



Indra Ganesan

COLLEGE OF ENGINEERING

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
Accredited by NAAC with 'B+' Grade, 2(f) & 12B Status Institution by UGC

IG Valley, Madurai Main Road, Manikandam, Tiruchirappalli - 620012

NAAC DOCUMENTS

QUALITY INDICATOR FRAME WORK

CRITERION – 1

CURRICULAR ASPECTS

SUBMITTED BY

IQAC

INTERNAL QUALITY ASSURANCE CELL

INDRA GANESAN COLLEGE OF ENGINEERING





DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ACADEMIC YEAR 2018-2019 / ODD SEMESTER

1.2 Academic Flexibility (30)

1.2.1 Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)

AND

1.2.2 Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

VAC Title:	PCB DESIGNING				
Resource Person:	Mrs.Shalom Jerlin, Technical Head, Mr.R.Hemnath Trainer, Hitakey Infosys, Trichy				
Date of conduct from:	17.06.2019	To:	21.06.2019	Duration:	30 Hours
Organized Department:	ELECTRONICS AND COMMUNICATION ENGINEERING				
Participant Year:	ECE IV, III, II	Semester:	ODD	No. of Students Registered:	72
Venue:	DSP Lab				

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Department of Electronics and Communication Engineering

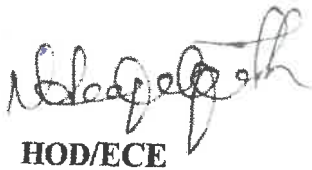
Academic Year 2018-2019 –ODD Semester

03.12.18

DEPARTMENT CIRCULAR

Department of Electronics and Communication Engineering in association with Galwin Technology is going to organize Value Added Course for all Second, Third and Final year students on “**PCB DESIGNING**” from **10.12.2018 to 14.12.2018**. Certificates will be issued to the eligible participants at the end of the Course. This training is to be provided in our campus.

Resource Persons	1.Mr.K.C.TamilVendhan, The Human Resource Manager, Galwin Technology, Trichy 2.Mr.Deepan Trainer Galwin Technology, Trichy
Venue	DSP lab and Optical Lab, ECE


HOD/ECE


PRINCIPAL

Cc:

- Principal Office
- IQAC Coordinator
- Class In-charges-II,III&IV-Year
- II,III & I V-Year ECE Students
- Office File
- Notice Board


Dr. G. Balakrishnan, M.E., Ph.D.,
Principal

Indra Ganesan College of Engineering
IG Valley, Madurai Main Road
Manikandam, Trichy-620 012.



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Value Added Course on "PCB DESIGNING"

SYLLABUS

S.NO	TOPIC COVERED	DURATION (in hours)	DATE
1	Resistor types, Capacitor types, Diode types, LED, Seven segment, Timer 555A	3	10.12.2018
2	Stable and mono stable circuits, Transistor As a switch, Relays, Op-amp in comparator mode	3	10.12.2018
3	Introduction to Installation of EAGEL software, Designing of PCB schematic with Leaded components,	3	11.12.2018
4	Documentation using ERC, Direct Board file creation for DC power supply circuit	3	11.12.2018
5	Direct schematic file creation using a RELAY DRIVER CIRCUIT BOARD	3	12.12.2018
6	Designing of PCB layout technique with leaded components, Documentation using DRC, Auto Routing techniques,	3	12.12.2018
7	Gerber file creation for your board file, Polygon, New component creation technique	3	13.12.2018
8	Layer study, Double layer creation, Multi Layer creation and script, making of a PCB of DC power supply circuit	3	13.12.2018
9	Drilling, Soldering of components and Testing of DC power supply circuit	3	14.12.2018
10	Fabrication of PCB designing, Testing and trouble shooting of MINI PROJECT circuit	3	14.12.2018
11	Exam	1	14.12.2018
Total Hours (Excluding Exam)		30	-

Kirif

VAC Coordinator

Madhavan

HOD/ECE

(Signature)

Dr. G. Balakrishnan, M.E., Ph.D.,

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Value Added Course

"PCB DESIGNING"

STUDENTS PARTICIPATION LIST

S.NO	REG NO	STUDENTS NAME	YEAR/ BRANCH
1	811215106002	Abinethri.J	IV/ECE
2	811215106004	Anitha.B	IV/ECE
3	811215106007	Balaji.S	IV/ECE
4	811215106008	BarjanaBarveen.N	IV/ECE
5	811215106009	Bhagya.D	IV/ECE
6	811215106010	Dhivyapriya.S	IV/ECE
7	811215106011	FairoseBegum.A	IV/ECE
8	811215106012	Farsana.K	IV/ECE
9	811215106013	Gomathi.M	IV/ECE
10	811215106014	HabeebBanu.M	IV/ECE
11	811215106015	Hemalatha.K	IV/ECE
12	811215106016	JaheerHussain.K	IV/ECE
13	811215106017	JancyRani.K	IV/ECE
14	811215106018	Jayasri.A	IV/ECE
15	811215106019	Juliet Vanitha.S	IV/ECE
16	811215106020	Kalaiselvi.R	IV/ECE
17	811215106021	Karthick.R	IV/ECE
18	811215106023	Krishnaveni.K	IV/ECE
19	811215106024	Madhu.M	IV/ECE
20	811215106025	Malarvizhi.R	IV/ECE
21	811215106026	Manikandan.S	IV/ECE
22	811215106027	Meena.V	IV/ECE
23	811215106028	MohamedYasin.M	IV/ECE
24	811215106029	Nandhini.R	IV/ECE
25	811215106030	NasithaBanu.S	IV/ECE
26	811215106032	Prabhu.M	IV/ECE
27	811215106033	Priya.K	IV/ECE
28	811215106034	Priya.M	IV/ECE
29	811215106035	Priyadharshini.K	IV/ECE
30	811215106037	Rafeek.M	IV/ECE
31	811215106038	Rajapalikhana.K	IV/ECE
32	811215106039	Ramya.G	IV/ECE
33	811215106040	Sachin.R	IV/ECE
34	811215106042	Saraswathi.A	IV/ECE

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S.NO	REG NO	STUDENTS NAME	YEAR/ BRANCH
35	811215106043	Saraswathi.R	IV/ECE
36	811215106044	Shalini.G	IV/ECE
37	811215106045	Subramani.M	IV/ECE
38	811215106046	SujiEvangelinJasmine.S	IV/ECE
39	811215106048	Surya.N	IV/ECE
40	811215106049	Vijay.G	IV/ECE
41	811215106050	Sathya.R	IV/ECE
42	811216106001	AbarnaT	III/ECE
43	811216106002	AmsavalliS	III/ECE
44	811216106003	AnushyaS	III/ECE
45	811216106004	Arockia NivethaS	III/ECE
46	811216106005	AshefaN	III/ECE
47	811216106006	DhanalakshmiT	III/ECE
48	811216106008	FeminaBegum A	III/ECE
49	811216106009	GayathriJ	III/ECE
50	811216106010	Joysefshiba J	III/ECE
51	811216106011	Keerthana P	III/ECE
52	811216106012	Keerthana S	III/ECE
53	811216106013	Keerthika D	III/ECE
54	811216106014	Lathasri S	III/ ECE
55	811216106015	Menaka R	III/ ECE
56	811216106016	Mithra P	III/ ECE
57	811216106017	Mohan Raj S	III/ ECE
58	811216106018	Nilavar Nisha F	III/ ECE
59	811216106019	Pavithra P	III/ ECE
60	811216106020	Pavithra V	III/ ECE
61	811216106021	Prabhu A	III/ ECE
62	811217106001	Aishwariya S	II/ECE
63	811217106002	Aneesha A	II/ECE
64	811217106003	Deepika B	II/ECE
65	811217106004	Durga D	II/ECE
66	811217106005	Gangadevi M	II/ECE
67	811217106006	Janan iC	II/ECE
68	811217106009	Karthick K	II/ECE
69	811217106010	Kosiananth R	II/ECE
70	811217106011	Lakshmi M	II/ECE
71	811217106012	Manikandan M	II/ECE
72	811217106013	Mekala Devi S	II/ECE



VAC Coordinator


Dr. G. Balakrishnan, M.E., Ph.D.,
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HOD ECE



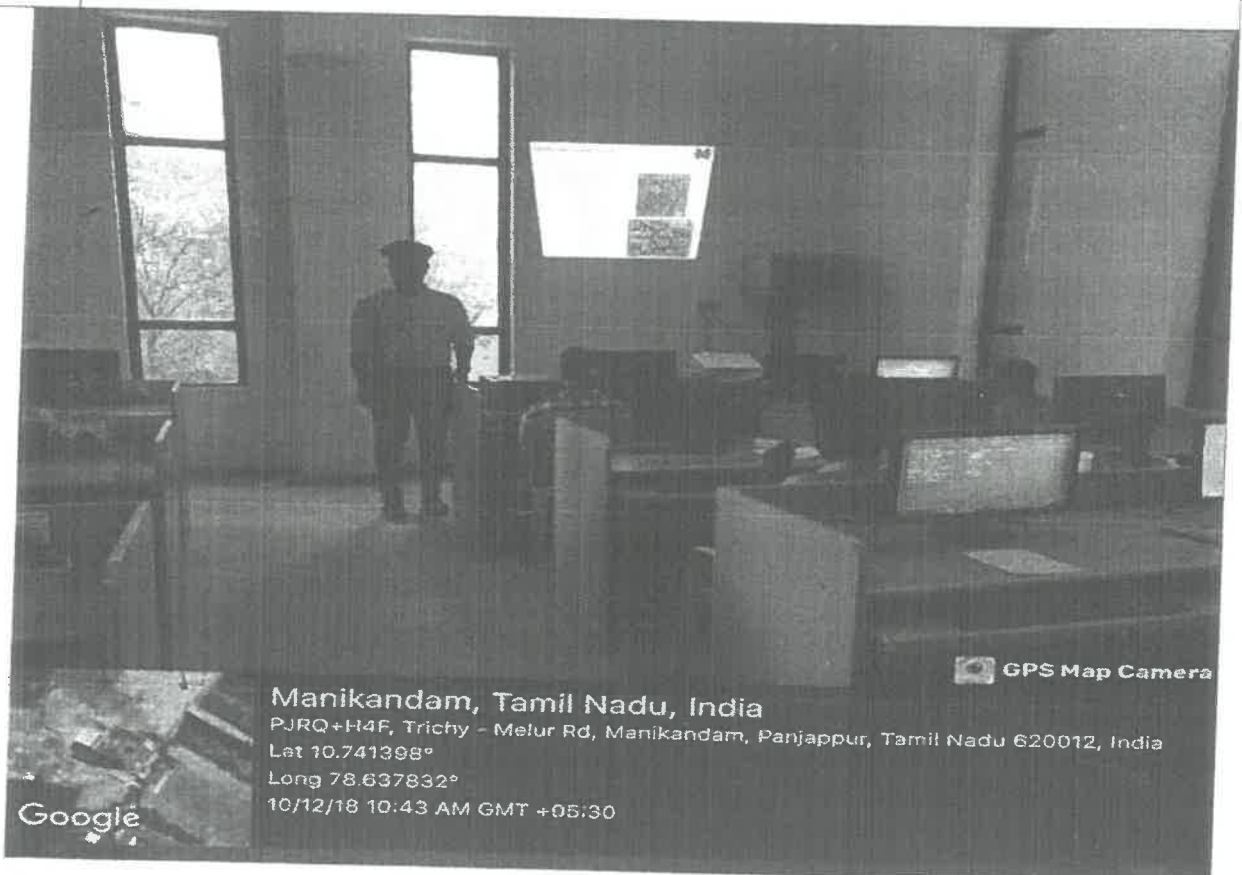
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Sample Photos of VAC on PCB Designing

Title:	PCB DESIGNING				
Resource Person:	Mr.K.C.TamilVendhan, The Human Resource Manager, Galwin Technology, Trichy	Mr.Deepan Trainer Galwin Technology, Trichy			
Date of conduct From:	10.12.2018	To:	14.12.2018	Duration:	30 Hours
Organized Department:	ELECTRONICS AND COMMUNICATION ENGINEERING				
Participant Year:	2,3,4	No.of Students Registered:	72		

Venue : DSP lab and Optical Lab,ECE



VAC Coordinator

HOD/ECE

Principal

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Name of the Student:

Year/ Sem:

AU Register Number:

Value Added Course on "PCB DESIGNING"

MCQ QUESTIONS (25X1 = 25 Marks)

1. Which phenomenon is not reduced by the circuit paths of lowest impedance especially provided by power and return planes for shielding purposes?
 - a) Radiation
 - b) Convection
 - c) Noise
 - d) Crosstalk
2. High current circuits are purposely located or placed near the edge of PC Bin accordance to the supply lines for _____
 - a) Removal of heat
 - b) Isolation of stray current
 - c) Reduction of path length
 - d) All of the above
3. Which among the below stated soldering methods is also renowned as 'High Frequency Resistance Soldering'?
 - a) Iron Soldering
 - b) Furnace Soldering
 - c) Torch Soldering
 - d) Electrical Soldering
4. Which among the below mentioned approaches belongs to the category of In-circuit Testing?
 - a) Impedance Testing
 - b) Component Testing
 - c) Apply Signal and check output
 - d) All of the above
5. Which type of solder ability testing is carried out for the generation of solder sample due to immersion of wire or sheet metal specimen in a bath of molten solder?
 - a) Solder Bath Testing
 - b) Meniscus Rise Testing
 - c) Solder Iron Testing
 - d) None of the above
6. What is / are the necessity / is to provide guarding to precision differential amplifiers?
 - a) To increase leakage resistance
 - b) To reduce capacitance between signal conductors & ground
 - c) Both a and b
 - d) None of the above
7. Which among the below mentioned assertions is not away of cross-talk reduction while designing digital PCBs?
 - a) Decrease in the distance between conductors
 - b) Shielding of clock line switch guard strips
 - c) Reduction in the loop area of circuits
 - d) A void running of parallel traces for longer distances especially for asynchronous signals
8. Which among the below mentioned packages does not belong to the category of 'Small Outline Package'?
 - a) SO
 - b) SOP
 - c) SOT
 - d) SON
9. Which among the below specified assertions is not grounding consideration associated with ADC as well as DAC?
 - a) Analog side to analog ground
 - b) Digital side to digital ground
 - c) Use of separate power supply and connection of their ground leads to single point reference
 - d) Reduction of inductive loop area between power and return traces
10. Which among the below stated devices / equipments are preferred for elimination of ground and supply line noise especially in TTL/CMOS / ECL PCB designing?


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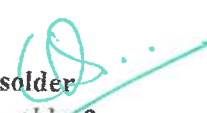
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- a) Coupling capacitor
b) Decoupling capacitor
c) Snubber circuits
d) All of the above
11. Which among the below specified condition is precise in the cross talk verification mechanism using logic flow in opposite direction with the limit of avoiding dangerous interference in digital PCB designing?
a) $Z_{\text{even}} > Z_{\text{odd}}$
b) $Z_{\text{odd}} \geq 0.5 Z_{\text{even}}$
c) $Z_{\text{odd}} \geq 0.8 Z_{\text{even}}$
d) $Z_{\text{odd}} = Z_{\text{even}}$
12. Which terminology of PCB represents a thin photo-sensitive polymer by supporting photographic pattern of single traces or IC pads for etching?
a) Prepreg
b) Etching
c) Photo-resist
d) Solder mask
13. Which problems are about to occur if PCB is not designed properly in a confined manner for digital circuits?
A) Diffraction B) Refraction C) Ground & Supply-line Noise D) Electromagnetic Interference
a) A&B
b) B&C
c) C&D
d) A,B,C, D
14. Which among the following assists in obtaining the desired value of wave impedance in reflection phase while designing digital PCBs?
A) Width of signal lines B) Distance between signal line and ground line C) Signal Delays D) Double Pulsing
a) A&B
b) B&C
c) C&D
d) A,B,C, D
15. What should be the resistance of 0.6 mm wide conductor with 15 cm length and 25 μm thickness of standard copper foil? (Assume $\rho = 1.7241 \times 10^{-6}$ (at 20° C)
a) 118.2m Ω
b) 138.2m Ω
c) 172.4m Ω
d) 192.4m Ω
16. The actual cost of PCB can be evaluated on the basis of ____
a) PCB size & material
b) Number of layers
c) Vi as on PCB
d) All of the above
17. Which factors contribute to the occurrence of mechanical stress?
a) Resonance
b) Cracked Solder Joints
c) Both a and b
d) None of the above
18. Which type of PCB requires minimum soldering on component side in order to avoid replacement oriented difficulties?
a) Single-sided PCB
b) Double-sided PCB
c) Both a and b
d) None of the above
19. What effects can be observed if the separate power and ground planes are provided with large conducting surfaces for better decoupling in PCB layouts?
a) Increase in self-inductance
b) Reduction in self-inductance
c) Reduction in self-inductance
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e) Stability in self-inductance
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Value Added Course on "PCB DESIGNING"

ANSWER KEY

1	B	6	C	11	C	16	D	21	D
2	A	7	A	12	C	17	C	22	B
3	D	8	D	13	C	18	B	23	D
4	D	9	D	14	A	19	B	24	D
5	B	10	B	15	C	20	C	25	A

VAC Coordinator


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COLLEGE OF ENGINEERING

Madurai Main Road (NH 45B) Manikandam Trichy 12
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Name of the Student: Meena V

Year / Sem: IV / VII

AU Register Number: 811215106027

Value Added Course on "PCB DESIGNING"

MCO QUESTIONS (25X1 = 25 Marks)

17
25

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Department of Electronics and communication Engineering

Academic Year 2018-2019- Odd Semester

STUDENTS PARTICIPATION LIST

VAC PROGRAM-PCB DESIGNING

S.NO	REG NO	STUDENT'S NAME	YEAR/ BRANCH	DATE: 10.12.18		DATE: 11.12.18		DATE: 12.12.18		DATE: 13.12.18		DATE: 14.12.18		NO OF SESSIONS ATTENDED	SIGNATURE OF THE STUDENT
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN		
1	811215106002	Abinethri.J	IV/ECE	/	/	/	/	/	/	/	/	/	/	10	J. Abinethri
2	811215106004	Anitha.B	IV/ECE	/	/	/	/	/	/	/	/	/	/	10	B. Anitha
3	811215106007	Balaji.S	IV/ECE	/	/	/	a	/	/	/	/	/	/	9	S. Balaji
4	811215106008	BarjanaBarveen.N	IV/ECE	/	/	/	/	a	/	/	/	/	/	9	N. Barveen
5	811215106009	Bhagya.D	IV/ECE	/	/	/	/	a	/	/	/	/	/	9	D. Bhagya
6	811215106010	Bhivyapriya.S	IV/ECE	/	a	/	/	/	/	/	/	/	/	9	S. Bhivyapriya
7	811215106011	PairoseBegum A	IV/ECE	/	/	/	/	/	/	/	/	/	/	9	A. Begum
8	811215106012	Farsana.K	IV/ECE	/	/	/	a	/	/	/	/	/	/	10	K. Farsana
9	811215106013	Gemathi.M	IV/ECE	/	/	/	/	/	/	/	/	/	/	9	M. Gemathi
10	811215106014	Haseeb Gani.M	IV/ECE	/	a	/	/	/	/	/	a	/	/	9	M. Gani
11	811215106015	Harmanthak	IV/ECE	/	/	/	/	/	/	/	/	/	/	9	K. Harmanthak
														10	

Dr. G. Balakrishnan, M.E., Ph.D.,

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Indra Ganesan College of Engineering

IC Vellore - 560011, Main Road

S.NO	REG NO	STUDENTS NAME	YEAR/ BRANCH	DATE: 10.12.18		DATE: 11.12.18		DATE: 12.12.18		DATE: 13.12.18		DATE: 14.12.18		NO OF SESSIONS ATTENDED	SIGNATURE OF THE STUDENT
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN		
12	811215106016	Jaheer Hussain.K	IV/ECE	/	/	/	a	/	/	/	/	/	/	9	Jaheer Hussain.K
13	811215106017	Jancy Rani.K	IV/ECE	/	/	/	/	/	/	/	/	/	/	10	Jancy Rani.K
14	811215106018	Jayasri.A	IV/ECE	/	/	/	/	/	/	/	/	/	/	10	Jayasri.A
15	811215106019	Juliet Vanitha.S	IV/ECE	/	/	/	/	/	/	/	/	/	/	9	Juliet Vanitha.S
16	811215106020	Kalaiselvi.R	IV/ECE	/	/	a	a	/	/	/	/	/	/	8	Kalaiselvi.R
17	811215106021	Karthick.R	IV/ECE	/	/	/	/	/	/	a	a	/	/	8	Karthick.R
18	811215106023	Krishnaveni.K	IV/ECE	/	/	/	a	/	/	/	/	/	/	8	Krishnaveni.K
19	811215106024	Madhu.M	IV/ECE	/	/	/	/	/	/	/	/	/	/	9	Madhu.M
20	811215106025	Malarvizhi.R	IV/ECE	/	a	/	/	/	/	/	/	/	/	10	Malarvizhi.R
21	811215106026	Manikandan.S	IV/ECE	/	/	/	/	a	a	/	/	/	/	9	Manikandan.S
22	811215106027	Meera.V	IV/ECE	/	/	/	a	/	/	/	/	/	/	8	Meera.V
23	811215106028	Mohamed Yasin.M	IV/ECE	/	/	/	/	/	/	/	/	/	/	9	Mohamed Yasin.M
24	811215106029	Nandhini.R	IV/ECE	/	/	/	/	/	/	/	/	/	/	10	Nandhini.R
25	811215106030	Nasitha Banu.S	IV/ECE	/	/	/	/	/	/	/	/	/	/	10	Nasitha Banu.S
26	811215106032	Prabhu.M	IV/ECE	/	/	/	/	/	/	/	/	/	/	10	Prabhu.M
27	811215106033	Priya.K	IV/ECE	/	/	/	/	/	/	/	/	/	/	10	Priya.K
28	811215106034	Priya.M	IV/ECE	/	/	/	/	/	/	a	a	/	/	9	Priya.M
29	811215106035	Priyadharshini.K	IV/ECE	/	/	/	/	/	a	/	/	/	/	9	Priyadharshini.K
30	811215106036	Rateek.M	IV/ECE	/	a	/	/	/	/	/	/	/	/	9	Rateek.M

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 Manikandam, Trichy-620 012



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Established in the year 1984. It is an Autonomous Institution. Affiliated to Anna University, Chennai.
 Recognized by AICTE, Madurai & Affiliated to Anna University, Chennai.

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				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN		
31	811215106038	Rajapalikhon. K	IV/ECE	/	/	/	/	/	/	/	/	/	/	10	K. Rajapalikhon
32	811215106039	Ranya.G	IV/ECE	/	/	/	a	/	/	/	/	/	/	9	G. Ranya
33	811215106040	Sachin.R	IV/ECE	a	a	/	/	/	/	/	/	/	/	8	R. Sachin
34	811215106042	Saraswathi.A	IV/ECE	/	/	/	/	/	a	/	/	/	/	9	A. Saraswathi
35	811215106043	Saraswathi.R	IV/ECE	/	/	/	/	/	/	/	/	/	/	10	R. Saraswathi
36	811215106044	Shalini.G	IV/ECE	/	/	a	/	/	/	/	/	/	/	9	G. Shalini
37	811215106045	Subramani.M	IV/ECE	/	/	/	/	/	/	/	/	/	/	10	M. Subramani
38	811215106046	Sujil.vangelin.Jasmine.S	IV/ECE	/	/	/	/	/	/	/	/	/	/	10	S. Sujil
39	811215106048	Surya.N	IV/ECE	/	/	/	/	/	/	/	/	/	/	10	N. Surya
40	811215106049	Vijay.G	IV/ECE	/	/	/	/	/	/	/	/	/	/	10	G. Vijay
41	811215106050	Sathya.R	IV/ECE	/	/	/	/	a	a	/	/	/	/	9	R. Sathya
42	811216106001	Abarna I	III/ECE	/	a	/	/	a	a	/	/	/	/	8	I. Abarna
43	811216106002	AnsavalliS	III/ECE	/	/	/	/	/	/	/	/	/	/	9	S. Ansavalli
44	811216106003	AnushyaS	III/ECE	/	/	/	a	/	/	/	/	/	/	10	S. Anushya
45	811216106004	Arockia NivethaS	III/ECE	/	/	/	/	/	/	/	/	/	/	9	S. Arockia
46	811216106005	AshelaN	III/ECE	/	/	/	/	/	/	/	/	/	/	10	N. Ashela
47	811216106006	DhanalakshmiT	III/ECE	/	/	/	/	/	/	/	/	/	/	10	T. Dhanalakshmi
48	811216106008	FeminaBegum A	III/ECE	/	/	a	a	/	/	a	/	/	/	9	A. Femina
49	811216106009	Gayathri	III/ECE	/	/	/	/	a	a	/	/	/	/	8	T. Gayathri

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				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN		
50	811216106010	Joysefishiba J	III/ECE	/	/	/	a	/	/	/	/	/	/	9	Joysefishiba
51	811216106011	Keerthana P	III/ECE	/	/	/	/	/	/	/	/	/	/	10	P. Keerthana
52	811216106012	Keerthana S	III/ECE	/	/	/	/	/	/	/	/	/	/	10	S. Keerthana
53	811216106013	Keerthika D	III/ECE	/	/	/	/	/	a	/	/	/	/	9	D. Keerthika
54	811216106014	Lathasri S	III/ECE	/	/	/	/	/	/	a	a	/	/	8	S. Latha
55	811216106015	Menaka R	III/ECE	/	/	a	a	/	/	/	/	/	/	8	R. Menaka
56	811216106016	Mithra P	III/ECE	/	a	/	/	/	/	/	/	/	/	9	P. Mithra
57	811216106017	Mohan Raj S	III/ECE	/	/	/	/	/	/	/	/	/	/	10	S. Mohan Raj
58	811216106018	Nilavar Nisha F	III/ECE	/	/	/	/	/	a	/	/	/	/	9	F. Nisha
59	811216106019	Pavithra P	III/ECE	/	/	/	/	a	a	/	/	/	/	8	P. Pavithra
60	811216106020	Pavithra V	III/ECE	/	a	/	/	/	/	/	/	/	/	9	V. Pavithra
61	811216106021	Prabhu A	III/ECE	/	/	/	/	/	/	/	/	/	/	10	A. Prabhu
62	811217106001	Aishwariya S	II/ECE	/	/	/	/	/	/	/	/	/	/	10	S. Aishwariya
63	811217106002	Ancasha A	II/ECE	/	/	/	/	/	/	/	/	/	/	10	A. Ancasha
64	811217106003	Deepika B	II/ECE	/	/	/	/	/	/	/	/	/	/	10	B. Deepika
65	811217106004	Durga D	II/ECE	/	/	/	/	/	/	/	a	/	/	10	D. Durga
66	811217106005	Gangadevi M	II/ECE	/	/	/	/	a	/	/	/	/	/	9	M. Gangadevi
67	811217106006	Janan IC	II/ECE	/	/	/	a	/	/	/	/	/	/	9	C. Janan
68	811217106009	Karthick K	II/ECE	/	/	/	/	/	/	a	/	/	/	9	K. Karthick

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COLLEGE OF ENGINEERING

S.NO	REG. NO	STUDENTS NAME	YEAR/ BRANCH	DATE: 10.12.18		DATE: 11.12.18		DATE: 12.12.18		DATE: 13.12.18		DATE: 14.12.18		NO OF SESSIONS ATTENDED	SIGNATURE OF THE STUDENT
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN		
69	811217106010	Kosimanth R	II/ECE	/	/	/	a	/	/	/	/	/	/	9	R. Kanyas
70	811217106011	Lakshmi M	II/ECE	/	/	/	/	/	/	/	/	/	/	10	Lakshmi M
71	811217106012	Manikandan M	II/ECE	/	a	/	/	/	/	/	/	/	/	9	M. Manikandan
72	811217106013	Mekala Devi S	II/ECE	/	/	/	/	a	a	/	/	/	/	8	S. Mekala Devi


VAC Coordinator


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Department of Electronics and communication Engineering

Academic Year 2018-2019- Odd Semester

VALUE ADDED COURSE ASSESMENT SHEET

PCB DESIGNING

S.NO	REG NO	STUDENTS NAME	YEAR/ BRANCH	Attendance Details		VAC-MCQ TEST		OVERALL MARK(100) (50% of A + 50% of B)
				No. of Session Attended	Attendance Mark(100) (A)	No of Correct Answers	MCQ Mark(100) (B)	
1	811215106002	Abinethri.J	IV/ECE	30	100	19	76	84
2	811215106004	Anitha.B	IV/ECE	30	100	20	80	90
3	811215106007	Balaji.S	IV/ECE	27	90	20	80	86
4	811215106008	BarjanaBarveen.N	IV/ECE	27	90	22	88	94
5	811215106009	Bhagya.D	IV/ECE	27	90	19	76	84
6	811215106010	Dhivyapriya.S	IV/ECE	27	90	19	76	88
7	811215106011	FairoseBegum.A	IV/ECE	30	100	19	76	88
8	811215106012	Farsana.K	IV/ECE	27	90	20	80	86
9	811215106013	Gomathi.M	IV/ECE	27	90	20	80	90
10	811215106014	HabeebBanu.M	IV/ECE	27	90	19	76	88
11	811215106015	Hemalatha.K	IV/ECE	30	100	22	88	94


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Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

S.NO	REG NO	STUDENTS NAME	YEAR/ BRANCH	Attendance Details		VAC-MCQ TEST		OVERALL MARK(100) (50% of A + 50% of B)
				No. of Session Attended	Attendance Mark(100) (A)	No of Correct Answers	MCQ Mark(100) (B)	
12	811215106016	JaheerHussain.K	IV/ECE	27	90	19	76	84
13	811215106017	JancyRani.K	IV/ECE	30	100	22	88	94
14	811215106018	Jayasri.A	IV/ECE	30	100	22	88	90
15	811215106019	Juliet Vanitha.S	IV/ECE	27	90	20	80	86
16	811215106020	Kalaiselvi.R	IV/ECE	24	80	19	76	84
17	811215106021	Karthick.R	IV/ECE	24	80	19	76	88
18	811215106023	Krishnaveni.K	IV/ECE	27	90	22	88	90
19	811215106024	Madhu.M	IV/ECE	30	100	19	76	84
20	811215106025	Malarvizhi.R	IV/ECE	27	90	19	76	88
21	811215106026	Manikandan.S	IV/ECE	24	80	20	80	86
22	811215106027	Meena.V	IV/ECE	27	90	19	76	88
23	811215106028	MohamedYasin.M	IV/ECE	30	100	19	76	84
24	811215106029	Nandhini.R	IV/ECE	30	100	20	80	90
25	811215106030	NasithaBanu.S	IV/ECE	30	100	19	76	88
26	811215106032	Prabhu.M	IV/ECE	30	100	19	76	88
27	811215106033	Priya.K	IV/ECE	27	90	19	76	88
28	811215106034	Priya.M	IV/ECE	27	90	20	80	90
29	811215106035	Priyadharshini.K	IV/ECE	27	90	19	76	84
30	811215106037	Rafeek.M	IV/ECE	27	90	19	76	88

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				No. of Session Attended	Attendance Mark(100) (A)	No of Correct Answers	MCQ Mark(100) (B)	
31	811215106038	Rajapalikhana. K	IV/ECE	30	100	20	80	86
32	811215106039	Ramya.G	IV/ECE	27	90	22	88	94
33	811215106040	Sachin.R	IV/ECE	24	80	22	88	94
34	811215106042	Saraswathi.A	IV/ECE	27	90	22	88	94
35	811215106043	Saraswathi.R	IV/ECE	30	100	20	80	86
36	811215106044	Shalini.G	IV/ECE	27	90	19	76	84
37	811215106045	Subramani.M	IV/ECE	30	100	19	76	88
38	811215106046	SujiEvangelinJasmine.S	IV/ECE	30	100	22	88	94
39	811215106048	Surya.N	IV/ECE	30	100	20	80	90
40	811215106049	Vijay.G	IV/ECE	27	90	19	76	88
41	811215106050	Sathya.R	IV/ECE	24	80	19	76	88
42	811216106001	AbarnaT	III/ECE	27	90	22	88	94
43	811216106002	AmsavalliS	III/ECE	30	100	22	88	94
44	811216106003	AnushyaS	III/ECE	27	90	19	76	88
45	811216106004	Arockia NivethaS	III/ECE	30	100	19	76	84
46	811216106005	AshefaN	III/ECE	30	100	19	76	84
47	811216106006	Dhanalakshmi T	III/ECE	27	90	20	80	90
48	811216106008	FeminaBegum A	III/ECE	24	80	19	76	84
49	811216106009	GayathriJ	III/ECE	24	80	19	76	88

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51	811216106011	Keerthana P	III/ECE	30	100	20	80	90
52	811216106012	Keerthana S	III/ECE	30	100	20	80	90
53	811216106013	Keerthika D	III/ECE	27	90	22	88	94
54	811216106014	Lathasri S	III/ ECE	24	80	20	80	86
55	811216106015	Menaka R	III/ ECE	24	80	20	88	94
56	811216106016	Mithra P	III/ ECE	27	90	20	80	90
57	811216106017	Mohan Raj S	III/ ECE	30	100	19	76	84
58	811216106018	Nilavar Nisha F	III/ ECE	27	90	20	80	90
59	811216106019	Pavithra P	III/ ECE	24	80	20	80	90
60	811216106020	Pavithra V	III/ ECE	27	90	19	76	84
61	811216106021	Prabhu A	III/ ECE	30	100	19	76	84
62	811217106001	Aishwariya S	II/ECE	30	100	19	76	88
63	811217106002	Aneesha A	II/ECE	30	100	19	76	84
64	811217106003	Deepika B	II/ECE	30	100	20	80	90
65	811217106004	Durga D	II/ECE	27	90	19	76	88
66	811217106005	Gangadevi M	II/ECE	27	90	19	76	84
67	811217106006	Janan iC	II/ECE	27	90	22	88	94
68	811217106009	Karthick K	II/ECE	27	90	19	76	88


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				No. of Session Attended	Attendance Mark(100) (A)	No of Correct Answers	MCQ Mark(100) (B)	
69	811217106010	Kosiananth R	II/ECE	27	90	20	80	90
70	811217106011	Lakshmi M	II/ECE	30	100	19	76	84
71	811217106012	Manikandan M	II/ECE	27	90	19	76	84
72	811217106013	Mekala Devi S	II/ECE	24	80	20	80	86


VAC Coordinator


HOD/ECE

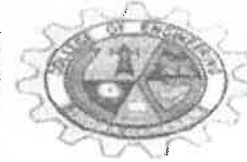

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CERTIFICATE OF PARTICIPATION

This is to certify that **Ms. MEKALA DEVIS**, II Year, ECE has successfully completed the Value Added Course on **“PCB Designing”** organized by Department of Electronics and Communication Engineering in Association with **Galwin Technology** from 10th December 2018 to 14th December 2018 (5 days) during the Academic year 2018-2019.

Galwin Technology
Mr.K.C.Tamil Vendhan
Chief Executive Officer.

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
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Principal
IGCE



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CERTIFICATE OF PARTICIPATION

This is to certify that **Ms.ANEESHA A**, II Year, ECE has successfully completed the Value Added Course on **“PCB Designing”** organized by Department of Electronics and Communication Engineering in Association with **Galwin Technology** from 10th December 2018 to 14th December 2018 (5 days) during the Academic year 2018-2019.

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Mr.K.C.Tamil Vendhan
Chief Executive Officer.

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Principal
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Manikandam, Trichy-620 012.

Principal
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CERTIFICATE OF PARTICIPATION

This is to certify that **Ms.DURGA D**, II Year, ECE has successfully completed the Value Added Course on “**PCB Designing**” organized by Department of Electronics and Communication Engineering in Association with **Galwin Technology** from 10th December 2018 to 14th December 2018 (5 days) during the Academic year 2018-2019.

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Mr.K.C.TamilVendhan
Chief Executive Officer.

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This is to certify that **Mr.KOSIANANTH R**, II Year, ECE has successfully completed the Value Added Course on **“PCB Designing”** organized by Department of Electronics and Communication Engineering in Association with **Galwin Technology** from 10th December 2018 to 14th December 2018 (5 days) during the Academic year 2018-2019.

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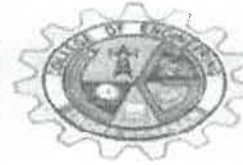

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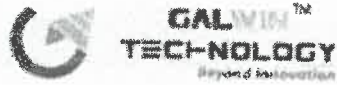
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