1.3.2 Details of value-added courses for imparting transferable and life skills offered during the year

To bridge the gap between the academic and industry need, Value Added Courses (VAC) are conducted regularly in our College. These courses are conducted by professionals and industry experts and help students stand apart from the rest in the job market by adding further value to their carrier development.

Value added courses are added as a part of the curriculum with different domains based on the current industry needs. Along with Value added courses Placement training programs, Leadership enhancement programs, Life skills and induction programs are conducted to improve their skills. The college organizes special training sessions to help the students for developing their communication skills, presentation skills, interview skills, writing skills. This will help the students develop confidence and become better equipped to face the challenges. Students are also motivated to do certification courses through NPTEL.

The main objectives of the value added courses are:

- To provide the understanding of the current industry needs
- To improve the employability skills of the students
- To bridge the skill gaps and make students industry ready.
- To provide an opportunity to develop inter-disciplinary skills.

SENGUNTHAR ENGINEERING COLLEGE

(AUTONOMOUS)

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)
Recognized Under Section 2(f) & 12(B) of the UGC Act, 1956
NAAC Accredited with 'A' Grade

TIRUCHENGODE - 637 205 NAMAKKAL (Dt) TAMILNADU

DEPARTMENT OF CIVIL ENGINEERING

NAME LIST

SL.NO	Reg. No.	Name of the Students
1	201911001	G. Sakthisiva
2	612318103001	Deepika J
3	612318103002	Kondappan A
4	612318103003	Ramya R
5	612318103004	Sabarisan J
6	612318103005	Sakthi Sugumar B
7	612318103006	Sandhiya A
8	612318103007	Sathyamoorthi S
9	612318103008	Thamodharan J
10	201911501	Jothika.B

Coordinator

HOD

PRINCIPAL

SENGUNTHAR ENGINEERING COLLEGE
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TIRUCHENGODE - 637 205 NAMAKKAL (Dt) TAMILNADU

CONTINUOUS INTERNAL ASSESSMENT - APRIL/MAY 2021

ATTENDANCE REPORT

Branch Code/Name: 104/CSE
Subject Code/Name: 19MDC401/Value Added Course - I

Date : 17-08-2021
Session : FN
Semester : IV

S.No	Register Number	Name of the Candidate	Number of Hours attended (out off 30 hours)	Attendance Percentage
1	201912001	CHANDRU.K	28	93%
2	201912002	DHARANIDHARA.N.K	30	100%
3	201912003	DHARMAN M	25	83%
4	201912004	ELAKKIYA D	30	100%
5	201912005	GIRIHARAN K	28	93%
6	201912006	GOWTHAM G	26	87%
7	201912007	HARINI SREE.S	30	100%
8	201912008	IMAYA.B	30	100%
9	201912009	KANAGASABAPATHI E	30	100%
10	201912010	KARTHI D	27	90%
11	201912011	KESAVA RAMAN K	25	83%
12	201912012	LOKESH.M	25	83%
13	201912013	MANOJ KUMAR S	26	87%
14	201912014	MEGANATHAN T	27	90%
15	201912015	NANDHA KUMAR R	28	93%
16	201912016	PRAGATHEESWARI.SS	29	97%
17	201912017	RAJKUMAR S	29	97%
18	201912018	RANJITH KUMAR.R	28	93%
19	201912019	RISHI KUMAR.K	29	97%
20	201912020	RITHISH MANI R	29	97%
21	201912021	SATHISKUMAR.S	29	97%
22	201912022	SIVANESAN M	27	90%
23	201912023	SRIDHAR.P	25	83%
24	201912024	SRINIVASAN.S	30	100%
25	201912025	STANLY J	26	87%
26	201912026	SUJI.D	30	100%
27	201912027	VISWANATHAN S	30	100%
28	201912501	MOHANRAJ M	25	83%

G. Mohesh kumar

G. MOHESH KUMAR, AP/CSE
Signature of the Course Incharge with Name and Designation

HoD

SENGUNTHAR ENGINEERING COLLEGE

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

VALUE ADDED COURSE NAME LIST

Academic Year: 2020-2021 Class : II Year

Total Number of Students: 14

Course Name: 19MDC401- PCB DESIGN

S.NO	Reg. No.	Name of the Student
1	201914001	ABIRAMI V
2	201914002	ARULKUMAR.A
3	201914003	CHANDNI S M
4	201914004	DHARANIDHARAN.S
5	201914005	DHINAKARAN B
6	201914006	KARTHI S
7	201914007	MOHAN A
8	201914008	NISHANTHI P
9	201914009	PRASANTH N
10	201914010	PRIYA N
11	201914011	PRIYADHARSHINI S
12	201914012	RAMESHKUMAR.M
13	201914013	SARAVANAN R
14	201914014	SWEATHA S V

COORDINATOR HOD PRINCIPAL

SENGUNTHAR ENGINEERING COLLEGE

(AUTONOMOUS)

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)
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TIRUCHENGODE - 637 205 NAMAKKAL (Dt) TAMILNADU

ESTD 2001

ISO 9001 REGISTERED

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

II YEAR/IV SEMESTER

19MDC401- VAULE ADDED COURSE - I

NAME LIST

S. No.	Reg. No.	Name of the Student
1	201913001	DINESHKUMAR.D
2	201913002	KOUSIK A
3	201913003	MAGESHVARAN S
4	201913004	PRAVEIN.K.R
5	201913005	RAJAMANI.S
6	201913006	RITHIC KUMAR S R
7	201913007	SRINIVASHINI PRIYA V
8	201913008	VIGNESHWARAN R
9	201913009	VIJAY VARMAN P
10	201913010	VIJAY.S

Faculty In-charge

HOD

Principal

SENGUNTHAR ENGINEERING COLLEGE

(AUTONOMOUS)

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TIRUCHENGODE - 637 205 NAMAKKAL (Dt) TAMILNADU

DEPARTMENT OF CIVIL ENGINEERING

NAME LIST

SL.NO	Reg. No.	Name of the Students
1	201911001	G. Sakthisiva
2	612318103001	Deepika J
3	612318103002	Kondappan A
4	612318103003	Ramya R
5	612318103004	Sabarisan J
6	612318103005	Sakthi Sugumar B
7	612318103006	Sandhiya A
8	612318103007	Sathyamoorthi S
9	612318103008	Thamodharan J
10	201911501	Jothika.B

Coordinator

HOD

PRINCIPAL

19MDC401 | VALUE ADDED COURSE – I (SKETCHUP SOFTWARE) | L T P C 0 0 0 0

OBJECTIVES

The objective of this course will enable students to:

- Draw shapes and lines and to move the surfaces back and forth for turning them into 3D forms quickly and accurately.
- Apply drawing scales, and insert dimensions, graphics, further to learn the sketch up for building design applications.
- View and presenting models in 3D and to make everyday shapes, from 2– D plans, elevations and sections.
- Create rectangles, circles, polygons, arcs and also for moving, scaling and rotating objects with the process of applying, creating and editing materials.

COURSE CONTENTS

3D – modeling using sketch up software.

TOTAL: 15 PERIODS

OUTCOMES

At the end of the course, students can:

- Apply basic 3D modeling and apply basic concepts to create simple building models.
- Create everyday shapes, from 2D plans, elevations; create rectangles, circles, polygons and arcs.
- Move, scale and rotate objects with processes of applying, creating and editing materials.
- Export in 2D and 3D and Map textures on straight and curved objects.

TEXT BOOKS

1. Marcus Ritland, "3D Printing with SketchUp".
2. Paul Lee, "Construction Documents Using SketchUp Pro 2020".

REFERENCES

1. Robert Lang, "Building Blocks of SketchUp".
2. John Romeo, "Create Scenery & Props with SketchUp".

E-RESOURCES

1. https://www.iit.edu/sites/default/files/2021– 02/google_sketchup.pdf(SketchUp Introduction)
2. https://www.naukri.com/learning/design–your–room–using–sketchup–course–udeml724 (Design your Room Using Sketchup)

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SENGUNTHAR ENGINEERING COLLEGE
(AUTONOMOUS)
TIRUCHENGODE - 637 205

SENGUNTHAR

PentaCAD®
...Shaping Competent Professionals

ISO 9001:2008 Certified

Construction CAD

Certificate of Merit and Recognition

This is to certify

J.DEEPIKA

has successfully completed

Certificate Course on

SKETCHUP SOFTWARE

on March 2021

His conduct during this period is good and satisfactory

Location	:	Erode	Duration	:	1.3.2021 –6.3.2021
Centre Head	:	P.Kannan	Month of Issue	:	April 2021
State	:	Tamilnadu			

Authorized Signatory

PentaCAD®
...Shaping Competent Professionals

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Construction CAD

Certificate of Merit and Recognition

This is to certify

B.JOTHIKA

has successfully completed

Certificate Course on
SKETCHUP SOFTWARE
On March 2021

His conduct during this period is good and satisfactory

Location	: Erode	Duration	: *1.3.2021-6.3.2021*
Centre Head	: P.Kannan	Month of Issue	: *April 2021*
State	: Tamilnadu		

Authorized Signatory

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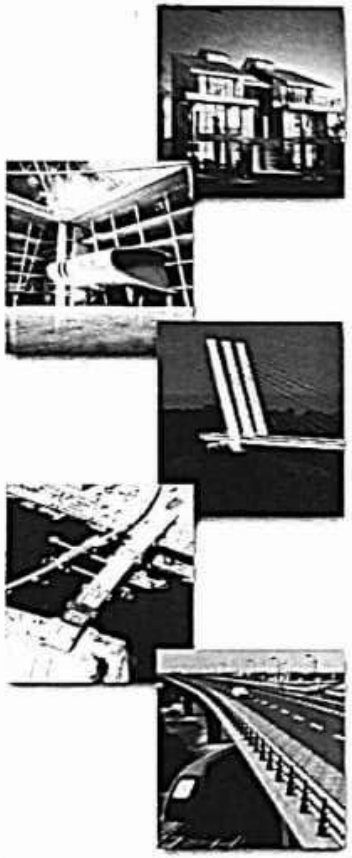

This is to certify

A.KONDAPPAN

has successfully completed

Certificate Course on SKETCHUP SOFTWARE

On March 2021

His conduct during this period is good and satisfactory

Location : Erode
Centre Head : P.Kannan
State : Tamilnadu

Duration : *1.3.2021 - 6.3.2021*
Month of Issue : *April 2021*

Authorized Signatory

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ISO 9001:2008 Certified

Construction CAD

Certificate of Merit and Recognition

This is to certify

R.RAMYA

has successfully completed

Certificate Course on

SKETCHUP SOFTWARE

On March 2021

His conduct during this period is good and satisfactory

Location	:	Erode	Duration	:	1.3.21 - 6.3.21
Centre Head	:	P.Kannan	Month of Issue	:	April 2021
State	:	Tamilnadu			

Authorized Signatory

PentaCAD
...Shaping Competent Professionals

ISO 9001:2008 Certified

Construction CAD

Certificate of Merit and Recognition

This is to certify

J.SABARISAN

has successfully completed

Certificate Course on

SKETCHUP SOFTWARE

On March 2021

His conduct during this period is good and satisfactory

Location : Erode

Centre Head : P.Kannan

State : Tamilnadu

Duration : 1.3.21 – 6.3.21

Month of Issue : April 2021

Authorized Signatory

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Construction CAD

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This is to certify

G.SAKTHI SIVA

has successfully completed

Certificate Course on SKETCHUP SOFTWARE

On March 2021

His conduct during this period is good and satisfactory

Location : Erode

Centre Head : P.Kannan

State : Tamilnadu

Duration : 1.3.21 — 6.3.21

Month of Issue : April 2021

Authorized Signatory

PentaCAD®
...Shaping Competent Professionals

ISO 9001:2008 Certified

Construction CAD

Certificate of Merit and Recognition

This is to certify

A.SANDHIYA

has successfully completed

Certificate Course on

SKETCHUP SOFTWARE

On March 2021

His conduct during this period is good and satisfactory

Location : Erode
Centre Head : P.Kannan
State : Tamilnadu

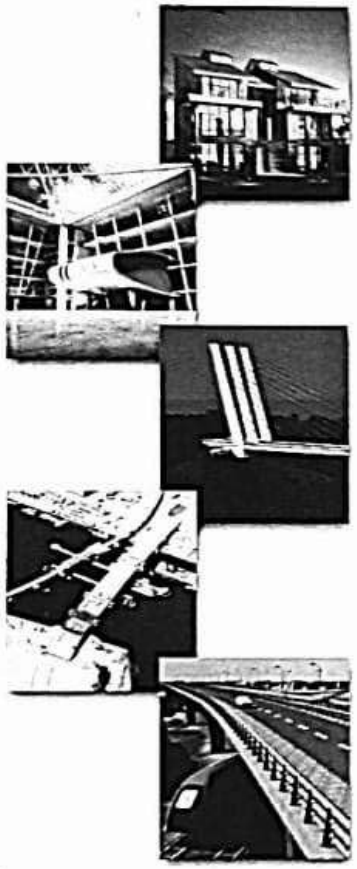
Duration : 1.3.21 – 6.3.21
Month of Issue : April2021

Authorized Signatory

PentaCAD®
...Shaping Competent Professionals

ISO 9001:2008 Certified

Construction CAD



Certificate of Merit and Recognition

This is to certify

S.SATHYAMOORTHI

has successfully completed

Certificate Course on

SKETCHUP SOFTWARE

On March 2021

His conduct during this period is good and satisfactory

Location	:	Erode	Duration	:	1.3.21 - 6.3.21
Centre Head	:	P.Kannan	Month of Issue	:	April 2021
State	:	Tamilnadu			

Authorized Signatory

PentaCAD®
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ISO 9001:2008 Certified

Construction CAD

Certificate of Merit and Recognition

This is to certify

B.SAKTHISUGUMAR

has successfully completed

Certificate Course on

SKETCHUP SOFTWARE

On March 2021

His conduct during this period is good and satisfactory

Location : Erode

Centre Head : P.Kannan

State : Tamilnadu

Duration : 1.3.21- 6.3.21

Month of Issue : April 2021

Authorized Signatory

PentaCAD®
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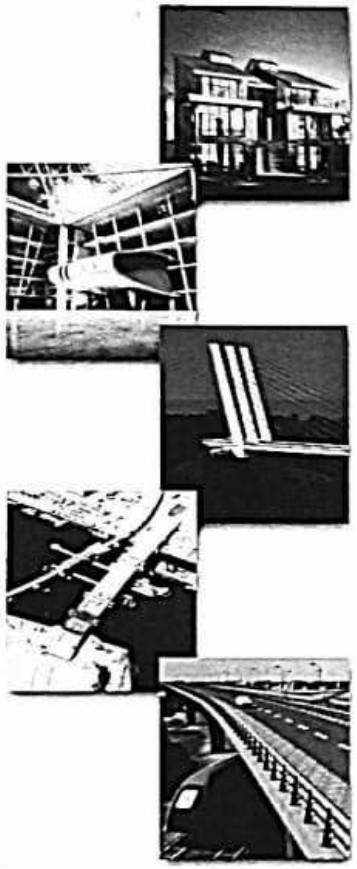
ISO 9001:2008 Certified

Construction CAD

Certificate of Merit and Recognition



This is to certify

J.THAMODHARAN

has successfully completed

Certificate Course on

SKETCHUP SOFTWARE

On March 2021

His conduct during this period is good and satisfactory

Location : Erode

Centre Head : P.Kannan

State : Tamilnadu

Duration : 1.3.21 - 6.3.21

Month of Issue : April 2021

Authorized Signatory

udemy

Certificate no: UC-6d228d10-8ddd-408d-9f79-9cad033ab49b
Certificate url: ude.my/UC-6d228d10-8ddd-408d-9f79-9cad033ab49b
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

Dharani dharan.K

Date **July 27, 2021**
Length **1 total hour**

udemy

Certificate no: UC-93792009-188d-44e1-8bc4-6d371c2d8e39
Certificate url: ude.my/UC-93792009-188d-44e1-8bc4-6d371c2d8e39
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

Viswanathan

Date **July 27, 2021**
Length **1 total hour**

udemy

Certificate no: UC-17911358-92de-4d06-8a6f-d065df74aaf4
Certificate url: ude.my/UC-17911358-92de-4d06-8a6f-d065df74aaf4
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

Pragatheeswari.S

Date **July 27, 2021**
Length **1 total hour**

udemy

Certificate no: UC-7655cd26-0fdf-48ca-a50f-9bf9e70888d7
Certificate url: ude.my/UC-7655cd26-0fdf-48ca-a50f-9bf9e70888d7
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

Suji

Date **July 27, 2021**
Length **1 total hour**

udemy

Certificate no: UC-9cc97b79-4825-401c-9941-339b36293475
Certificate url: ude.my/UC-9cc97b79-4825-401c-9941-339b36293475
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

Imaya.B

Date **July 27, 2021**
Length **1 total hour**

udemy

Certificate no: UC-aa936d29-b3b6-4718-a954-e60fce965cf1
Certificate url: ude.my/UC-aa936d29-b3b6-4718-a954-e60fce965cf1
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

Harini sree. S

Date **July 27, 2021**
Length **1 total hour**

udemy

Certificate no: UC-ae5c6482-f021-4074-82a4-2211b3fb76f4
Certificate url: ude.my/UC-ae5c6482-f021-4074-82a4-2211b3fb76f4
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

ELAKKIYA.D

Date **July 27, 2021**
Length **1 total hour**

udemy

Certificate no: UC-4efdbf69-9fce-4b47-89ec-e65a441ea092
Certificate url: ude.my/UC-4efdbf69-9fce-4b47-89ec-e65a441ea092
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

K.kesava Raman

Date **July 30, 2021**
Length **1 total hour**

udemy

Certificate no: UC-1c7a7c31-5963-4734-b245-0d01003a9828
Certificate url: ude.my/UC-1c7a7c31-5963-4734-b245-0d01003a9828
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

Manoj Kumar.S

Date **Aug. 17, 2021**
Length **1 total hour**

udemy

Certificate no: UC-a03c7fce-c188-4fc9-a6da-dd8eb0407cca
Certificate url: ude.my/UC-a03c7fce-c188-4fc9-a6da-dd8eb0407cca
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

K.Rishikumar

Date **July 27, 2021**
Length **1 total hour**

udemy

Certificate no: UC-60d194bb-1960-440a-a1ea-af8c6d1e4b6f
Certificate url: ude.my/UC-60d194bb-1960-440a-a1ea-af8c6d1e4b6f
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

Meganathan

Date **July 28, 2021**
Length **1 total hour**

udemy

Certificate no: UC-1f70d6a6-ff21-4f11-895e-acff9306311a
Certificate url: ude.my/UC-1f70d6a6-ff21-4f11-895e-acff9306311a
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

Giriharan K

Date **July 30, 2021**
Length **1 total hour**

udemy

Certificate no: UC-f28efab7-67f0-46cd-9071-8530aa8d9b2e
Certificate url: ude.my/UC-f28efab7-67f0-46cd-9071-8530aa8d9b2e
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

Sridhar P

Date **July 27, 2021**
Length **1 total hour**

udemy

Certificate no: UC-3a0dbeb7-921c-475f-9873-7457d52f06b7
Certificate url: ude.my/UC-3a0dbeb7-921c-475f-9873-7457d52f06b7
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

Stanly.J

Date **Aug. 4, 2021**
Length **1 total hour**

udemy

Certificate no: UC-27d6a7b4-8632-46a7-8e02-d0cbb967b1c9
Certificate url: ude.my/UC-27d6a7b4-8632-46a7-8e02-d0cbb967b1c9
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

chandru.K

Date **July 27, 2021**
Length **1 total hour**

udemy

Certificate no: UC-b137328c-3350-46b1-b6a7-bbd5d86c02fe
Certificate url: ude.my/UC-b137328c-3350-46b1-b6a7-bbd5d86c02fe
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

Sathish kumar

Date **July 27, 2021**
Length **1 total hour**

udemy

Certificate no: UC-44903d32-7582-4276-979a-a73495907f62
Certificate url: ude.my/UC-44903d32-7582-4276-979a-a73495907f62
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

S.srinivasan

Date **July 27, 2021**
Length **1 total hour**

udemy

Certificate no: UC-7138a090-4d63-4224-8ca8-c1ae2a674658
Certificate url: ude.my/UC-7138a090-4d63-4224-8ca8-c1ae2a674658
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

Karthi

Date **July 28, 2021**
Length **1 total hour**

udemy

Certificate no: UC-9221dceb-1cf0-48a8-a508-bd193a972713
Certificate url: ude.my/UC-9221dceb-1cf0-48a8-a508-bd193a972713
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

M.Dharman

Date **July 29, 2021**
Length **1 total hour**

udemy

Certificate no: UC-fd195292-32c6-4087-adfc-323840b48de3
Certificate url: ude.my/UC-fd195292-32c6-4087-adfc-323840b48de3
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

Gowtham.G

Date **Aug. 17, 2021**
Length **1 total hour**

udemy

Certificate no: UC-5541fde5-d9f3-47eb-ab73-25e3e98a769e
Certificate url: ude.my/UC-5541fde5-d9f3-47eb-ab73-25e3e98a769e
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

Sivanesan.M

Date **July 27, 2021**
Length **1 total hour**

udemy

Certificate no: UC-ab160fcb-f52e-4cee-9dbf-7f5e23a8359c
Certificate url: ude.my/UC-ab160fcb-f52e-4cee-9dbf-7f5e23a8359c
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

Lokesh M

Date **Aug. 4, 2021**
Length **1 total hour**

udemy

Certificate no: UC-dc015ce4-c1ff-4120-bfba-cd5c09d31e83
Certificate url: ude.my/UC-dc015ce4-c1ff-4120-bfba-cd5c09d31e83
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

Rithish Mani.R

Date **July 29, 2021**
Length **1 total hour**

udemy

Certificate no: UC-dfc89059-38c2-41f7-a145-62122d0ced78
Certificate url: ude.my/UC-dfc89059-38c2-41f7-a145-62122d0ced78
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

Nandha kumar R

Date **Aug. 4, 2021**
Length **1 total hour**

udemy

Certificate no: UC-5ee097ab-bc54-45d0-8a8e-45c007ab0ed2
Certificate url: ude.my/UC-5ee097ab-bc54-45d0-8a8e-45c007ab0ed2
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

Rajkumar S

Date **July 27, 2021**
Length **1 total hour**

udemy

Certificate no: UC-44a667fa-9f27-4e22-961f-d8dd52f68651
Certificate url: ude.my/UC-44a667fa-9f27-4e22-961f-d8dd52f68651
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

Ranjith Kumar

Date **July 30, 2021**
Length **1 total hour**

udemy

Certificate no: UC-ae5c6482-f021-4074-82a4-2211b3fb76f4
Certificate url: ude.my/UC-ae5c6482-f021-4074-82a4-2211b3fb76f4
Reference Number: 0004

CERTIFICATE OF COMPLETION

Computer Hardware Troubleshooting course

Instructors **Ingelbert Philomondhas**

Kanagasabapathi.E

Date **July 27, 2021**
Length **1 total hour**

SENGUNTHAR ENGINEERING COLLEGE

(AUTONOMOUS)

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)
Recognized Under Section 2(f) & 12(B) of the UGC Act, 1956
NAAC Accredited with 'A' Grade

TIRUCHENGODE - 637 205 NAMAKKAL (Dt) TAMILNADU

ESTD 2001

ISO 9001 REGISTERED

19MDC401 **VALUE ADDED COURSE - I**

(PC HARDWARE AND TROUBLESHOOTING)

OBJECTIVES:

- To explore the various hardware components on a computer
- To know about graphics card and types of CPU
- To enhance the knowledge in system diagnostics
- To exploit the problem solving techniques
- To learn the ways of assembling the PC

COURSE CONTENTS

1. Installation of Hardware Components and Identifying the Memory
2. Installing Graphics cards, USB and Configuring it for better performance
3. Virtual Memory Configuration
4. Registry Cleaner, Spyware Detector and Diagnosing Hardware failures
5. Configuring BIOS
6. Troubleshooting and Isolating Computer Problems
7. Working with Motherboard and CPU
8. Assembling Motherboard
9. Fault detection after assembling

OUTCOMES :

Upon completion of the course, students will be able to:

- Explore the various hardware components on a computer
- Know the graphics card usage and types of CPU
- Enhance the knowledge in system diagnostics
- Exploit the problem solving techniques
- Learn the ways of assembling the PC

Faculty In-charge HOD Dean Academics Principal

Head of the Department,
Computer Science and Engineering,
Sengunthar Engineering College,
Tiruchengode-637 205.

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SENGUNTHAR ENGINEERING COLLEGE
(AUTONOMOUS)
TIRUCHENGODE - 637 205

19MDC401 **PCB DESIGN** **L T P C**
- - - -

OBJECTIVES

The student should be made to:

- Understand basics of PCB designing.
- Apply advance techniques, skills and modern tools for designing and fabrication of PCBs.
- Apply the knowledge and techniques to fabricate Multilayer, SMT and HDI PCB.
- Understand concepts of Packaging.
- Create an exposure for PCB Design applications.

UNIT I: INTRODUCTION **9**

Fundamental of electronic components, basic electronic circuits, Basics of printed circuit board designing: Layout planning, general rules and parameters, ground conductor considerations, thermal issues, check and inspection of artwork.

UNIT II: DESIGN RULES **9**

Design rules for Digital circuit PCBs, Analog circuit PCBs, high frequency and fast pulse applications, Power electronic applications, Microwave applications.

UNIT III: PCB DESIGN **9**

Introduction to KiCad, Schematic entry / drawing, netlisting, layering, component foot print library selection & designing, design rules, component placing: Manual & automatic, track routing: automatic & manual, rules: track length, angle, joint & size, Autorouter setup. IPC standards for schematic, designing, material and documentation.

UNIT IV: PCB PRODUCTION TECHNIQUES **9**

Photo printing, film-master production, reprographic camera, basic process for double sided PCBs photo resists, Screen printing process, plating, relative performance and quality control, Etching machines, Solders alloys, fluxes, soldering techniques, Mechanical operations.

UNIT V: PCB TECHNOLOGY TRENDS **9**

Multilayer PCBs, Multi wire PCB, Flexible PCBs, Surface mount PCBs, Reflow soldering, Introduction to High-Density Interconnection (HDI) Technology.

TOTAL: 45 PERIODS

OUTCOMES

The students can:

- Able to carry out any PCB design necessary for their graduation projects.
- Understand PCB design rules.
- Study the PCB design Software tools.
- Understand the PCB production techniques.
- Recognize the technologies used in electronic industry through the practical experience gained in the course.

TEXT BOOKS

1. Printed Circuits Handbook, Sixth Edition, by Clyde F. Coombs, Jr, Happy T. Holden, Publisher: McGraw-Hill Education Year: 2016.
2. Introduction to System-on-Package, Rao R Tummala &Madhavan Swaminathan, McGraw Hill, 2008.

REFERENCES

1. Elaine Rhodes, Developing Printed Circuit Assemblies: From Specifications to Mass Production, 2008.
2. Ki CAD like a PRO, Dr.Peter dalmaris, Second edition, Tech explorations publication.

E - RESOURCES

1. https://nptel.ac.in/courses/108/108/108108031/ (An Introduction to Electronics System packaging.
2. https://www.ee.iitb.ac.in/~pcpandey/courses/ee616/pcblayout_c_aug07.pdf

19MDC401 **PCB DESIGN** **L T P C**
- - - -

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2. Ki CAD like a PRO, Dr.Peter dalmaris, Second edition, Tech explorations publication.

E - RESOURCES

1. https://nptel.ac.in/courses/108/108/108108031/ (An Introduction to Electronics System packaging.
2. https://www.ee.iitb.ac.in/~pcpandey/courses/ee616/pcblayout_c_aug07.pdf

19MDC401	VALUE ADDED COURSE – I	L T P C - - - -

OBJECTIVES

- Being able to carry out simple numerical computations and analyses using MATLAB.
- The objective of the course makes students capable to design their own projects PCB upto industrial grade.
- To prepare students with latest knowledge in mobile technology.
- The purpose of the course is to help circuit designers better understand the operation of a SPICE circuit simulator and semiconductor device models with emphasis on Deep- Submicron (DSM) transistors.

COURSE CONTENTS

1. **MATLAB**
2. **PCB DESIGN**
3. **MOBILE HARDWARE TROUBLE SHOTTING**
4. **PSPICE SIMULATION**

OUTCOMES

At the end of this course, the students are able to:

- Write simple programs in MATLAB to solve scientific and mathematical problems.
- Students are capable to produce PCB of their own circuit.
- Repair and Diagnose the Problem of all kinds of faults in Mobile Phone handsets in Hardware as well Software and rectify the faults using tools and equipment and various software.
- Analyze simple analog and digital circuits using PSpice software.

19MDC401	VALUE ADDED COURSE – I	L T P C - - - -

OBJECTIVES

- Being able to carry out simple numerical computations and analyses using MATLAB.
- The objective of the course makes students capable to design their own projects PCB upto industrial grade.
- To prepare students with latest knowledge in mobile technology.
- The purpose of the course is to help circuit designers better understand the operation of a SPICE circuit simulator and semiconductor device models with emphasis on Deep- Submicron (DSM) transistors.

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3. **MOBILE HARDWARE TROUBLE SHOTTING**
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- Analyze simple analog and digital circuits using PSpice software.

TubeStudy

CERTIFICATE

of learning time

ABIRAMI.V

PCB DESIGN COURSE

180 hours.

ABIRAMI.V

27 July 2021

Date

This document certifies the hours viewed online in the course with a duration of 180 hours.
The course has been made through the TubeStudy Online App available for Android on GooglePlay
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The hours have been counted with the visualization of each lesson of the course in the platform of the App
Developer of the App: Juan Manuel Cubero. e-mail: cuseju2015@gmail.com

TubeStudy

CERTIFICATE

of learning time

ARUL KUMAR.A

(SERIES #6) KICAD LAYOUT

180 hours.

July 29, 2021

ARUL KUMAR.A — Date

ID User: 10325600754079624031 6, Email User: arul01208@gmail.com

This document certifies the hours viewed online in the course with a duration of 180 hours.
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with contents available from third parties in video-courses.
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TubeStudy

CERTIFICATE

of learning time

CHANDNI. S. M

PCB DESIGNING IN KICAD (TAMIL)

180 hours.

26 July 2021

CHANDNI. S. M — Date

ID User: 116438182222569578851, Email User: smchandni1912@gmail.com

This document certifies the hours viewed online in the course with a duration of 180 hours.
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TubeStudy

CERTIFICATE

of learning time

DHARANIDHARAN.S

PCB DESIGNING IN KICAD (TAMIL)

180 hours.

14 September 2021

DHARANIDHARAN.S — Date

ID User: 114810313992980663462, Email User: dharanidharan536@gmail.com

This document certifies the hours viewed online in the course with a duration of 180 hours.
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TubeStudy

CERTIFICATE

of learning time

DHINAKARAN.B

PCB DESIGNING IN KICAD (TAMIL)

180 hours.

July 26, 2021

DHINAKARAN.B — Date

ID User: 116060513311121789516, Email User: 19ec005@scteng.co.in

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TubeStudy

CERTIFICATE

of learning time

S. KARTHI

PCB DESIGNING IN KICAD (TAMIL)

180 hours.

S. KARTHI

July 24, 2021

Date

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TubeStudy

CERTIFICATE

of learning time

MOHAN ANGAPPAN

PCB DESIGNING IN KICAD (TAMIL)

180 hours.

July 24, 2021

MOHAN ANGAPPAN — Date

ID User: 115934387182472766099, Email User: almohan532001@gmail.com

This document certifies the hours viewed online in the course with a duration of 180 hours.
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TubeStudy

CERTIFICATE

of learning time

NISHANTHI . P

PCB DESIGNING IN KICAD (TAMIL)

180 hours.

July 22, 2021

NISHANTHI . P — Date

ID User: 10170286476861790705 5, Email User: 19ec008@scteng.co.in

This document certifies the hours viewed online in the course with a duration of 180 hours.
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TubeStudy

CERTIFICATE

of learning time

N. PRASANTH

PCB DESIGNING IN KICAD (TAMIL)

180 hours.

13 August 2021

N. PRASANTH — Date

ID User: 10394328160969221063 2, Email User: prasanthnataraj2001@gmail.com

This document certifies the hours viewed online in the course with a duration of 180 hours.
The course has been made through the TubeStudy Online App available for Android on GooglePlay
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TubeStudy

CERTIFICATE

of learning time

PRIYA. N

PCB DESIGNING IN KICAD (TAMIL)

180 hours.

July 27, 2021

PRIYA. N — Date

ID User: 115019544170660094019, Email User: priyanadesan0612@gmail.com

This document certifies the hours viewed online in the course with a duration of 180 hours.
The course has been made through the TubeStudy Online App available for Android on GooglePlay
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TubeStudy

CERTIFICATE

of learning time

PRIYADHARSHINI.S

PCB DESIGNING IN KICAD (TAMIL)

180 hours.

PRIYADHARSHINI.S

July 26, 2021

Date

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TubeStudy

CERTIFICATE

of learning time

M.RAMESHKUMAR

PCB DESIGNING IN KICAD (TAMIL)

180 hours.

July 27, 2021

M.RAMESHKUMAR — Date

ID User: 100808972209274796584, Email User: 19ec012@scteng.co.in

This document certifies the hours viewed online in the course with a duration of 180 hours.
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Developer of the App: Juan Manuel Cubero. e-mail: cuseju2015@gmail.com

TubeStudy

CERTIFICATE

of learning time

SARAVANAN.R

PCB DESIGNING IN KICAD (TAMIL)

180 hours.

August 2, 2021

SARAVANAN.R — Date

ID User: 105079885928019277336, Email User: rs.saravanan2001@gmail.com

This document certifies the hours viewed online in the course with a duration of 180 hours.
The course has been made through the TubeStudy Online App available for Android on GooglePlay
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Developer of the App: Juan Manuel Cubero. e-mail: cuseju2015@gmail.com

TubeStudy

CERTIFICATE

of learning time

S.V.SWEATHA

PCB DESIGNING IN KICAD (TAMIL)

180 hours.

14 September 2021

S.V.SWEATHA — Date

ID User: 10328992401370153302 6, Email User: 19ec014@scteng.co.in

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19MDC401 **PCB DESIGN** L T P C
- - - -

OBJECTIVES

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Multilayer PCBs, Multi wire PCB, Flexible PCBs, Surface mount PCBs, Reflow soldering, Introduction to High-Density Interconnection (HDI) Technology.

TOTAL: 45 PERIODS

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Strive 2 Success

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SENGUNTHAR ENGINEERING COLLEGE
(AUTONOMOUS)
TIRUCHENGODE - 637 205

OUTCOMES

The students can:

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- Study the PCB design Software tools.
- Understand the PCB production techniques.
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2. https://www.ee.iitb.ac.in/~pcpandey/courses/ee616/pcblayout_c_aug07.pdf

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(AUTONOMOUS)
TIRUCHENGODE - 637 205

TubeStudy

CERTIFICATE
of learning time

DINESHKUMAR. D

EMBEDDED SYSTEM BY DR.SANTANU CHAUDHURY

6.30hours.

27 July 2021

DINESHKUMAR. D — Date

ID User: 117479902138495145790. Email User: dinesh87092@gmail.com

This document certifies the hours viewed online in the course with a duration of 35.4 hours.
The course has been made through the TubeStudy Online App available for Android on GooglePlay
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The hours have been counted with the visualization of each lesson of the course in the platform of the App
Developer of the App: Juan Manuel Cubero. e-mail: cuseju2015@gmail.com

TubeStudy

CERTIFICATE

of learning time

KOWSICK

EMBEDDED SYSTEM BY DR.SANTANU CHAUDHURY

35.4 hours.

16 September 2021

KOWSICK — Date

ID User: 117479902138495145790, Email User: dinesh37092@gmail.com

This document certifies the hours viewed online in the course with a duration of 35.4 hours.
The course has been made through the TubeStudy Online App available for Android on GooglePlay
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TubeStudy

CERTIFICATE
of learning time

MAGESHWARAN S

EMBEDDED SYSTEMS WITH 8051 MICRO CONTROLLER USING EMBED...

6 hours.

9 August 2021

MAGESHWARAN S — Date

ID User: 108600951335868935272, Email User: rithicshri@gmail.com

This document certifies the hours viewed online in the course with a duration of 6 hours.
The course has been made through the TubeStudy Online App available for Android on GooglePlay
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TubeStudy

CERTIFICATE

of learning time

K.R PRAVEIN

EMBEDDED SYSTEMS DESIGN

10.0 hours.

K.R PRAVEIN

8 August 2021

Date

This document certifies the hours viewed online in the course with a duration of 10.0 hours.
The course has been made through the TubeStudy Online App available for Android on GooglePlay
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TubeStudy

CERTIFICATE
of learning time

RAJAMANI S

EMBEDDED SYSTEMS WITH 8051 MICRO CONTROLLER USING EMBED...

6 hours.

RAJAMANI S

8 August 2021
Date

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The course has been made through the TubeStudy Online App available for Android on GooglePlay
with contents available from third parties in video-courses.
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Developer of the App: Juan Manuel Cubero. e-mail: cuseju2015@gmail.com

TubeStudy

CERTIFICATE

of learning time

RITHICKUMAR S.R

EMBEDDED SYSTEMS WITH 8051 MICRO CONTROLLER USING EMBED...

6 hours.

RITHICKUMAR S.R

7 August 2021

Date

This document certifies the hours viewed online in the course with a duration of 2.3 hours.
The course has been made through the TubeStudy Online App available for Android on GooglePlay
with contents available from third parties in video-courses.
The hours have been counted with the visualization of each lesson of the course in the platform of the App
Developer of the App: Juan Manuel Cubero. e-mail: cuseju2015@gmail.com

TubeStudy

CERTIFICATE

of learning time

V. SRI NIVASHINI PRIYA

EMBEDDED SYSTEMS TUTORIALS

9.1 hours.

27 July 2021

V. SRI NIVASHINI PRIYA — Date

ID User: 104546021927447669972, Email User: srinivi0804@gmail.com

This document certifies the hours viewed online in the course with a duration of 9.1 hours.
The course has been made through the TubeStudy Online App available for Android on GooglePlay
with contents available from third parties in video-courses.
The hours have been counted with the visualization of each lesson of the course in the platform of the App
Developer of the App: Juan Manuel Cubero. e-mail: cuseju2015@gmail.com

TubeStudy

CERTIFICATE

of learning time

R.VIGNESHWARAN

EMBEDDED SYSTEMS DESIGN

10.0 hours.

13 August 2021

R.VIGNESHWARAN

Date

This document certifies the hours viewed online in the course with a duration of 10.0 hours.
The course has been made through the TubeStudy Online App available for Android on GooglePlay
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Developer of the App: Juan Manuel Cubero. e-mail: cuseju2015@gmail.com

TubeStudy

CERTIFICATE

of learning time

VIJAY VARMAN

EMBEDDED SYSTEM BY DR.SANTANU CHAUDHURY

35.4 hours.

16 September 2021

VIJAY VARMAN — Date

ID User: 117479902138495145790, Email User: dinesh37092@gmail.com

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Developer of the App: Juan Manuel Cubero. e-mail: cuseju2015@gmail.com

TubeStudy

CERTIFICATE

of learning time

VIJAY.S

ELECTRICAL - EMBEDDED SYSTEMS

6 hours.

VIJAY.S

July 26, 2021
Date

ID User: 116280548331701012840, Email User: vijayvijayvijay819@gmail.com

This document certifies the hours viewed online in the course with a duration of 35.4 hours.
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NAAC Accredited with 'A' Grade

TIRUCHENGODE - 637 205 NAMAKKAL (Dt) TAMILNADU

VALUE ADDED COURSES OFFERED IN THE DEPARTMENT

Department of Electrical and Electronics Engineering

Academic Year: 2020-2021 Semester: Even

S. No.	Class	Value Added Course	Vendor	Student Strength	Duration	Level/Course Coverage	Outcome
1	II-EEE	Embedded system with 8051 Microcontroller	Tube Study	03	06 Hours	Basic level	Gained Knowledge in Embedded Systems
2	II-EEE	Embedded systems Tutorials	Tube Study	01	09 Hours	Basic level	Gained Knowledge in Embedded Systems
3	II-EEE	Embedded systems	Tube Study	02	06 Hours	Basic level	Gained Knowledge in Embedded Systems
4	II-EEE	Embedded systems Design	Tube Study	02	10 Hours	Basic level	Gained Knowledge in Embedded Systems

Coordinator

H.O.D.

19MDC401 **VALUE ADDED COURSE - I**

OBJECTIVES:

- Enter MATLAB commands, with an emphasis on creating variables, accessing and manipulating data in variables, and creating basic visualizations. Collect MATLAB commands into scripts for ease of reproduction and experimentation.
- This course covers basic to intermediate theory & applications of programmable logic controllers.
- The objective of this course is to enable the students to understand embedded-system programming and apply that knowledge to design and develop embedded solutions. Interaction with peripheral devices.
- The purpose of the course is to help circuit designers better understand the operation of a SPICE circuit simulator and semiconductor device models with emphasis on Deep- Submicron (DSM) transistors.

COURSE CONTENTS

1. Power Electronics System for Smart Grid Renewable Energy System using MATLAB.
2. Design of Wiring and Winding - Electrical CAD.
3. Embedded System and Real Time Programming VHDL Program using Xilinx.
4. PLC programming.
5. Solar power supply on grid and off grid.
6. Electrical safety & maintenance.
7. E-CAD Programming.

OUTCOMES:

Upon completion of the course, students will be able to:

- Able to generate plots and export this for use in reports and presentations.
- Able to program scripts and functions using the Mat lab development environment.
- Students will be able to state basic PLC terminology and their meanings.
- Students will be able to explain and apply the concept of electrical ladder logic, its history,and its relationship to programmed PLC instruction.
- System design and program an embedded system at the basic level develop hardware- softwarecomplex with the use of the National Instruments products.

Faculty In-charge HOD Principal

PRINCIPAL
SENGUNTHAR ENGINEERING COLLEGE
(AUTONOMOUS)
TIRUCHENGODE - 637 205

SENGUNTHAR
Shine 2 Success

Department of Electrical and Electronics Engineering

Value Added Course – Attendance

Academic Year 2020 – 2021

Year: II

Date: 04.02.2021

S.NO	REG.NO	STUDENT NAME	Attendance
1	201913001	DINESH KUMAR.D	Present
2	201913003	MAHESHWARAN.S	Present
3	201913004	PRAVIN.R	Present
4	201913005	RAJAMANI.S	Present
5	201913006	RITHICKKUMAR.S.R	Present
6	201913007	SRI NIVASHINI PRIYA.V	Present
7	201913008	VIGNESHWARAN.R	Present
8	2019130110	VIJAY.S	Present

Faculty In-charge

HOD

Principal

TubeStudy

CERTIFICATE
of learning time

DINESHKUMAR. D

EMBEDDED SYSTEM BY DR.SANTANU CHAUDHURY

6.30hours.

27 July 2021

DINESHKUMAR. D — Date

ID User: 117479902138495145790. Email User: dinesh87092@gmail.com

This document certifies the hours viewed online in the course with a duration of 35.4 hours.
The course has been made through the TubeStudy Online App available for Android on GooglePlay
with contents available from third parties in video-courses.
The hours have been counted with the visualization of each lesson of the course in the platform of the App
Developer of the App: Juan Manuel Cubero. e-mail: cuseju2015@gmail.com

TubeStudy

CERTIFICATE

of learning time

KOWSICK

EMBEDDED SYSTEM BY DR.SANTANU CHAUDHURY

35.4 hours.

16 September 2021

KOWSICK — Date

ID User: 117479902138495145790, Email User: dinesh37092@gmail.com

This document certifies the hours viewed online in the course with a duration of 35.4 hours.
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TubeStudy

CERTIFICATE
of learning time

MAGESHWARAN S

EMBEDDED SYSTEMS WITH 8051 MICRO CONTROLLER USING EMBED...

6 hours.

9 August 2021

MAGESHWARAN S — Date

ID User: 108600951335868935272, Email User: rithicshri@gmail.com

This document certifies the hours viewed online in the course with a duration of 6 hours.
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The hours have been counted with the visualization of each lesson of the course in the platform of the App
Developer of the App: Juan Manuel Cubero. e-mail: cuseju2015@gmail.com

TubeStudy

CERTIFICATE

of learning time

K.R PRAVEIN

EMBEDDED SYSTEMS DESIGN

10.0 hours.

K.R PRAVEIN

8 August 2021

Date

This document certifies the hours viewed online in the course with a duration of 10.0 hours.
The course has been made through the TubeStudy Online App available for Android on GooglePlay
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The hours have been counted with the visualization of each lesson of the course in the platform of the App
Developer of the App: Juan Manuel Cubero. e-mail: cuseju2015@gmail.com

TubeStudy

CERTIFICATE
of learning time

RAJAMANI S

EMBEDDED SYSTEMS WITH 8051 MICRO CONTROLLER USING EMBED...

6 hours.

RAJAMANI S

8 August 2021
Date

This document certifies the hours viewed online in the course with a duration of 6 hours.
The course has been made through the TubeStudy Online App available for Android on GooglePlay
with contents available from third parties in video-courses.
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Developer of the App: Juan Manuel Cubero. e-mail: cuseju2015@gmail.com

TubeStudy

CERTIFICATE

of learning time

RITHICKUMAR S.R

EMBEDDED SYSTEMS WITH 8051 MICRO CONTROLLER USING EMBED...

6 hours.

RITHICKUMAR S.R

7 August 2021

Date

This document certifies the hours viewed online in the course with a duration of 2.3 hours.
The course has been made through the TubeStudy Online App available for Android on GooglePlay
with contents available from third parties in video-courses.
The hours have been counted with the visualization of each lesson of the course in the platform of the App
Developer of the App: Juan Manuel Cubero. e-mail: cuseju2015@gmail.com

TubeStudy

CERTIFICATE

of learning time

V. SRI NIVASHINI PRIYA

EMBEDDED SYSTEMS TUTORIALS

9.1 hours.

27 July 2021

V. SRI NIVASHINI PRIYA — Date

ID User: 104546021927447669972, Email User: srinivi0804@gmail.com

This document certifies the hours viewed online in the course with a duration of 9.1 hours.
The course has been made through the TubeStudy Online App available for Android on GooglePlay
with contents available from third parties in video-courses.
The hours have been counted with the visualization of each lesson of the course in the platform of the App
Developer of the App: Juan Manuel Cubero. e-mail: cuseju2015@gmail.com

TubeStudy

CERTIFICATE

of learning time

R.VIGNESHWARAN

EMBEDDED SYSTEMS DESIGN

10.0 hours.

13 August 2021

R.VIGNESHWARAN

Date

This document certifies the hours viewed online in the course with a duration of 10.0 hours.
The course has been made through the TubeStudy Online App available for Android on GooglePlay
with contents available from third parties in video-courses.
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Developer of the App: Juan Manuel Cubero. e-mail: cuseju2015@gmail.com

TubeStudy

CERTIFICATE

of learning time

VIJAY VARMAN

EMBEDDED SYSTEM BY DR.SANTANU CHAUDHURY

35.4 hours.

16 September 2021

VIJAY VARMAN — Date

ID User: 117479902138495145790, Email User: dinesh37092@gmail.com

This document certifies the hours viewed online in the course with a duration of 35.4 hours.
The course has been made through the TubeStudy Online App available for Android on GooglePlay
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Developer of the App: Juan Manuel Cubero. e-mail: cuseju2015@gmail.com

TubeStudy

CERTIFICATE

of learning time

VIJAY.S

ELECTRICAL - EMBEDDED SYSTEMS

6 hours.

VIJAY.S

July 26, 2021
Date

ID User: 116280548331701012840, Email User: vijayvijayvijay819@gmail.com

This document certifies the hours viewed online in the course with a duration of 35.4 hours.
The course has been made through the TubeStudy Online App available for Android on GooglePlay
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SENGUNTHAR ENGINEERING COLLEGE
(AUTONOMOUS)
(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)
Recognized Under Section 2(f) & 12(B) of the UGC Act, 1956
NAAC Accredited with 'A' Grade
TIRUCHENGODE - 637 205 NAMAKKAL (Dt) TAMILNADU

19MDC401

VALUE ADDED COURSES- I
(SOLIDWORKS)

OBJECTIVES

The main objective of this course is to

- Learn the individual features and functions of SOLIDWORKS, thereby emphasizing proces and procedures for completion of any task.
- Understand the principles of technical drawings to create different 3D models.
- Extend a knowledge of parametric 3D models to design and build mechanical parts and assemblies.
- Know the setup sheets for plotting with text, dimensions, and details.
- Familiar with Parametric Modeling to manufacturing and engineering concepts.

COURSE CONTENTS

a. 2D DRAFTING
b. 3D-MODELLING
c. SURFACE CREATIONS AND ASSEMBLY
d. DRAFTING & DRAWING
e. SHEET METAL FEATURES
f. PHOTO WORKS
g. PROJECT

OUTCOMES

At the end of this course, learners will be able to

- Demonstrate competency with multiple drawing and modification commands.
- Create three-dimensional solid models.
- Build three-dimensional assemblies incorporating multiple solid models.
- Apply industry standards in the preparation of technical mechanical drawings.
- Make simulation of the assemblies incorporating multiple solid models.

TEXT BOOKS

1. John E Matsson, "An Introduction to Solidworks Flow Simulation 2020", SDC Publication, USA, 2020.
2. Prof. Sham Tickoo, "Solidworks 2020 for designers", Purdue University Northwest, USA, 2020.

REFERENCES

1. Alejandro Reyes, "Beginner's Guide to Solidworks 2020", SDC Publication, USA, 2019.
2. Matt Lombard, "Mastering SolidWorks", Wiley Publisher, 2018.

E-RESOURCES

1. https://mlc-cad.com/solidworks-online-resources/
2. https://www.cadimensions.com/video/solidworks-online-resources-webinar/

ETS Academy
TECHNOLOGY PROVIDES NEW ENERGY

Date :12/08/2021

Certificate No :A002188

CERTIFICATE

Of

Appreciation

PRESENTED TO

HARISHRI S

has successfully completed the course in:

SOLIDWORKS

at ETS Academy, ERODE.

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PTC PTC university Authorized Training Center

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Appreciation

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Appreciation

PRESENTED TO

GOWTHAM M

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