PCB Design Flow • Overview of PCB Terminology	Day 4	• Polygon process • Component Placement & Design • Basic Routing • PCB Design Flow	Day 5	• EAGLE Introduction • Tools function • Components Datasheet identification • Types of Tracks, Pads, Vias	Day 6	• Library Creation & Footprint generation for SMD and T.H components • Uses of Grids • Library searching and creation	Day 7	• Download the Library component & add into EAGLE • Importing the another Gerbe to EAGLE • Component Placement • Component Arrangement	Day 8	• Component Name & Value • Single Sided Design • Double Sided Design • Manual routing	Day 9	• Auto Routing • Auto Placement • Penalization • Net Connection	Day10	• Boom Creation • Component list Creation • ERC Checking • DRC Checking			Assignment / Project / Case Study/Others: 1.Power Supply Circuit for 5 Volt 2.Fire Alarm Circuit 3.LED Chaser Circuit 4Automatic Street light controller using LDR 5.Water Level Indicator 6.Traffic light Controller
Day 1	• Electronics Introduction • Passive Components & Active Components • Definitions of PCB • Designing Tools for PCB																									
Day 2	• Introduction about PCB design tools • Process of PCB designs • Introduction to EDA • Components Introduction & their Categories																									
Day 3	• Introduction to Industrial Design Tools & Specification • Library Standards • PCB Design Flow • Overview of PCB Terminology																									
Day 4	• Polygon process • Component Placement & Design • Basic Routing • PCB Design Flow																									
Day 5	• EAGLE Introduction • Tools function • Components Datasheet identification • Types of Tracks, Pads, Vias																									
Day 6	• Library Creation & Footprint generation for SMD and T.H components • Uses of Grids • Library searching and creation																									
Day 7	• Download the Library component & add into EAGLE • Importing the another Gerbe to EAGLE • Component Placement • Component Arrangement																									
Day 8	• Component Name & Value • Single Sided Design • Double Sided Design • Manual routing																									
Day 9	• Auto Routing • Auto Placement • Penalization • Net Connection																									
Day10	• Boom Creation • Component list Creation • ERC Checking • DRC Checking																									
		Assignment / Project / Case Study/Others: 1.Power Supply Circuit for 5 Volt 2.Fire Alarm Circuit 3.LED Chaser Circuit 4Automatic Street light controller using LDR 5.Water Level Indicator 6.Traffic light Controller																								

13.	Course Outcomes	:	After completing the course the student will be able to: 1. Extend the Knowledge of Electronics Components 2. Understand the Electronics Project Design flow 3. Design and develop their Own Product 4. Participate in National and International Contests.		
14.	Course Assessment (Min. 2)	:	S. No.	Type	Max. Marks
			1	Assessment Test I	50
			2	Assessment Test II	50
				Total	100
15.	Any other details	:	--		

The above proposal may kindly be approved.

Course Coordinator

HOD

CCO/Academic

KONGU ENGINEERING COLLEGE, THOPPUPALAYAM,
PERUNDURAI, ERODE - 638 060



ACCOUNT SETTLEMENT FORM

(Function / Events Conducted @ KEC)

Association	Value Added Course	IIPC	Others: One Credit Course
-------------	--------------------	------	---------------------------

DATE: 25.02.2021

School & Department	: Mechatronics		
Name of the Function / Event	: One credit course on Design of Printed Circuit Board.		
Function In-charge	: Dr. K. Gomathi		
Date of Function / Event	: 08.02.2021 to 19.02.2021		
Date of proposal	: 03.02.2021		
Amount sanctioned	: ₹. 20,000/-		
Amount Collected from Participants (if any)	Amount (A)	Service Tax (B)	Total (A + B)
	₹. 20,000/-	₹. -	₹. 20,000/-
	Receipt No. & Date	00227 to 00257 & 09.02.2021	
Advance amount Received & Date	: ₹. -	Date:	-
Total expenses	: ₹. 20,000/-		
Balance amount Remitted	: ₹.	Receipt No.	Receipt Date
Amount Claimed (if any)	: ₹.		
Amount to KEC / IIPC	: ₹. -	Percentage (%)	

STAFF INCHARGE
(WITH NAME) (Dr. K. Gomathi)

HOD 25/2/2021

DEAN

For Office use only

SUPERINTENDENT

REGISTRAR



ENTHU Technology Solutions India Pvt Ltd

Development | Support | Training

INVOICE

Enthu Technology Solutions India Pvt Ltd #88 & 89 SSN Square, Peelamedu Pudur, Coimbatore-641004. State Name: Tamil Nadu. Contact No: 0422-4217197	INVOICE NUMBER	ETS/20-21/INV/136
	INVOICE DATE	24/02/2021
	PO NUMBER	
	ORDER DATE	
	TRAINING MODE	ONLINE
BILL TO M/s. Kongu Engineering College, Department of Mechatronics, Thoppupalayam, Perundurai, Tamil Nadu 638060	SHIP TO Dr. Gomathi K, Department of Mechatronics, M/s. Kongu Engineering College, Thoppupalayam, Perundurai, Tamil Nadu 638060.	

Serial No	Description	Days/ Hours	Qty	Unit Price	Total Cost
1	Conducted One Credit Course - Design of Printed Circuit Board	24 Hrs	40	500	20,000.00

Thanks for your business.

Looking forward for your business.

Account Details :

Beneficiary Name : Mr. Moorthi K

Account No : 824310110000279

IFSC Code : BKID0008243

Branch : Peelamedu, Coimbatore

Name of the Bank : Bank Of India

For Enthu Technology Solutions India Pvt Ltd



Authorized Signature

[Signature]
25/2/2021

Course co-ordinator

[Signature]
25/2/2021

GSTIN No. : 33AADCE 9083 H1ZJ | CIN No. : U72300TZ2015PTC021189

88 & 89, SSN Square, Peelamedu Pudur, Coimbatore - 641 004, Tamilnadu, India.

Te : +91 -422 - 4217197 | E : info@enthutech.in | W : www.enthutech.in



KONGU ENGINEERING COLLEGE(AUTONOMOUS)
PERUNDURAI ERODE -6380 060 TAMILNADU



DEPARTMENT OF MECHATRONICS ENGINEERING

Account Details

26.02.2021

S.No.	Company Name	Bill Details	Amount Proposed	Amount Spent	Remarks
1.	Enthu Technology Solutions India Pvt Ltd Address: #88 & 89, SSN Square, Peelamedu Pudur, Coimbatore-641 004, Tamilnadu, India.	Invoice Number: ETS/20-21/INV/136 Account Details: Name: Mr.K.Moorthi Account No: 824310110000279 IFSC CODE: BKID0008243 Bank Name: Bank of India Branch: Peelamedu, Coimbatore	20,000.00	20,000.00	Honorarium of Rs.20,000 will be given to Industry Experts

26/2/2021

Course Co-ordinator

[Dr. K Gomathi]

26/2/2021

HoD/MTS

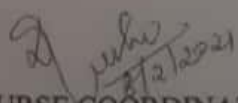
 Estd - 1984	KONGU ENGINEERING COLLEGE (AUTONOMOUS) PERUNDURAI ERODE -6380 060 TAMILNADU ONE CREDIT COURSE-DESIGN OF PRINTED CIRCUIT BOARD	 CERT No. 88-100-24704 001-0011-2012
--	---	---

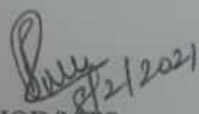
ONE CREDIT COURSE ON DESIGN OF PRINTED CIRCUIT BOARD (BATCH-I)

S.NO	ROLL NO.	NAME OF THE STUDENT	SECTION	AMOUNT PAID
1	19MTL108	GOKUL ANAND. R	A	500
2	19MTL110	GOWTHAM A	A	500
3	19MTL111	HARISH P	A	500
4	19MTL112	HARSHAD P	A	500
5	19MTL113	KAVINRAJ G.R	A	500
6	19MTL114	MANISH DAS. P.M	A	500
7	19MTL116	NAVEED AHMED N	A	500
8	19MTL117	NAVEENKARTHIK.R	A	500
9	19MTL118	NITHISH KUMAR V	B	500
10	19MTL128	S VIGNESH	B	500
11	19MTR001	ABI CHANDAR K	A	500
12	19MTR006	D.ARAVINDHAN	A	500
13	19MTR009	ASWIN GUHAN N	A	500
14	19MTR010	BALAGURU C	A	500
15	19MTR011	DANY ROHINTH.R.S	A	500
16	19MTR012	DEVADHARSINI G	A	500
17	19MTR013	DHANUSH CHAKARAVARTHY	A	500

Handwritten signature and date: 8/2/2024

18	19MTR017	GOKUL S	A	500
19	19MTR021	GURU MOORTHIL P	A	500
20	19MTR031	KARTHIKEYAN K	A	500
21	19MTR032	B.S.KARUNYA	A	500
22	19MTR038	KISHORE KUMAR.B	A	500
23	19MTR043	S.B.LALU PRASANNA	A	500
24	19MTR044	MAGESH R	A	500
25	19MTR046	MANOJ. J	A	500
26	19MTR047	MEGAVARTHINI M	A	500
27	19MTR048	MITHELAASH YAADAV D	A	500
28	19MTR049	MOHAMED RAFIUDEEN.M.M	A	500
29	19MTR050	MOHAMED THOWFIQ.N	A	500
30	19MTR052	MOHAMMED JAHEERUDDIN J	A	500
31	19MTR056	MURALIDHARAN.A	B	500
32	19MTR058	NITHESH KUMAAR M	B	500
33	19MTR060	PAVISH P	B	500
34	19MTR062	PRITHIVI RAJAN N	B	500
35	19MTR066	RAJKUMAR J	B	500
36	19MTR073	ROHIT A C	B	500
37	19MTR085	SRI SUDHARSANAM.C	B	500
38	19MTR095	SURYA B	B	500
39	19MTR104	VIMAL S	B	500
40	19MTR105	VINOTHKANNA.S	B	500


COURSE COORDINATOR


HOD/MTS

10/20/3

UP TO
₹. 20,000/-

KONGU ENGINEERING COLLEGE, PERUNDURAI, ERODE-638 060

AD - 12 - PP
REV.1
01.01.2021

PROGRAMME APPROVAL FORM

Proposal Tracking No. KEC / MTR / 2020-2021 / 02 / 0166Dept Ref No. MT / 2020-2021, 010Date 23-02-2021

1.	Department:	Mechatronics		
2.	a). Name of the Programme	One Credit Course on Design of Printed Circuit Board.		
	b). Norms under which it is proposed	One Credit Norms.		
3.	Dates:	From : <u>24.02.21</u>	TO: <u>18.03.21</u> (tentative)	No. of Days <u>10 days</u>
4.	Programme for:	Faculty	Students	Others (Specify)
5.	Level:	State / National / International	Association	Institution / Dept. / Cell / General
6.	Highlights of the Programme:	One Credit Course will be conducted by Industry Expert [Enthu Technology, Coimbatore]		

1. Proposed Invitees:

S. No.	Purpose	Chief Guest	Speakers / Jury	Trust Member Invitees
1	To deliver course content	-	Mr. Balaji Mohan	-
2		-	Mr. Praveen Kumar Enthu Technology, Coimbatore.	-

2. Agenda: Programme Agenda / Schedule Enclosed : Yes / No

3. Expenditure:

S.No.	Purpose	Proposed	Revised	Actual	Remarks
1	Honorarium	15,000/-			
2	will be given to Industry expert				
3	Enthu Technology Coimbatore				
4					
5					
6					
Total		15,000/-			

4. Source Amount Collected from students

	Proposed	Actual
Budget Allotment		
Balance Amt. Available		
Expenses Proposed	Registration - 30 x 500/-	15,000/-
Balance		

Faculty i/c (with Name)

(Dr. K. GEMATHI)

H.O.D

CCO (A)

PRINCIPAL

DESIGN OF PRINTED CIRCUIT BOARD

Programme & Branch	B.E. & Mechatronics Engineering	Sem.	Category	L	T	P	Credit
Prerequisites	Basics knowledge in Analog Devices and Digital Circuits	4	OCC	1	0	2	1

Preamble	This Course provides an understanding on design of Printed Circuit Boards which will help the learners to leverage their knowledge in electronics field. Course has been designed for undergraduates who might start their career in electronics field.	10
----------	---	----

Theory	Introduction to PCB: Introduction to Electronics - Passive Components and Active Components-Definitions of PCB- Introduction about PCB design tools-Process of PCB designs-Introduction to EDA- Introduction to Components and their Categories - Introduction to Industrial Design Tools & Specification - Library Standards - PCB Design Flow - Overview of PCB Terminology - Polygon process - Component Placement and Design - Basic Routing - PCB Design Flow - EAGLE Introduction - Tools function - Components Datasheet identification - Types of Tracks, Pads and Vias. Design of PCB: Library Creation & Footprint generation for SMD and T.H components- Uses of Grids - Library searching and creation- Download the Library component and add into EAGLE - Importing another Gerber to EAGLE - Component Placement - Component Arrangement - Component Name and Value - Single Sided Design - Double Sided Design - Manual routing - Auto Routing - Auto Placement - Penalization - Net Connection - Boom Creation - Component list Creation - ERC Checking - DRC Checking.	
--------	--	--

List of Exercises / Experiments :

1.	Power Supply Circuit for 5 Volt
2.	Fire Alarm Circuit
3.	LED Chaser Circuit
4.	Automatic Street light controller using LDR
5.	Water Level Indicator
6.	Traffic light Controller

Lecture:10, Practical:10, Total:20

TEXT BOOK:

1.	Simon Monk " Make Your Own PCBs with EAGLE: From Schematic Designs to Finished Boards", McGraw Hill Education, 2017.
----	--

REFERENCES:

1.	S D Mehta, "Electronic Product Design", S. Chand Publishing, 2011.
2.	R S Khandpur "Printed Circuit Boards: Design - Fabrication" Tata McGraw Hill Education, 2017.

COURSE OUTCOMES:

On completion of the course, the students will be able to

	BT Mapped (Highest Level)
CO1 Extend the Knowledge of Electronics Components	Understanding (K2)
CO2 Understand the Electronics Project Design flow	Understanding (K2)
CO3 Design and develop their Own Product	Applying (K3)

Mapping of COs with POs and PSOs

COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3	3	3	3	3				2	2	2	3	3	3
CO2	3	3	3	3	3				2	2	2	3	3	3
CO3	3	3	3	3	3				2	2	2	3	3	3

1 - Slight, 2 - Moderate, 3 - Substantial, BT- Bloom's Taxonomy

S. Sathiyavathi
23/2/21
Dr. S SATHIVATHI

S. Sathiyavathi
23/2/2021

KONGU ENGINEERING COLLEGE
PERUNDURAI ERODE-638060
(AUTONOMOUS)

DEPARTMENT OF MECHATRONICS ENGINEERING

Date: 23.02.2021

SESSION SCHEDULE
ONE CREDIT COURSE ON DESIGN OF PRINTED CIRCUIT BOARD

Day	Date	Course Contents
Day 1	24.02.21	• Electronics Introduction • Passive Components & Active Components • Definitions of PCB • Designing Tools for PCB
Day 2	25.02.21	• Introduction about PCB design tools • Process of PCB designs • Introduction to EDA • Components Introduction & their Categories
Day 3	26.02.21	• Introduction to Industrial Design Tools & Specification • Library Standards • PCB Design Flow • Overview of PCB Terminology
Day 4	01.03.21	• Polygon process • Component Placement & Design • Basic Routing • PCB Design Flow
Day 5	02.03.21	• EAGLE Introduction • Tools function • Components Datasheet identification • Types of Tracks, Pads, Vias
Day 6	03.03.21	• Library Creation & Footprint generation for SMD and T.H components • Uses of Grids • Library searching and creation
	04.03.21	Assessment Test 1
Day 7	05.03.21	• Download the Library component & add into EAGLE • Importing the another Gerbe to EAGLE • Component Placement • Component Arrangement
Day 8	15.03.21	• Component Name & Value • Single Sided Design • Double Sided Design • Manual routing
Day 9	16.03.21	• Auto Routing • Auto Placement • Penalization • Net Connection
Day 10	17.03.21	• Boom Creation • Component list Creation • ERC Checking • DRC Checking
	18.03.21	Assessment Test 2

S. Sathiyavathi
 23/2/21
 Course Coordinator
 DR. S. SATHIYAVATHI

[Signature]
 23/2/2021
 HOD

**KONGU ENGINEERING COLLEGE, THOPPUPALAYAM,
PERUNDURAI, ERODE – 638 060**

ACCOUNT SETTLEMENT FORM

(Function / Events Conducted @ KEC)



Association	Value Added Course	IIPC	Others: One Credit Course
-------------	--------------------	------	---------------------------

DATE: 19.03.2021.

School & Department	: Mechatronics		
Name of the Function / Event	: One Credit Course on Design of Printed Circuit Board.		
Function In-charge	: Dr. K. Gomathi		
Date of Function / Event	: 24.02.2021 to 18.03.2021.		
Date of proposal	: 23.02.2021.		
Amount sanctioned	: ₹. 15,000/-		
Amount Collected from Participants (if any)	Amount (A) ₹. 15,000/-	Service Tax (B) ₹. —	Total (A + B) ₹. 15,000/-
	Receipt No. & Date	990 to 1019 & 04/03/2021	
Advance amount Received & Date	: ₹. —	Date:	—
Total expenses	: ₹. 15,000/-		
Balance amount Remitted	: ₹.	Receipt No.	Receipt Date
Amount Claimed (if any)	: ₹.		
Amount to KEC / IIPC	: ₹. —	Percentage (%) —	

STAFF INCHARGE
(WITH NAME) *Dr. K. Gomathi*

HOD *19/3/2021*

DEAN

For Office use only

SUPERINTENDENT

REGISTRAR



ENTHU Technology Solutions India Pvt Ltd

Development | Support | Training

INVOICE

Enthu Technology Solutions India Pvt Ltd #88 & 89 SSN Square, Peelamedu Pudur, Coimbatore-641004. State Name: Tamil Nadu. Contact No: 0422-4217197	INVOICE NUMBER	ETS/20-21/INV/155
	INVOICE DATE	18/03/2021
	PROGRAMME DATE	24.02.2021 – 18.03.2021 (Per Day 2 Hrs)
	BATCH NAME/NO	Batch - II
	TRAINING MODE	ONLINE
BILL TO M/s. Kongu Engineering College, Department of Mechatronics, Thoppupalayam, Perundurai, Tamil Nadu 638060	SHIP TO Dr. Gomathi K, Department of Mechatronics, M/s. Kongu Engineering College, Thoppupalayam, Perundurai, Tamil Nadu 638060.	

Serial No	Description	Days/ Hours	Qty	Unit Price	Total Cost
1	Conducted One Credit Course - Design of Printed Circuit Board	24 Hrs	30	500	15,000
Thanks for your business. Looking forward for your business. Account Details : Beneficiary Name : Mr. Moorthi K Account No : 824310110000279 IFSC Code : BKID0008243 Branch : Peelamedu, Coimbatore Name of the Bank : Bank Of India		For Enthi Technology Solutions India Pvt Ltd  Authorized Signature			

Dr. K. Gomathi
Course Co-ordinator.
(Dr. K. Gomathi)

19/3/2021

GSTIN No. : 33AADCE 9083 H1ZJ | CIN No. : U72300TZ2015PTC021189

88 & 89, SSN Square, Peelamedu Pudur, Coimbatore - 641 004, Tamilnadu, India.

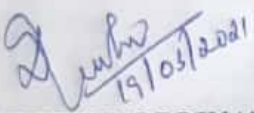
Te : +91 - 422 - 4217197 | E : info@enthutech.in | W : www.enthutech.in

 Estd : 1984	KONGU ENGINEERING COLLEGE(AUTONOMOUS) PERUNDURAI ERODE -6380 060 TAMILNADU DEPARTMENT OF MECHATRONICS ENGINEERING	 CERT No. 83 100 20108 ISO 9001:2015
--	--	---

ONE CREDIT COURSE FEE-DETAILS

18.03.2021

S.No.	Company Name	Bill Details	Amount Proposed	Amount Spent	Remarks
1.	Enthu Technology Solutions India Pvt Ltd Address: #88 & 89, SSN Square, Peelamedu Pudur, Coimbatore-641-004, Tamilnadu, India.	Invoice Number: ETS/20-21/INV/155 Account Details: Name: Mr.K.Moorthi Account No: 824310110000279 IFSC CODE: BKID0008243 Bank Name: Bank of India Branch: Peelamedu, Coimbatore	15,000.00	15,000.00	Honorarium of Rs.15,000 will be given to Industry Experts


 COURSE CO-ORDINATOR
 (Dr. K. Gomathi)


 HoD/MTS



KONGU ENGINEERING COLLEGE (AUTONOMOUS)

PERUNDURAI ERODE -6380 060 TAMILNADU

DEPARTMENT OF MECHATRONICS ENGINEERING

ONE CREDIT COURSE ON DESIGN OF PRINTED CIRCUIT BOARDBATCH-2 BILL RECEIPT

S.NO.	ROLL No.	NAME OF THE STUDENT	SEC	AMOUNT	RECEIPT	
					No	DATE
1.	19MTL106	ASHOK R	A	500	990	04/03/2021
2.	19MTL107	RAHUL PRAVIN GANGADHAR	B	500	991	04/03/2021
3.	19MTL122	SELVAVIGNESH HARIHARAN K	B	500	992	04/03/2021
4.	19MTL127	SUDAR PAVITHRA M	B	500	993	04/03/2021
5.	19MTL129	VIGNESHWAR S	B	500	994	04/03/2021
6.	19MTR007	ARAVINDSURYA K	A	500	995	04/03/2021
7.	19MTR014	DHEEMATHSHA M	A	500	996	04/03/2021
8.	19MTR023	HARISH G K	A	500	997	04/03/2021
9.	19MTR024	HARISH M	A	500	998	04/03/2021
10.	19MTR025	JAGADEESH R	A	500	999	04/03/2021
11.	19MTR029	JIDHESH P	A	500	1000	04/03/2021
12.	19MTR036	KIRTHIK RAJA A J	A	500	1001	04/03/2021
13.	19MTR039	KISHORE M	A	500	1002	04/03/2021
14.	19MTR041	KUMARAN E Y	A	500	1003	04/03/2021
15.	19MTR059	PADMA A	B	500	1004	04/03/2021
16.	19MTR067	RAJARAM G	B	500	1005	04/03/2021
17.	19MTR076	SAMITHA N	B	500	1006	04/03/2021
18.	19MTR078	SASIKUMAR C	B	500	1007	04/03/2021
19.	19MTR079	SEHWAG NIKKIL AKASH A	B	500	1008	04/03/2021
20.	19MTR082	SIVA SHANKAR M	B	500	1009	04/03/2021
21.	19MTR083	SNEHA A	B	500	1010	04/03/2021
22.	19MTR084	SOMESWARAN N	B	500	1011	04/03/2021
23.	19MTR089	SRINIVASAN M	B	500	1012	04/03/2021
24.	19MTR090	SUBA S P	B	500	1013	04/03/2021
25.	19MTR091	SUBHASHCHANDRABOSE N	B	500	1014	04/03/2021
26.	19MTR092	SUDAHAR P S	B	500	1015	04/03/2021
27.	19MTR093	SUDHARSON M S	B	500	1016	04/03/2021
28.	19MTR100	VASANTH S	B	500	1017	04/03/2021
29.	19MTR102	VENGADESH PRASATH K	B	500	1018	04/03/2021
30.	19MTL123	SHAIYON M	B	500	1019	04/03/2021

COURSE CO-ORDINATOR

(Dr. K. GOMATHI)

HOD/MIS



KONGU ENGINEERING COLLEGE(AUTONOMOUS)
PERUNDURAI ERODE -6380 060 TAMILNADU



DEPARTMENT OF MECHATRONICS ENGINEERING

ONE CREDIT COURSE-DESIGN OF PRINTED CIRCUIT BOARD

BATCH 2

S.NO.	ROLL No.	NAME OF THE STUDENT	SECTION
1.	19MTL106	ASHOK R	A
2.	19MTL107	RAHUL PRAVIN GANGADHAR	B
3.	19MTL122	SELVAVIGNESH HARIHARAN K	B
4.	19MTL127	SUDAR PAVITHRA M	B
5.	19MTL129	VIGNESHWAR S	B
6.	19MTR007	ARAVINDSURYA K	A
7.	19MTR014	DHEEMATHSHA M	A
8.	19MTR023	HARISH G K	A
9.	19MTR024	HARISH M	A
10.	19MTR025	JAGADEESH R	A
11.	19MTR029	JIDHESH P	A
12.	19MTR036	KIRTHIK RAJA A J	A
13.	19MTR039	KISHORE M	A
14.	19MTR041	KUMARAN E Y	A
15.	19MTR059	PADMA A	B
16.	19MTR067	RAJARAM G	B
17.	19MTR076	SAMITHA N	B
18.	19MTR078	SASIKUMAR C	B
19.	19MTR079	SEHWAG NIKKIL AKASH A	B
20.	19MTR082	SIVA SHANKAR M	B
21.	19MTR083	SNEHA A	B
22.	19MTR084	SOMESWARAN N	B
23.	19MTR089	SRINIVASAN M	B
24.	19MTR090	SUBA S P	B
25.	19MTR091	SUBHASHCHANDRABOSE N	B
26.	19MTR092	SUDAHAR P S	B
27.	19MTR093	SUDHARSON M S	B
28.	19MTR100	VASANTH S	B
29.	19MTR102	VENGADESH PRASATH K	B
30.	19MTL123	SHAIYON M	B

COURSE CO-ORDINATOR

(Dr. K. Gomathi)

HOD/MTS

KONGU ENGINEERING COLLEGE(AUTONOMOUS)
PERUNDURAI-638 060
DEPARTMENT OF MECHATRONICS ENGINEERING
ONE CREDIT COURSE- DESIGN OF PRINTED CIRCUIT BOARD

BATCH 2-ONLINE CLASS ATTENDANCE

S.No	ROLL No.	NAME OF THE STUDENT	24.02.21	25.02.21	26.02.21	01.03.21	02.03.21	03.03.21	05.03.21	15.03.21	16.03.21	17.03.21	TEST 1 04.3.21	TEST 2 18.3.21	Cumulative % Attendance
1	19MTL106	ASHOK R	P	P	A	P	P	P	P	P	P	P	P	P	95
2	19MTL107	RAHUL PRAVIN GANGADHAR	P	A	A	P	A	A	A	A	A	A	A	A	20
3	19MTL122	SELVAVIGNESH HARIHARAN K	P	P	P	P	P	P	P	P	P	P	P	P	100
4	19MTL127	SUDAR PAVITHRA M	P	P	P	P	P	P	P	P	P	P	P	P	100
5	19MTL129	VIGNESHWAR S	P	P	P	P	P	P	P	P	P	P	P	P	100
6	19MTR007	ARAVINDSURYA K	P	P	P	P	P	P	P	P	P	P	P	P	100
7	19MTR014	DHEEMATHSHA M	P	P	P	P	P	A	P	P	P	P	P	P	90
8	19MTR023	HARISH G K	P	P	P	P	P	A	P	P	P	P	P	P	90
9	19MTR024	HARISH M	P	P	P	P	P	P	P	P	P	P	P	P	100
10	19MTR025	JAGADEESH R	P	P	P	P	P	P	P	P	P	P	P	P	100
11	19MTR029	JIDHESH P	P	P	P	P	P	P	P	P	P	P	P	P	100
12	19MTR036	KIRTHIK RAJA A J	A	A	P	P	P	P	P	P	P	P	P	P	80
13	19MTR039	KISHORE M	P	P	P	P	P	A	P	P	P	A	P	P	80
14	19MTR041	KUMARAN E Y	P	P	P	P	P	A	P	P	P	P	P	P	90
15	19MTR059	PADMA A	P	P	P	P	P	P	P	P	P	P	P	P	100
16	19MTR067	RAJARAM G	P	A	A	P	P	P	P	P	P	P	P	P	80
17	19MTR076	SAMITHA N	P	P	P	P	P	P	P	P	P	P	P	P	100
18	19MTR078	SASIKUMAR C	P	P	P	P	P	P	P	P	P	P	P	P	100
19	19MTR079	SEHWAG NIKKIL AKASH A	A	A	P	P	P	P	P	P	P	P	P	P	100
20	19MTR082	SIVA SHANKAR M	A	A	P	P	A	P	P	P	P	P	P	P	80
21	19MTR083	SNEHA A	P	P	P	P	P	P	P	P	P	P	P	P	80
22	19MTR084	SOMESWARAN N	P	P	P	P	P	P	P	P	P	P	P	P	100
23	19MTR089	SRINIVASAN M	P	P	P	P	P	P	A	P	A	A	P	P	90
24	19MTR090	SUBA S P	P	P	P	P	P	P	P	P	P	P	P	P	80
25	19MTR091	SUBHASHCHANDRAHOSE N	P	P	P	P	P	P	P	P	P	P	P	P	100
26	19MTR092	SUDAHAR P S	P	P	P	P	P	P	P	P	P	P	P	P	100
27	19MTR093	SUDHARSON M S	P	P	P	P	P	P	P	P	P	P	P	P	100
28	19MTR100	VASANTH S	P	P	P	P	P	P	P	P	P	P	P	P	100
29	19MTR102	VENGADESH PRASATH K	P	P	P	P	P	P	P	P	P	P	P	P	100
30	19MTL123	SHAIYON M	P	P	P	P	P	A	A	P	P	P	P	P	80

Date: 19/03/2021
HoD/MTS

Date: 19/03/2021
COURSE CO-ORDINATOR

(Dr. N. Gomathi)

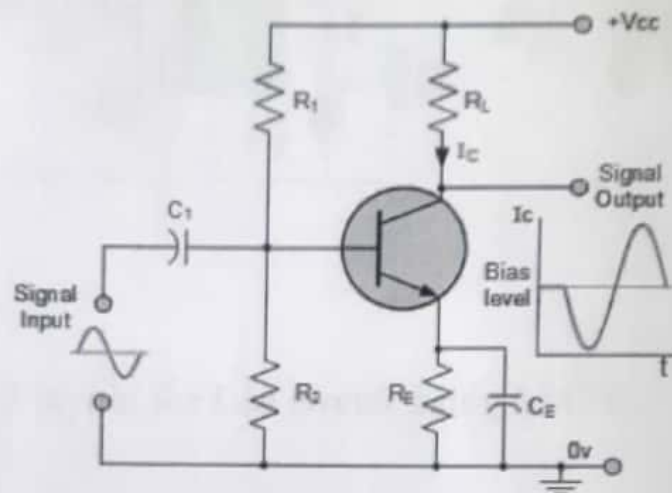


ONE CREDIT COURSE- DESIGN OF PRINTED CIRCUIT BOARD

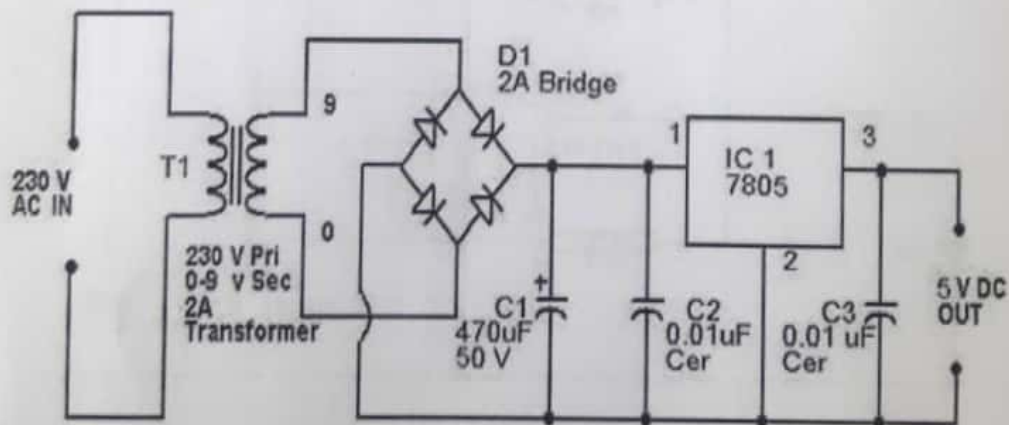
CREATION OF SCHEMATIC FILE- TEST I

1. Design a PCB layout for Class A amplifier

- Class A

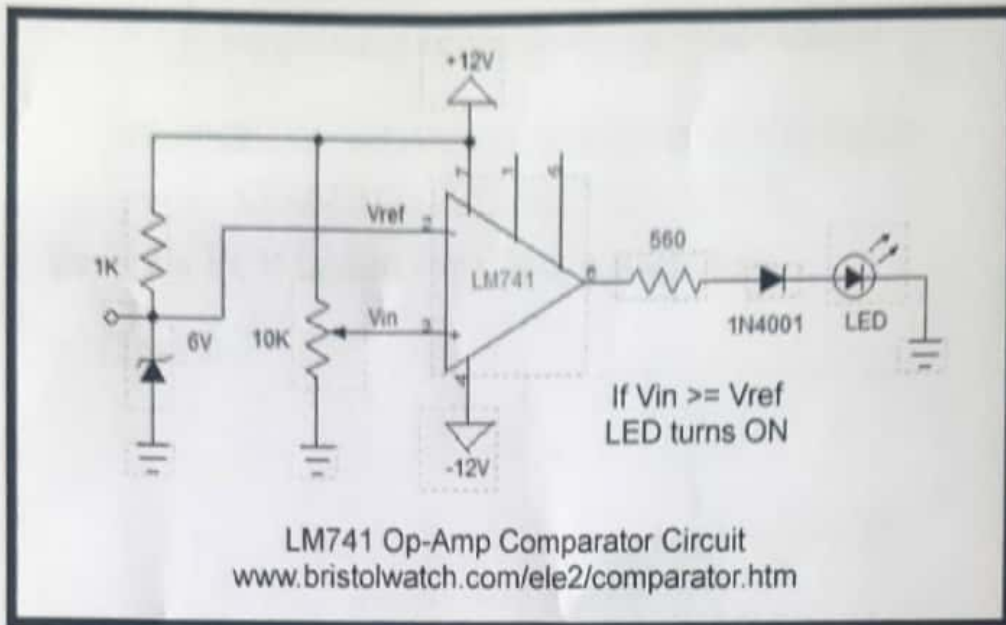


2. Design A PCB layout for Bridge Rectifier with voltage regulator IC 7805

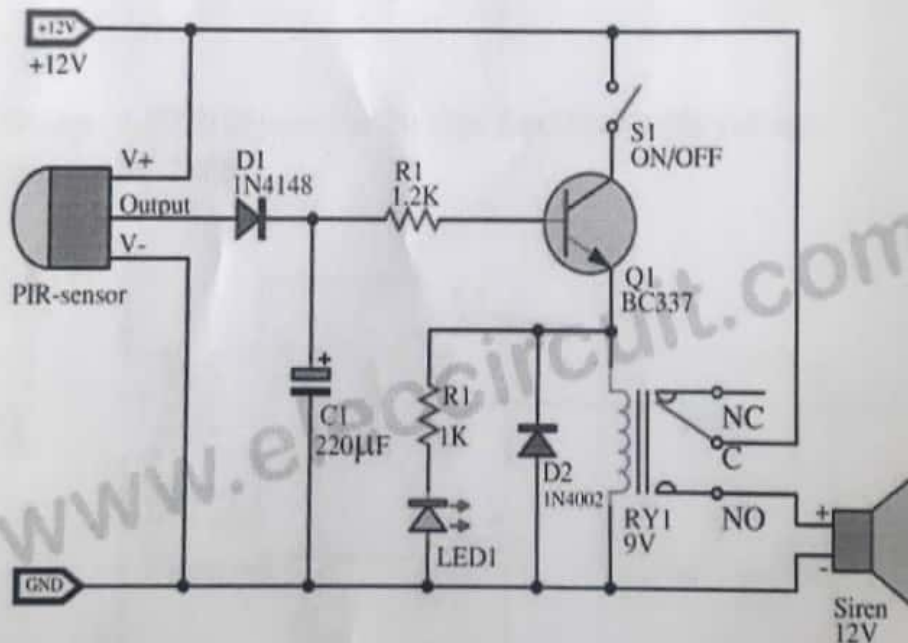


www.circuitstoday.com

9. Design A PCB layout for Basic Comparator Circuit



10. Design A PCB layout for PIR Motion Sensor Circuit



COURSE CO-ORDINATOR

(Dr. K. GOMATHI)

HoD/MTS

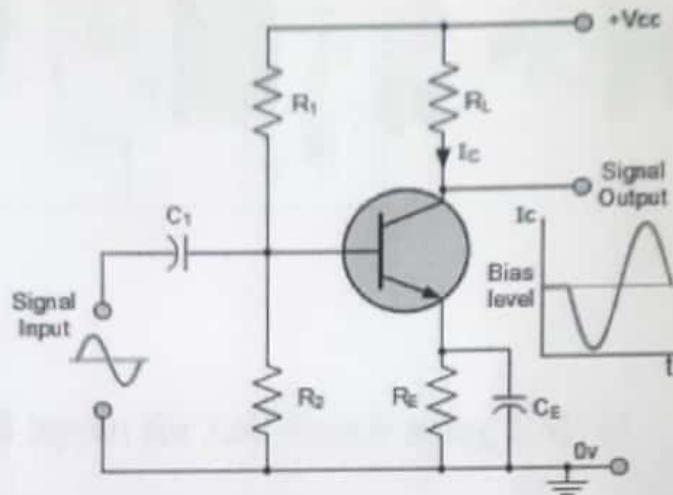


ONE CREDIT COURSE- DESIGN OF PRINTED CIRCUIT BOARD

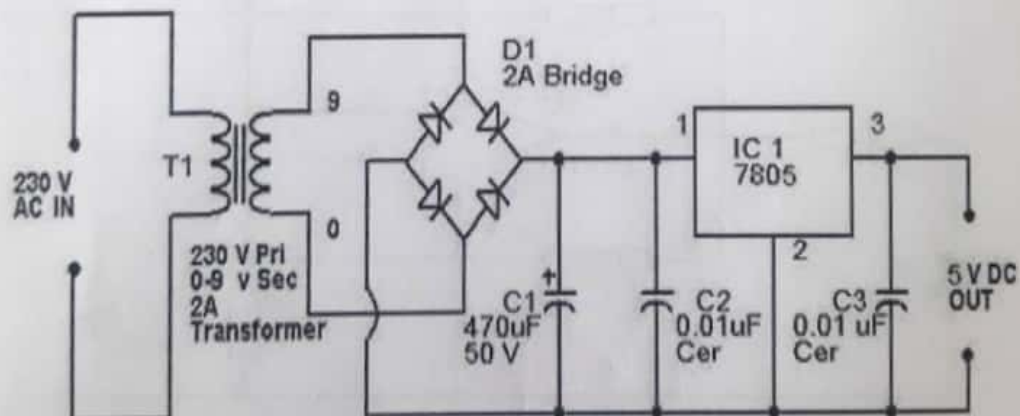
CREATION OF BOARD FILE- TEST II

1. Design a PCB layout for Class A amplifier

- Class A

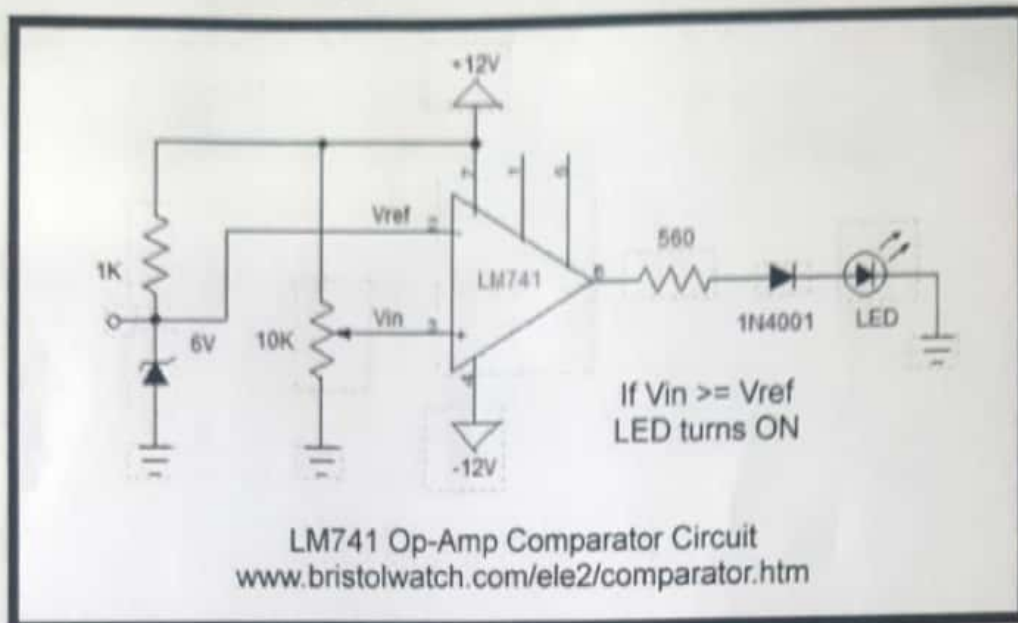


2. Design A PCB layout for Bridge Rectifier with voltage regulator IC 7805

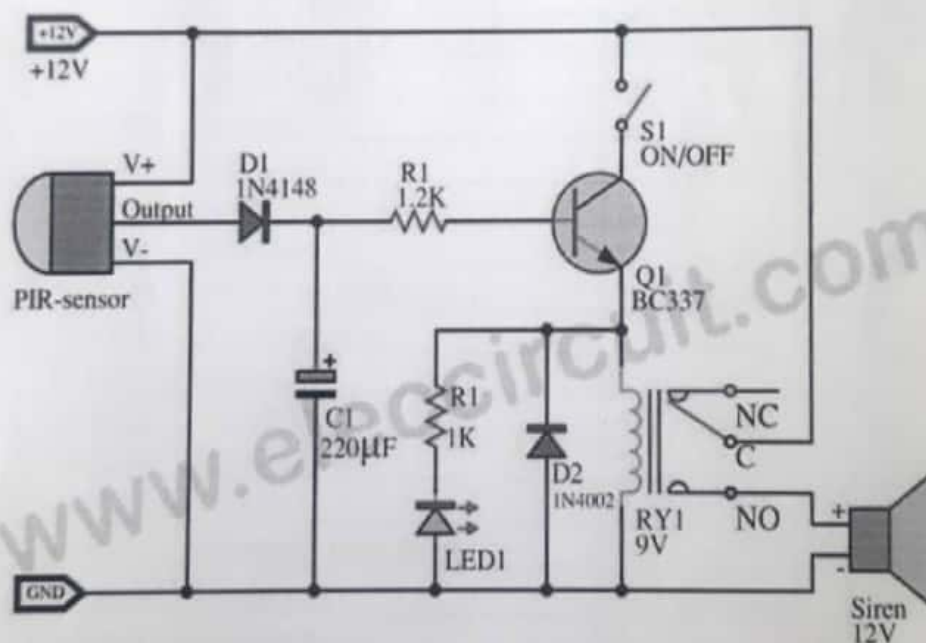


www.circuitstoday.com

9. Design A PCB layout for Basic Comparator Circuit



10. Design A PCB layout for PIR Motion Sensor Circuit



[Signature]
 13/03/2021
 COURSE CO-ORDINATOR
 [Dr. K. GOMATHI]

[Signature]
 19/3/2021
 HoD/MTS



KONGU ENGINEERING COLLEGE(AUTONOMOUS)
PERUNDURAI ERODE -6380 060 TAMILNADU



DEPARTMENT OF MECHATRONICS ENGINEERING

ONE CREDIT COURSE-DESIGN OF PRINTED CIRCUIT BOARD

BATCH-2 ASSESMENT TEST ATTENDANCE

S.NO.	ROLL No.	NAME OF THE STUDENT	Q. No	04-03-21	18-03-21
1.	19MTL106	ASHOK R	4	R. Ashok	R. Ashok
2.	19MTL107	RAHUL PRAVIN GANGADHAR	8	← ABSENT →	← ABSENT →
3.	19MTL122	SELVAVIGNESH HARIHARAN K	5	K. Selva	K. Selva
4.	19MTL127	SUDAR PAVITHRA M	8	P. Sudar	P. Sudar
5.	19MTL129	VIGNESHWAR S	7	S. Vigneshwar	S. Vigneshwar
6.	19MTR007	ARAVINDSURYA K	10	A. Aravind	A. Aravind
7.	19MTR014	DHEEMATHSHA M	3	M. Dheemathsha	M. Dheemathsha
8.	19MTR023	HARISH G K	2	H. Harish	H. Harish
9.	19MTR024	HARISH M	5	M. Harish	M. Harish
10.	19MTR025	JAGADEESH R	1	R. Jagadeesh	R. Jagadeesh
11.	19MTR029	JIDHESH P	1	P. Jidhesh	P. Jidhesh
12.	19MTR036	KIRTHIK RAJA A J	4	A. J. Kirthik	A. J. Kirthik
13.	19MTR039	KISHORE M	3	M. Kishore	M. Kishore
14.	19MTR041	KUMARAN E Y	10	E. Y. Kumaran	E. Y. Kumaran
15.	19MTR059	PADMA A	2	A. Padma	A. Padma
16.	19MTR067	RAJARAM G	4	G. Rajaram	G. Rajaram
17.	19MTR076	SAMITHA N	6	N. Samitha	N. Samitha
18.	19MTR078	SASIKUMAR C	9	C. Sasikumar	C. Sasikumar
19.	19MTR079	SEHWAG NIKKIL AKASH A	7	A. Akash	A. Akash
20.	19MTR082	SIVA SHANKAR M	6	M. Siva Shankar	M. Siva Shankar
21.	19MTR083	SNEHA A	5	A. Sneha	A. Sneha
22.	19MTR084	SOMESWARAN N	3	N. Someswaran	N. Someswaran
23.	19MTR089	SRINIVASAN M	2	M. Srinivasan	M. Srinivasan
24.	19MTR090	SUBA S P	8	P. Suba	P. Suba
25.	19MTR091	SUBHASHCHANDRABOSE N	9	N. Subhash	N. Subhash
26.	19MTR092	SUDAHAR P S	7	S. Sudahar	S. Sudahar
27.	19MTR093	SUDHARSON M S	8	S. Sudharson	S. Sudharson
28.	19MTR100	VASANTH S	1	S. Vasanth	S. Vasanth
29.	19MTR102	VENGADESH PRASATH K	6	K. Vengadesh	K. Vengadesh
30.	19MTL123	SHAIYON M	10	M. Shaiyon	M. Shaiyon

COURSE CO-ORDINATOR

(Dr. K. GOMATHI)

HOD/MTS



KONGU ENGINEERING COLLEGE(AUTONOMOUS)
PERUNDURAI ERODE -6380 060 TAMILNADU



DEPARTMENT OF MECHATRONICS ENGINEERING

ONE CREDIT COURSE ON DESIGN OF PRINTED CIRCUIT BOARD

BATCH – 2 -ASSESSMENT TEST MARKS

DATE: 04.03.2021 & 18.03.2021

Sl.No	ROLL NO	NAME OF THE STUDENT	TEST 1 MARKS (50)	TEST 2 MARKS (50)	TOTAL MARKS (100)
1.	19MTR007	ARAVINDSURYA K	46	45	91
2.	19MTR014	DHEEMATHSHA M	48	48	96
3.	19MTR023	HARISH G K	47	48	95
4.	19MTR024	HARISH M	46	46	92
5.	19MTR025	JAGADEESH R	47	45	92
6.	19MTR029	JIDHESH P	45	47	92
7.	19MTR036	KIRTHIK RAJA A J	46	45	91
8.	19MTR039	KISHORE M	48	49	97
9.	19MTR041	KUMARAN E Y	47	45	92
10.	19MTR059	PADMA A	48	46	94
11.	19MTR067	RAJARAM G	47	44	91
12.	19MTR076	SAMITHA N	48	47	95
13.	19MTR078	SASIKUMAR C	46	48	94
14.	19MTR079	SEHWAG NIKKIL AKASH A	46	46	92
15.	19MTR082	SIVA SHANKAR M	47	45	92
16.	19MTR083	SNEHA A	47	45	92
17.	19MTR084	SOMESWARAN N	48	44	92

[Signature]
19/03/2021

18.	19MTR089	SRINIVASAN M	46	44	90
19.	19MTR090	SUBA S P	48	48	96
20.	19MTR091	SUBHASHCHANDRABOSE N	47	48	95
21.	19MTR092	SUDAHAR P S	46	45	91
22.	19MTR093	SUDHARSON M S	47	44	91
23.	19MTR100	VASANTH S	46	45	91
24.	19MTR102	VENGADESH PRASATH K	48	47	95
25.	19MTL106	ASHOK R	45	46	91
26.	19MTL107	RAHUL PRAVIN GANGADHAR	A	A	A
27.	19MTL122	SELVAVIGNESHHARIHARAN K	48	46	94
28.	19MTL123	SHAIYON M	48	46	94
29.	19MTL127	SUDAR PAVITHRA M	47	45	92
30.	19MTL129	VIGNESHWAR S	48	47	95

[Signature]
19/02/2021
COURSE CO-ORDINATOR

[Signature]
[Dr. K. Gomathi]

[Signature]
19/3/2021
HoD/MTS