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Add on/Certificate programs

Academic Year 2018 – 2019

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Value Added Course

2018-2019

S.No	Name of Add on / Certificate programs offered	Course Code(if any) Collaboration Details	Year of offering	Number of students completing the course this year	Type of Add-on Course
1	Sketchup	-	2018-2019	24	Self Framed Course
2	Data Science	-	2018-2019	41	Self Framed Course
3	Technology Skill Development in PCB design	-	2018-2019	8	Self Framed Course
4	CATIA	-	2018-2019	99	Self Framed Course
5	CREO	-	2018-2019	82	Self Framed Course
6	PC Hardware & Networking Issues	-	2018-2019	78	Self Framed Course

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Ref: MSAJCE / PO 102 / 2018-2019

Date: 5.7.2018

CIRCULAR

This is to inform the following faculty members to attend the meeting on 6.7.2018 in principal chamber to design the curriculum for the ADD-ON program on **" Sketchup".**

S.NO	Faculty Name	Designation	Signature
1	Mr. P.Dharmaraj	Associate Professor	
2	Mr.J.Thiyagarajan	Associate Professor	
3	Mrs. Sharmila Ponammal	Assistant Professor	
4	Mr. Antony Francis .V	Assistant Professor	

Principal

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Chennai-603 103.

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Egattur, Chennai 603 103

DEPARTMENT OF CIVIL ENGINEERING

From ,

Mr.P.Dharmaraj
Head Of The Department
Department of Civil Engineering
Mohamed Sathak A.J.College of Engineering,
Chennai – 603103.

To

The Principal,
Mohamed Sathak A.J.College of Engineering,
Chennai – 603103.

Respected Sir,

Sub: Permission for conducting ADD on course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of Civil Engineering department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

Year/Sem	Title	Dates
II/III - Civil	Sketchup	10/12/2018 to 14/12/2018

Thanking you

Place : Chennai
Date: 5/12/2018

Your's faithfully

5/12/2018
[P. DHARMARAJ]

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Egattur, Chennai 603 103

DEPARTMENT OF CIVIL ENGINEERING

From,

Mr.P.Dharmaraj

Head Of The Department

Department of Civil Engineering

Mohamed Sathak A.J.College of Engineering,
Chennai – 603103.

To

The Principal,

Mohamed Sathak A.J.College of Engineering,

Chennai – 603103.

Respected Sir,

Sub: Assigning of faculty for VAC course curriculum design for the academic year 2018-2019 reg.

Ref: Letter of Requisition for the appointment of faculty for ADD on course curriculum design for the academic year 2018-2019 Dated 10/12/2018 to 14/12/2018.

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD on course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
Sketchup	Ms.Sharmila Ponnammal AP/CIVIL

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Chennai-603 103.

Thanking you

Your's faithfully

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DEPARTMENT OF CIVIL ENGINEERING

Date:5/12/2018

MSAJCE/CIVIL/COE/01/2018-2019

CIRCULAR

It is hereby informed to Second Year students of CIVIL department Sketchup software class is arranged from 10/12/2018 to 14/12/2018at BIM lab. All are advised to attend positively.

5/12/2018

Head of the Department

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DEPARTMENT OF CIVIL ENGINEERING

COURSE MODULE
B.E CIVIL ENGINEERING (REGULATIONS 2017)
VALUE ADDED COURSE

SKETCHUP

L	T	P	C
1	0	2	2

OBJECTIVES:

The objective of this course is to learn how to represent an Interior Design concept in a 3-dimensional visual computer environment. The student will learn about the basic drawing tools used in SketchUp, and then use those tools to draft and build a 3D conceptual model.

Module I: **8**

Introduction to Sketchup software – Basic tools- Modeling practice- Openings- Creating materials. Edit materials- Warehouse- Project 1: Interior Space – Bedroom

Module II: **8**

Object placement- Section plane - Layouts - Basic renders. Structures phase

Module III: **8**

Detailing phase- Lighting phase- Test renders- Render phase- Presentation phase.

Module IV: **8**

Set up layout– Image hierarchy- scale – Creating a proposed street style.

Module V: **8**

Inserting renderings- Dimensions and labels- Title block.

TOTAL: 40 HOURS

OUTCOMES:

Upon completion of the course,

- Generate clear, visual RFI graphics. Create dimensionally accurate, highly-detailed 3D models. Able to develop various approaches in developing the Building models.

TEXT BOOKS:

1. Marcus Ritland(May 21, 2014). 3D Printing with SketchUp, Packt Publishing; Illustrated edition
2. Alex Schreye(October 26, 2015)r, Architectural Design with SketchUp: 3D Modeling, Extensions, BIM, Rendering, Making, and Scripting (2nd Edition), Wiley; 2nd edition

REFERENCES:

1. Paul Lee(January 15, 2020), Construction Documents using SketchUp Pro and LayOutViewsion Virtual Environments Ltd.
2. AdrianaGranadosSeptember 1, 2012, Designing Kitchens with SketchUp.

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Sl. No.	Topic	T / R* Book	Periods Required	Mode of Teaching
1	Introduction to Sketchup software	TB	1	Online
2	Basic tools	TB	1	Online
3	Modeling practice	TB	1	Online
4	Openings	RB	1	Online
5	Creating materials	TB	1	Online
6	Edit materials	TB	1	Online
7	Warehouse	TB	1	Online
8	Project 1: Interior Space - Bedroom	RB	2	Online
9	Object placement	TB	1	Online
10	Section plane	RB	2	Online
11	Layouts	RB	2	Online
12	Basic renders	TB	2	Online
13	Structures phase	RB	2	Online
14	Detailing phase	RB	2	Online
15	Lighting phase	TB	2	Online
16	Test renders	TB	2	Online
17	Render phase	TB	2	Online
18	Presentation phase	TB	1	Online
19	Set up layout	RB	2	Online

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20	Image hierarchy	TB	2	Online
21	scale	TB	1	Online
22	Creating a proposed street style	TB	2	Online
23	Inserting renderings	RB	2	Online
24	Dimensions and labels	TB	2	Online
25	Title block	TB	2	Online

Quiz / Mini Projects / Model Develpoed if any
Quiz Conducted

Text / Reference Books	
1	Marcus Ritland(May 21, 2014). 3D Printing with SketchUp, Packt Publishing; Illustrated edition.
2	Alex Schreye(October 26, 2015)r, Architectural Design with SketchUp: 3D Modeling, Extensions, BIM, Rendering, Making, and Scripting (2nd Edition), Wiley; 2nd edition.

Website / URL References	
1	Paul Lee(January 15, 2020), Construction Documents using SketchUp Pro and LayOutViewsion Virtual Environments Ltd.
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Value added course summary 2018 - 19

Course code and Name : Sketch up

Course Duration : 45 Hours

Year offered : II year Students 2018-19

Course Instructor : Ms.Sharmila Ponnammal AP/CIVIL

Course Outcome :

Upon completion of the course,

- Generate clear, visual RFI graphics. Create dimensionally accurate, highly-detailed 3D models. Able to develop various approaches in developing the Building models.

Course Type : Add on Course

Theory and Practical with Hands on sessions

Assessment Mode :

Attendance : 45 Hours

No. of Participants : 24

Scheme of Exam : MCQ Online through GCR

Date of Exam : 17/12/2018

Course Coordinator **HoD**

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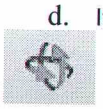
DEPARTMENT OF CIVIL ENGINEERING
Assessment

1.

What action does the Push/Pull tool perform?

a. It allows you to move around your design
b. It allows you to create a 3D object
c. It moves your model upwards
d. It allows you to add dimensions to your design

2. 

What action does the Orbit tool perform?

a. Allows you to move your view around the design at any angle.
b. Allows you to move your view up, down, left and right, without changing the angle of your view.
c. It allows you to send your model into space.
d. Allows you to zoom in and out of the design.

3.

What action does the Zoom tool perform?

a. Allows you to push and pull shapes or faces in to, or out of your model.
b. Allows you to move your model quickly.
c. Allows you to zoom in and out of the design.
d. Can be used to duplicate the profile of a face along a path.

4.

What action does the Pan tool perform?

a. Allows you to move your view up, down, left and right, without changing the angle of your view.
b. Allows you to copy a component as many times as you wish.
c. Allows you to move your view around the design at any angle.
d. Allows you to make pan shaped holes in your model.

5.

What is the name of this tool?

a. Line tool
b. Wheel tool
c. Circle tool.
d. Ark tool

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6.

What is the name of this tool?

a. Circle tool
b. Button tool
c. Hole tool
d. Round tool

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DEPARTMENT OF CIVIL ENGINEERING

Assessment

7.

What is the name of this tool?

a. Pencil tool
b. Line tool
c. Eraser tool
d. Colour tool

8.

What is the name of this tool?

a. Box tool
b. Rectangle tool
c. Push/Pull tool
d. View tool

9.

What is the name of this tool?

a. Trash tool
b. Pour tool
c. Paint Bucket tool
d. Follow Me tool

10.

What is the name of this tool?

a. Push/Pull tool
b. Follow Me tool
c. Move tool
d. Arrow tool

11.

What is the name of this tool?

a. Make Component tool
b. 3D tool
c. Rectangle tool
d. Ghost tool

12. Which tool allows you do delete a line or edge?

a. Follow Me tool
b. Eraser tool
c. Paint Bucket tool
d. Line tool

13. How can you make a slanted edge in Google SketchUp?

a. Using the Push/Pull tool
b. Using the Slant Edge button
c. Using the Pan tool
d. Using the Move tool

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DEPARTMENT OF CIVIL ENGINEERING

Assessment

14.

What is the name of this tool?

a. Pan tool
b. Compass tool
c. Move tool
d. Expand tool

15. What does **Render** mean?

a. To add colour or texture to your model
b. To draw your model
c. To save your model
d. To expand your model

16. How can you easily **add detail** to a SketchUp model along a path?

a. Using the Follow Me tool
b. Copy the detail
c. Using the Arc tool
d. Draw more lines on the existing drawing

17. What does the Make **Component tool** do?

a. It makes a 3D object
b. It can be used to duplicate the profile of a face along a path
c. It erases lines or edges in your model
d. It can single out the selected part of your model and make it into a part or component

18. What does the **Tape Measure** tool do?

a. It allows you to measure accurately and draw guidelines on your model
b. It wraps your model in masking tape
c. It moves components in your model
d. It changes your view to 2D

19. What is an **Inference Point?**

a. The top of your model
b. Inference Points are the various points of an edge or line indicated by your cursor
c. Interference from the internet
d. A dimension of part of your model

20. What does **Coplanar** mean?

a. On the same plane or surface
b. Two parts of a model that are joined together
c. The ability for SketchUp to line up two edges
d. To delete an axis

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DEPARTMENT OF CIVIL ENGINEERING

Assessment

17/20

1.

What action does the Push/Pull tool perform?

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2.

What action does the Orbit tool perform?

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What action does the Zoom tool perform?

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4.

What action does the Pan tool perform?

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5.

What is the name of this tool?

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b. Wheel tool
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What is the name of this tool?

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DEPARTMENT OF CIVIL ENGINEERING

Assessment

7.

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b. Follow Me tool
c. Move tool
d. Arrow tool

11.

What is the name of this tool?

a. Make Component tool
b. 3D tool ✓
c. Rectangle tool
d. Ghost tool

12. Which tool allows you do delete a line or edge?

a. Follow Me tool
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c. Paint Bucket tool
d. Line tool ✓

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13. How can you make a slanted edge in Google SketchUp?

a. Using the Push/Pull tool
b. Using the Slant Edge button ✓
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d. Using the Move tool

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DEPARTMENT OF CIVIL ENGINEERING

Assessment

14.

What is the name of this tool?

a. Pan tool
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15. What does **Render** mean?

a. To add colour or texture to your model
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d. To expand your model ✓

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17. What does the Make **Component tool** do?

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DEPARTMENT OF CIVIL ENGINEERING

Academic year 2018 – 2019

Enrolled Student Name List

Sl.No	Name of theStudent	Register No.	Certificate Program Sketch up
1	AMSHA AFRIDEEN A	311817103001	✓
2	ANTONY DARSHAN A	311817103002	✓
3	ARUN M	311817103003	✓
4	ASIF ALI J	311817103004	✓
5	FAREED AHAMED S	311817103005	✓
6	IJAZ AHAMED P M	311817103006	✓
7	ISMATH ALI M	311817103007	✓
8	JAFFER ABBAS M A	311817103008	✓
9	KISHORE KUMAR R	311817103009	✓
10	KISHORE KUMAR S	311817103010	✓
11	MOHAMED MUKHTAR	311817103011	✓
12	MOHAMED NATHKAR SHIFU M S	311817103012	✓
13	MOHAMED SAMEEM MOHIDEEN A	311817103014	✓
14	MOHAMED SHAHEEM S B	311817103015	✓
15	MOHAMED TAJAMMUL	311817103016	✓
16	MOHAMED UMAR M	311817103017	✓
17	MOHAMMED AMEEN A	311817103018	✓
18	MOHAMMED ISMAAIL S	311817103019	✓
19	MOHAMMED YASIR T	311817103021	✓
20	SAMEEMUDEEN A	311817103023	✓
21	SURENDER M	311817103025	✓
22	SYED MOHAMMED USAID MOHIUDDIN	311817103026	✓
23	ZAHID AHAMED S	311817103027	✓
24	NAINAMOHAMEDBASIDH D	311817103701	✓

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Sl.No	Name of theStudent	Register No.	10/12/18	11/12/18	12/12/18	13/12/18	14/12/18
1	AMSHA AFRIDEEN A	311817103001					
2	ANTONY DARSHAN A	311817103002					
3	ARUN M	311817103003					
4	ASIF ALI J	311817103004					
5	FAREED AHAMED S	311817103005					
6	IJAZ AHAMED P M	311817103006					
7	ISMATH ALI M	311817103007					
8	JAFFER ABBAS M A	311817103008					
9	KISHORE KUMAR R	311817103009					
10	KISHORE KUMAR S	311817103010					
11	MOHAMED MUKHTAR	311817103011					
12	MOHAMED NATHKAR SHIFU M S	311817103012					
13	MOHAMED SAMEEM MOHIDEEN A	311817103014					
14	MOHAMED SHAHEEM S B	311817103015					
15	MOHAMED TAJAMMUL	311817103016					
16	MOHAMED UMAR M	311817103017					
17	MOHAMMED AMEEN A	311817103018					
18	MOHAMMED ISMAAIL S	311817103019					
19	MOHAMMED YASIR T	311817103021					
20	SAMEEMUDEEN A	311817103023					
21	SURENDER M	311817103025					
22	SYED MOHAMMED USAID MOHIUDDIN	311817103026					
23	ZAHID AHAMED S	311817103027					
24	NAINAMOHAMEDBASIDH D	311817103701					

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Sl.No	Name of theStudent	Register No.	Status of Qualifying
1	AMSHA AFRIDEEN A	311817103001	Qualified
2	ANTONY DARSHAN A	311817103002	Qualified
3	ARUN M	311817103003	Qualified
4	ASIF ALI J	311817103004	Qualified
5	FAREED AHAMED S	311817103005	Qualified
6	IJAZ AHAMED P M	311817103006	Qualified
7	ISMATH ALI M	311817103007	Qualified
8	JAFFER ABBAS M A	311817103008	Qualified
9	KISHORE KUMAR R	311817103009	Qualified
10	KISHORE KUMAR S	311817103010	Qualified
11	MOHAMED MUKHTAR	311817103011	Qualified
12	MOHAMED NATHKAR SHIFU M S	311817103012	Qualified
13	MOHAMED SAMEEM MOHIDEEN A	311817103014	Qualified
14	MOHAMED SHAHEEM S B	311817103015	Qualified
15	MOHAMED TAJAMMUL	311817103016	Qualified
16	MOHAMED UMAR M	311817103017	Qualified
17	MOHAMMED AMEEN A	311817103018	Qualified
18	MOHAMMED ISMAAIL S	311817103019	Qualified
19	MOHAMMED YASIR T	311817103021	Qualified
20	SAMEEMUDEEN A	311817103023	Qualified
21	SURENDER M	311817103025	Qualified
22	SYED MOHAMMED USAID MOHIUDDIN	311817103026	Qualified
23	ZAHID AHAMED S	311817103027	Qualified
24	NAINAMOHAMEDBASIDH D	311817103701	Qualified

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Ref: MSAJCE / PO 103 / 2018-2019

Date: 5.7.2018

CIRCULAR

This is to inform the following faculty members to attend the meeting on 6.7.2018 in principal chamber to design the curriculum for the ADD-ON program on **" Datascience".**

S.NO	Faculty Name	Designation	Signature
1	DR.K. Venkatramanan	Professor	
2	Dr. K. Manivannan	Professor	
3	Mrs. J.Nirmala	Assistant Professor	
4	Mr.A.Syed Ismail	Assistant Professor	

Principal

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From,

The Head of Department,

Department of CSE & IT,

Mohamed Sathak A.J.College of Engineering,

Chennai – 603103.

To,

The Principal,

Mohamed Sathak A.J.College of Engineering,

Chennai – 603103.

Respected Madam/Sir,

Sub: Permission for conducting ADD ON course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of CSE & IT department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

Year/Sem	Title	Dates
IV/VIII	DATA SCIENCE	05/02/2019 – 13/02/2019

Thanking you

yours faithfully

Place: Chennai

Date: 01/02/2019

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From,

The Head of Department,

Department of Computer Science and Engineering & IT,

Mohamed Sathak A.J.College of Engineering,

Chennai- 603103.

Respected Madam/Sir,

Sub: Assigning of faculty for VAC course curriculum design for the academic year 2018-2019 reg.

Ref: Letter of Requisition for the appointment of faculty for ADD on course curriculum design for the academic year 2018-2019 Dated: 05/02/2019 to 13/02/2019.The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD on course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
DATA SCIENCE	Mrs.J.Nirmala AP/CSE

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DEPARTMENT OF CSE & IT

Date: 04/02/2019

Ref:01/MSAJCE/COMMON CIRCULAR/EVEN/2018-2019

CIRCULAR

Our department is organizing a "VAC" on DATA SCIENCE during 05/02/2019 to 13/02/2019. The IV Year Computer Science and Engineering and Information Technology Students register with Mrs.J.Nirmala AP/CSE on or before 04/02/2019.

The session schedule is as follows

Timing: 1.30 PM to 3.30 PM

Resource Person: Mrs.J.Nirmala AP/CSE

Venue: Computer Lab - II

HOD

COPY TO:

Dept. of CSE & IT

IV Year CSE & IT Students

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COURSE MODULE

Course Objectives:

1) To learn the fundamentals of data science.
2) To develop design thinking capability to build big-data
3) To understand the machine learning algorithms and develop models for big data problems.
4) To practice the important data science modules NumPy, SciPy and Matplotlib.
5) To handle the input/output files in Python and apply the statistical processing of data using Pandas.

MODULE-1

INTRODUCTION **5**

Introduction Big Data and Data Science - Big Data Analytics, Business intelligence vs. Big data- Data Science Process Overview – Defining goals – Retrieving data – Data preparation – Data exploration – Data modelling – Presentation -Big data frameworks.

MODULE-2

DATA PROCESSING **5**

Big Data: General techniques for handling large data -Data Pre-processing and Feature Selection:Data cleaning -Data integration -Data Reduction -Data Transformation and Data Discretization, Feature Generation and Feature Selection.

MODULE-3

MACHINE LEARNING ALGORIHMS **5**

Machine Learning: Machine learning – Modelling Process – Training model – Validating model – Predicting new observations –Classifiers - Decision tree - Naive Bayes - k-Nearest Neighbours (k-NN), k-means – SVM Association Rule mining – Ensemble methods.

MODULE-4

DATA VISUALIZATION **5**

Data Visualization: Introduction to data visualization-NumPy arrays – 1-d, multidimensional arrays and matrices; SciPy – Scientific Computing library of Python – Introduction, Basic functions, Special functions, scipy.integrate, scipy.optimize, scipy.interpolate.

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MODULE-5

PLOTTING WITH PYPLOT

5

Python Plotting: PyPlot – Basic Plotting; Logarithmic Plots; Plots with multiple axes; Matplotlib – interactive functions 3d plotting; Pandas – Introduction, Data Frame, Reading and writing CSV, XLS files, Working with missing data, categorical data, data visualization with pandas-Development problems related to Data Science

Course Outcomes:

The students will be able to

CO1: Apply the data analysis techniques for applications handling large data

CO2: Demonstrate the various machine learning algorithms used in data science process.

CO3: Develop hands-on skills using the tools, languages, and libraries used by data scientists

CO4: Read and write data from/to files in Python programs, apply data pre-processing techniques and develop algorithmic solutions to data science related problems.

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CO PO Mapping

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
The students will be able to CO1: Apply the data analysis techniques for applications handling large data	3	3	3					2		2	3	3
CO2: Demonstrate the various machine learning algorithms used in data science process.	2	2	2									
CO3: Develop hands-on skills using the tools, languages, and libraries used by data scientists	3	2	3									

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Agenda and Topics

Sl. No.	Topic	Periods Required
1	Fundamentals of Data Analytics	2
2	Basics concepts in Statistics for Data Analytics	3
3	Advanced concepts in Statistics for Data Analytics	2
4	Python essential for Data Science	3
5	Data Science with Python	2
6	Supervised Learning	3
7	Unsupervised Learning	2
8	Machine Learning with Python	2
9	Artificial intelligence with Python	3
10	Tableau	2
11	Big Data Introduction	3
12	Introduction to Database	2
13	Hadoop	3
14	Spark	2

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DEPARTMENT OF CSE

ACADEMIC YEAR 2018-2019

ENROLLED STUDENTS NAMELIST FOR DATA SCIENCE COURSE

DATE: 05.02.2019 to 13.02.2019

S.No	Register No	Name of the Student
1	311815104002	ARUN REKHA .A
2	311815104003	ASIRA BANU .I
3	311815104004	ASMA .P.A
4	311815104005	ATHEEQ AHED KHAN
5	311815104006	BALAJI .P
6	311815104007	DEVA SAHAYAM .G
7	311815104008	HARISHA .S
8	311815104010	HIDHAYATHUN NASEERA .K.R
9	311815104011	IRFANA .J
10	311815104012	IRFAN KHAN .H.S
11	311815104013	JAMELA RUKSHANA .A
12	311815104015	KARTHIKEYAN .R
13	311815104017	MAHAJABEEN SULTHANA .B
14	311815104018	MAHISHA VARSHINI .C
15	311815104019	MANO RAJA .G
16	311815104020	MEERAAN SHA .A.R
17	311815104022	MOHAMMED MAAHIL .S
18	311815104023	MOHAMMED MOHSIN
19	311815104024	MOHAMMED ASIQ .K
20	311815104025	MOHAMMED IMRAN .A
21	311815104027	MUTHU MOHAMED ALI .L.A
22	311815104029	PRADDEPA .N
23	311815104031	RAHILA SULTANA BEGUM .M
24	311815104032	RESHMA BANU .A
25	311815104033	SELCIA .R
26	311815104035	SIVAKUMAR .M
27	311815104037	SURUTHI .E
28	311815104038	SAROOP .A.S
29	311815104039	THOUFIQ ANSARI .S
30	311815104040	VIKASH .L

Head-Training

Signature of HOD with date

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DEPARTMENT OF IT

ACADEMIC YEAR 2018-2019

ENROLLED STUDENTS NAMELIST FOR DATA SCIENCE COURSE

DATE: 05.02.2019 to 13.02.2019

S.No	Register No	Name of the Student
1	311815205001	ABBASUDEEN N
2	311815205002	ABIRAMI R
3	311815205003	AEJAS BASHA M
4	311815205006	MAGESH G
5	311815205007	MOHAMMED ARBAZ ALI A
6	311815205009	MOHAMMED YAHIYA A
7	311815205010	SATHISH KUMAR S
8	311815205011	SIDDHARTH T
9	311815205012	SOFIYA FATHIMA AM
10	311815205013	VIGNESH J K
11	311815205301	ATHIYAMAN G

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Signature of HOD with date

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ATTENDANCE SHEET FOR CSE

ACADEMIC YEAR 2018-2019

S.No	Name of the Student	Attendance of the Participants													
		05/02/2019		06/02/2019		07/02/2019		08/02/2019		09/02/2019		12/02/2019		13/02/2019	
		FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1	ARUN REKHA .A	/	/	/	/	/	/	a	a	/	/	/	/	/	/
2	ASIRA BANU .I	/	/	/	/	a	a	/	/	/	/	/	/	/	/
3	ASMA .P.A	/	/	/	/	/	/	/	/	/	/	/	/	/	/
4	ATHEEQ AHED KHAN	/	/	/	/	/	/	/	/	/	/	/	/	/	/
5	BALAJI .P	a	a	/	/	/	/	a	a	/	/	/	/	/	/
6	DEVA SAHAYAM .G	/	/	/	/	/	/	/	/	a	a	a	/	/	/
7	HARISHA .S	/	/	a	a	/	/	/	/	/	/	/	/	/	/
8	HIDHAYATHUN NASEERA .K.R	/	/	/	/	/	/	/	/	a	/	/	/	/	/
9	IRFANA .J	/	/	/	/	a	a	/	/	/	a	/	/	/	/
10	IRFAN KHAN .H.S	/	/	/	/	/	/	/	/	/	/	/	a	/	/
11	JAMELA RUKSHANA .A	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	KARTHIKEYAN .R	/	/	/	/	/	/	/	/	/	/	/	/	a	a
13	MAHAJABEEN SULTHANA .B	/	/	/	/	/	/	/	/	/	/	/	/	/	/
14	MAHISHA VARSHINI .C	/	/	/	/	a	a	/	/	/	/	/	/	/	/
15	MANO RAJA .G	a	a	/	/	/	/	a	a	/	/	/	/	/	/
16	MEERAAN SHA .A.R	/	/	/	/	/	/	/	/	/	/	/	/	/	/
17	MOHAMMED MAAHIL .S	/	/	/	/	/	/	/	/	/	/	/	a	a	a
18	MOHAMMED MOHSIN	/	/	/	/	/	/	/	/	/	/	/	/	/	/
19	MOHAMMED ASIQ .K	/	/	/	/	/	/	/	/	/	/	a	a	/	/
20	MOHAMMED IMRAN .A	/	/	/	/	/	/	/	/	/	/	/	/	/	/
21	MUTHU MOHAMED ALI .L.A	/	/	/	/	/	/	/	/	/	/	/	/	/	/
22	PRADDEPA .N	/	/	a	a	/	/	/	/	/	/	/	/	/	/
23	RAHILA SULTANA BEGUM .M	a	/	/	/	/	/	/	/	/	/	/	/	/	/
24	RESHMA BANU .A	/	/	/	/	/	/	/	/	a	a	/	/	/	/
25	SELCIA .R	/	/	/	/	/	/	a	a	/	/	/	/	/	/
26	SIVAKUMAR .M	/	/	/	/	/	/	/	/	/	/	/	/	/	/
27	SURUTHI .E	/	/	/	/	/	/	/	/	/	/	a	/	/	/
28	SAROOP .A.S	/	/	/	/	/	/	/	/	/	/	/	/	/	/

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29	THOUFIQ ANSARI .S	/	/	/	/	/	/	a	/	/	/	a	a	/	/
30	VIKASH .L	/	/	/	/	a	a	a	/	/	/	/	/	/	/
Total no.of Students Present		27	28	28	28	26	26	24	26	27	27	26	26	28	28
Total no.of Students Absent		3	2	2	2.	4	4	6	4	3	3	4	4	2	2.
Signature of the Coordinator		In	In	In	In	In	In	In	In	In	In	In	In	In	In
Signature of the HOD															

Head-Training

Signature of HOD with date

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ATTENDANCE SHEET FOR DATASCIENCE COURSE

ACADEMIC YEAR 2018-2019

S.No	Name of the Student	Attendance of the Participants													
		05/02/2019		06/02/2019		07/02/2019		08/02/2019		09/02/2019		12/02/2019		13/02/2019	
		FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1	ABBASUDEEN N	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	ABIRAMI R	/	/	/	/	a	a	/	/	/	/	/	/	/	/
3	AEJAS BASHA M	/	/	/	/	/	/	/	/	/	/	/	/	/	/
4	MAGESH G	/	/	/	/	/	/	/	/	/	/	a	a	/	/
5	MOHAMMED ARBAZ ALI A	a	/	/	/	/	/	a	a	/	/	/	/	/	/
6	MOHAMMED YAHIYA A	/	/	/	/	/	/	/	/	/	/	/	/	/	/
7	SATHISH KUMAR S	/	/	/	/	/	/	/	/	/	/	/	/	/	/
8	SIDDHARTH T	/	/	/	/	/	/	/	/	/	/	a	a	/	/
9	SOFIYA FATHIMA AM	/	/	/	/	/	/	/	/	/	/	/	/	/	/
10	VIGNESH J K	/	/	/	/	/	/	/	/	/	/	/	/	/	/
11	ATHIYAMAN G	/	/	/	/	a	a	/	/	/	/	a	a	/	/
Total no.of Students Present		10	11	11	11	9	9	10	10	11	11	8	8	11	11
Total no.of Students Absent		1	–	–	–	2	2	1	1	–	–	3	3	–	–
Signature of the Coordinator		Jr	Jr	Jr	Jr	Jr	Jr	Jr	Jr	Jr	Jr	Jr	Jr	Jr	Jr
Signature of the HOD															

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Signature of HOD with date

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Assessment Test

1. Which of the following is performed by Data Scientist?

a) Define the question

b) Create reproducible code

c) Challenge results

d) All of the mentioned

2. Which of the following is the most important language for Data Science?

a) Java

b) Ruby

c) R

d) None of the mentioned

3. Point out the wrong statement.

a. Merging concerns combining datasets on the same observations to produce a result with more variables

b) Data visualization is the organization of information according to preset specifications

c) Subsetting can be used to select and exclude variables and observations

d) All of the mentioned

4. Which of the following is one of the key data science skills?

a) Statistics

b) Machine Learning

c) Data Visualization

d) All of the mentioned

5. Which of the following is characteristic of Processed Data?

a) Data is not ready for analysis

b) All steps should be noted

c) Hard to use for data analysis

d) None of the mentioned

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6. Which of the following characteristic of big data is relatively more concerned to data science?

a) Velocity

b) Variety

c) Volume

d) None of the mentioned

7. Which of the following step is performed by data scientist after acquiring the data?

a) Data Cleansing

b) Data Integration

c) Data Replication

d) All of the mentioned

8. Data that summarize all observations in a category are called _____ data.

a) frequency

b) summarized

c) raw

d) none of the mentioned

9. Which of the following data is put into a formula to produce commonly accepted results?

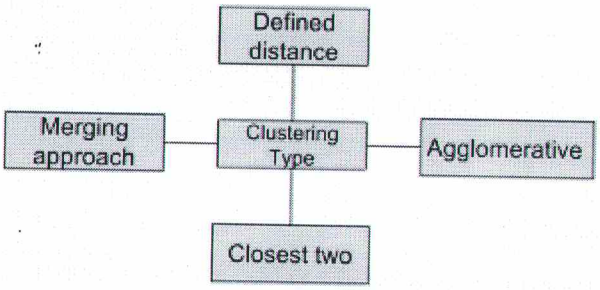
a) Raw

b) Processed

c) Synchronized

d) All of the Mentioned

10. Which of the following clustering type has characteristic shown in the below figure?



a) Partitional

b) Hierarchical

c) Naive bayes

d) None of the mentioned

11. Which of the following function can create the indices for time series type of splitting?

a) newTimeSlices

b) createTimeSlices

c) binTimeSlices

d) none of the mentioned

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12. caret does not use the proxy package.

a) True

b) False

13. Which of the following package tools are present in caret?

a) pre-processing

b) feature selection

c) model tuning

d) all of the mentioned

14. All pandas data structures are ___ mutable but not always _____mutable.

a) size, value

b) semantic, size

c) value, size

d) none of the mentioned

15. Which of the following statement will import pandas?

a) import pandas as pd

b) import panda as py

c) import pandaspy as pd

d) all of the mentioned

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Evaluation Sheet

Arun Rekha A
311815104002.
13-02-2019.

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Assessment Test

1. Which of the following is performed by Data Scientist?

a) Define the question
b) Create reproducible code
c) Challenge results
d) All of the mentioned ✓

2. Which of the following is the most important language for Data Science?
a) Java
b) Ruby
c) R ✓
d) None of the mentioned

3. Point out the wrong statement.

a. Merging concerns combining datasets on the same observations to produce a result with more variables
b) Data visualization is the organization of information according to preset specifications
c) Subsetting can be used to select and exclude variables and observations ✗
d) All of the mentioned

4. Which of the following is one of the key data science skills?
a) Statistics
b) Machine Learning ✓
c) Data Visualization
d) All of the mentioned

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5. Which of the following is characteristic of Processed Data?

(a) Data is not ready for analysis

b) All steps should be noted

c) Hard to use for data analysis

d) None of the mentioned

6. Which of the following characteristic of big data is relatively more concerned to data science?

a) Velocity

(b) Variety

c) Volume

d) None of the mentioned

7. Which of the following step is performed by data scientist after acquiring the data?

(a) Data Cleansing

b) Data Integration

c) Data Replication

d) All of the mentioned

8. Data that summarize all observations in a category are called _____ data.

a) frequency

(b) summarized

c) raw

d) none of the mentioned

9. Which of the following data is put into a formula to produce commonly accepted results?

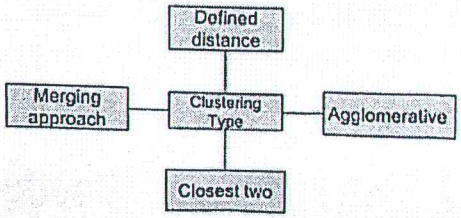
a) Raw

(b) Processed

c) Synchronized

d) All of the Mentioned

10. Which of the following clustering type has characteristic shown in the below figure?



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a) Partitional
b) Hierarchical
c) Naive bayes
d) None of the mentioned

11. Which of the following function can create the indices for time series type of splitting?
a) newTimeSlices
b) createTimeSlices
c) binTimeSlices
d) none of the mentioned

12. caret does not use the proxy package.
a) True
b) False

13. Which of the following package tools are present in caret?
a) pre-processing
b) feature selection
c) model tuning
d) all of the mentioned

14. All pandas data structures are ___ mutable but not always _____mutable.
a) size, value
b) semantic, size
c) value, size
d) none of the mentioned

15. Which of the following statement will import pandas?
a) import pandas as pd
b) import panda as py
c) import pandaspy as pd
d) all of the mentioned

12/15

20/02/19

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DEPARTMENT OF CSE

Name of the Value Added Course : Data Science				
Year/Sem: IV/VIII		Faculty Incharge:		Mrs.J.Nirmala
Location: Computer Lab-II		Academic Year : 2018- 2019		05-02-2019 to 13-02-2019
S.No	**Name of the Student**	**Register No**	**Status of qualifying**	**Sign of Student**
1	ARUN REKHA .A	311815104002	Yes	
2	ASIRA BANU .I	311815104003	Yes	
3	ASMA .P.A	311815104004	Yes	
4	ATHEEQ AHED KHAN	311815104005	Yes	
5	BALAJI .P	311815104006	Yes	
6	DEVA SAHAYAM .G	311815104007	Yes	
7	HARISHA .S	311815104008	Yes	
8	HIDHAYATHUN NASEERA .K.R	311815104010	Yes	
9	IRFANA .J	311815104011	Yes	
10	IRFAN KHAN .H.S	311815104012	Yes	
11	JAMELA RUKSHANA .A	311815104013	Yes	
12	KARTHIKEYAN .R	311815104015	Yes	
13	MAHAJABEEN SULTHANA .B	311815104017	Yes	
14	MAHISHA VARSHINI .C	311815104018	Yes	
15	MANO RAJA .G	311815104019	Yes	
16	MEERAAN SHA .A.R	311815104020	Yes	
17	MOHAMMED MAAHIL .S	311815104022	Yes	
18	MOHAMMED MOHSIN	311815104023	Yes	
19	MOHAMMED ASIQ .K	311815104024	Yes	
20	MOHAMMED IMRAN .A	311815104025	Yes	
21	MUTHU MOHAMED ALI .L.A	311815104027	Yes	
22	PRADDEPA .N	311815104029	Yes	
23	RAHILA SULTANA BEGUM .M	311815104031	Yes	
24	RESHMA BANU .A	311815104032	Yes	
25	SELCIA .R	311815104033	Yes	
26	SIVAKUMAR .M	311815104035	Yes	
27	SURUTHI .E	311815104037	Yes	
28	SAROOP .A.S	311815104038	Yes	
29	THOUFIQ ANSARI .S	311815104039	Yes	
30	VIKASH .L	311815104040	Yes	

Head-Training

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Signature of HoD with date

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DEPARTMENT OF IT

Name of the Value Added Course : Data Science				
Year/Sem: IV/VII		Faculty Incharge:		Mrs.J.Nirmala
Location: Computer Lab-II		Academic Year : 2018- 2019		05/02/2019 – 13/02/2019
S.No	**Name of the Student**	**Register No**	**Status of qualifying**	**Sign of Student**
1	ABBASUDEEN N	311815205001	Yes	
2	ABIRAMI R	311815205002	Yes	
3	AEJAS BASHA M	311815205003	Yes	
4	MAGESH G	311815205006	Yes	
5	MOHAMMED ARBAZ ALI A	311815205007	Yes	
6	MOHAMMED YAHIYA A	311815205009	Yes	
7	SATHISH KUMAR S	311815205010	Yes	
8	SIDDHARTH T	311815205011	Yes	
9	SOFIYA FATHIMA AM	311815205012	Yes	
10	VIGNESH J K	311815205013	Yes	
11	ATHIYAMAN G	311815205301	Yes	

Head-Training

Signature of HOD with date

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SUMMARY/OUTCOME REPORT

Name of the Course: Data Science

Name of the Coordinator: Mrs.J.Nirmala

No.of Students Enrolled: 41

No.of Students Completed:41

I hereby affirm that the entire program contents in the VAC "Data Science" listed in the Syllabus have been actually learned by the students as the part of the prescribed co-curricular activities through Certificate Program.

I confirmed that the Certificate program titled as Data Science course was done by me in the beginning of this semester and program delivery with attendance of the students were recorded.

I confirm that all registered students for this certificate program were actively attended and learned well throughout the duration of this program. And all the students were successfully completed and eligible to receive the participation certificate.

OUTCOME: Students shall be able to gain knowledge in

- Applying the data analysis techniques for applications handling large data
- Understanding the various machine learning algorithms used in data science process.
- Hands-on skills using the tools, languages, and libraries used by data scientists
- Reading and writing data from/to files in Python programs, apply data pre-processing techniques and develop algorithmic solutions to data science related problems.

Name: Mrs.J.Nirmala

Designation: AP/CSE

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Chennai-603 103.

Head Training **HOD** **Principal**

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Siruseri IT Park, Egattur, Chennai 603 103

Ref: MSAJCE / PO 104 / 2018-2019

Date: 5.7.2018

CIRCULAR

This is to inform the following faculty members to attend the meeting on 6.7.2018 in principal chamber to design the curriculum for the ADD-ON program on **" Technology Skill Development in PCB Design".**

S.NO	Faculty Name	Designation	Signature
1	Dr.E.Dhiravidachelvi	Associate Professor	
2	Mrs. Jayanthi	Assistant Professor	
3	Mr.S.NaveenKumar	Assistant Professor	
4	Mrs. Suganthi	Assistant Professor	

Principal

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Department of ECE

From
Dr.E.Dhiravidachelvi
Head/ECE,
Mohamed SathakA J College of Engineering,
Chennai.

To
The Principal,
Mohamed SathakA J College of Engineering,
Chennai.

Respected Sir,

Sub: Seeking Permission for conducting CertificationProgram Regarding.

We are planning to conduct a Certification Program on the topic "Technology Skill Development in PCB Design"from 23.07.2018 to 27.07.2018 by Mr.K.Sudhakaran, Proprietor, EMB Ware Technologies and Components" So I kindly request you to give permission for conducting this certificate program.

Thanking You,

Yours faithfully

Place: Chennai

Date: 09.07.2018

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DEPARTMENT OF ECE Date: 10/07/2018

Ref:01/MSAJCE/ECE/EVEN/2018-2019

CIRCULAR

Our department is organizing a "Certification program" on "Technology Skill Development in PCB Design" from 23.07.2018 to 27.07.2018 by Mr.K.Sudhakaran, Proprietor, EMB Ware Technologies and Components" The II YearElectronics and Communication Engineering Students Register with Mr.J.Raja AP/ECE On or Before 12.07.2018.

The session schedule is as follows

Timing :08.30 PM to 3.30 PM

Resource Person: Mr.K.Sudhakaran, Proprietor, EMB Ware Technologies and Components

Venue:Digital Signal Processing Lab

HOD/ ECE

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COPY TO:

Dept. of ECE

II Year ECE

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ENROLLED STUDENT'S NAME LIST

Department of ECE

Technology Skill Development in PCB Design

S.No	Reg.No	Name of the Students
1	311817106002	Hameed Ziyath
2	311817106003	Karan J
3	311817106004	M Mohamed Abdul Rahman
4	311817106005	Mohamed Shafiqshariff
5	311817106006	Muhammed Swalih.K
6	311817106008	Rajkumar C
7	311817106010	Subash G
8	311817106301	Sandhya Roselin Mary

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Technology Skill Development in PCB Design

Syllabus

Objective of the Course:

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

Duration : 30 Hrs.

Topics Covered:

1. Introduction to PCB designing concepts
2. Component introduction and their categories
3. Introduction to Development Tools
4. Detailed description and practical of PCB designing
5. Lab practice and designing concepts

Detailed Syllabus of the Course

Section 1: Introduction to PCB designing concepts

Introduction & Brief History

- What is PCB
- Difference between PWB and PCB
- Types of PCBs: Single Sided (Single Layer), Multi-Layer (Double Layer)
- PCB Materials

Introduction to Electronic design Automation (EDA)

- Brief History of EDA
- Latest Trends in Market
- How it helps and Why it requires
- Different EDA tools
- Introduction to SPICE and PSPICE Environment
- Introduction and Working of PROTEUS

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Section 2: Component introduction and their categories

Types of Components

- Active Components
    - o Diode
    - o Transistor
    - o MOSFET
    - o LED
    - o SCR
    - o Integrated Circuits (ICs)
- Passive Components
    - o Resistor
    - o Capacitor
    - o Inductor
    - o Transformer
    - o Speaker/Buzzer

Component Package Types

- Through Hole Packages
    - o Axial lead
    - o Radial Lead
    - o Single Inline Package(SIP)
    - o Dual Inline Package(DIP)
    - o Transistor Outline(TO)
    - o Pin Grid Array(PGA)
- Through Hole Packages
    - o Metal Electrode Face(MELF)
    - o Leadless Chip Carrier(LCC)
    - o Small Outline Integrated Circuit(SOIC)
    - o Quad Flat Pack(QPF) and Thin QFP (TQFP)
    - o Ball Grid Array(BGA)
    - o Plastic Leaded Chip Carrier(PLCC)

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Course Co-ordinator

HOD / ECE

MOHAMED SATHAK A J COLLEGE OF ENGINEERING, Chennai - 603103

Technology Skill Development in PCB Design

Department of ECE- Attendance from 23.07.2018-27.07.2018

S.no	Reg.number	Student Name	23.07.2018	24.07.2018	25.07.2018	26.07.2018	27.07.2018	Total class attended
1	311817106002	HAMEED ZIYATH U.R	/	/	a	/	/	4
2	311817106003	KARAN.J	/	/	/	/	a	4
3	311817106004	MOHAMED ABDUL RAHMAN.M	/	/	/	/	/	5
4	311817106005	MOHAMED SHAFIQ SHARRIFF.G	/	/	/	/	/	5
5	311817106006	MUHAMMED SWALIH.K	a	/	/	/	a	3
6	311817106008	RAJKUMAR.C	/	/	/	/	/	5
7	311817106010	SUBASH.G	/	/	/	/	/	5
8	311817106301	SANDHIYA ROSELIN MARY N.V	/	/	a	/	/	4

Course coordinator

HOD

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MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING, Chennai - 603103

STUDENTS NAME LIST

Department of .....ECE.....

Academic Year:2018-2019

Name of the Value Added Course : Technology Skill Development in PCB Design				
Yr / Sem :II /III		Faculty In-charge : Mr.K.Sudhakaran,Embware technologies and components		
Location : OFFLINE				
Sl.No	**Name of the Student**	**Register No.**	**Status of Qualifying**	**Sign of Student**
1	Hameed Ziyath U.R	311817106002	Qualified	
2	Karan.J	311817106003	Qualified	
3	Mohamed Abdul Rahman.M	311817106004	Qualified	
4	Mohamed Shafiq Sharriff.G	311817106005	Qualified	
5	Muhammed Swalih.K	311817106006	Qualified	
6	Rajkumar.C	311817106008	Qualified	
7	Subash.G	311817106010	Qualified	
8	Sandhiya Roselin Mary N.V	311817106301	Qualified	

Status of qualifying

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ASSESMENT- TECHNOLOGY SKILL DEVELOPMENT IN PCB DESIGN

Name: Subash. G

Reg.no: 311817106010

Year &Dept: II Year & ECE

Date: 27/07/2018

17/20

1) 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

2) Which among the below mentioned packages does not belong to the category of 'Small Outline Package'?

a. SO

b. SOP

c. SOT

(d.) SON

3) Which type of solderability 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

4) Which among the below stated soldering methods is also renowned as 'High Frequency Resistance Soldering'?

(a.) Iron Soldering

b. Furnace Soldering

c. Torch Soldering

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5) 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

6) High current circuits are purposely located or placed near the edge of PCB in 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

7) What is/are the necessity/ies 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

8) Which phenomenon is not reduced by the circuit paths of lowest impedances especially provided by power and return planes for shielding purposes?

a. Radiation

(b.) Convection

c. Noise

d. Crosstalk

9) Which among the below specified assertions is not a 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

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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?

a. Coupling capacitor

b. Decoupling capacitor

c. Snubber circuits

d. All of the above

11) Which among the below mentioned assertions is not a way of cross-talk reduction while designing digital PCBs?

a. Decrease in the distance between conductors

b. Shielding of clock lines with guard strips

c. Reduction in the loop area of circuits

d. Avoid running of parallel traces for longer distances especially for asynchronous signals

12) Which among the below specified condition is precise in the crosstalk verification mechanism using logic flow in opposite direction with the limit of avoiding dangerous interference in digital PCB designing?

a. Zeven>Zodd

b. Zodd ≥ 0.5 Zeven

c. Zodd ≥ 0.8 Zeven

d. Zodd = Zeven

13) 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

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14) 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

15) 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. Stability in self-inductance

d. None of the above

16) What should be the resistance of 0.6 mm wide conductor with 15 cm length and 25 μm thickness of standard copper foil? (Assume ρ = 1.7241 x 10-6(at 20° C)

a. 118.2 mΩ

b. 138.2 mΩ

c. 172.4 mΩ

d. 192.4 mΩ

17) 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

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18) 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

19) The actual cost of PCB can be evaluated on the basis of _____

a. PCB size & material

b. Number of layers

c. Vias on PCB

d. All of the above

20. Which among the below mentioned assertions is not a way of cross-talk reduction while designing digital PCBs?

a. Decrease in the distance between conductors

b. Shielding of clock lines with guard strips

c. Reduction in the loop area of circuits

d. Avoid running of parallel traces for longer distances especially for asynchronous signals

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Value Added Course Summary 2018-2019

Course code and Name :Technology Skill Development in PCB Design

Couse Duration : 30 hours

Years offered : II YearStudents of ECE

Course Instructors :Mr.K.Sudhakaran, Propreitor, EMBWARE Technologies and components

Course Outcome's :Students can explore different aspect of Printed Circuit Board Design and fabrication, learn various types of PCBs. Schematic Design. entry Rules for Schematic Entry, Component Layout methodsPlacement Rules, Routing Techniques for Single Sided Board. After completing this course student can design and fabricate their own PCB for their Project and can also work in PCB Designing and Fabrication area.

Couse Type : Add on course Organized by Msajce, EMBWARE Technologies and components

Assessment Mode :

Attendance	:30 Hours
Number of Participants	: 8
Scheme of Exam	: Offline Assesment Examination
Date of Exam -	: 27.07.2018

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Course Coordinator

HOD/ECE

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Ref: MSAJCE / PO 100 / 2018-2019

Date: 5.7.2018

CIRCULAR

This is to inform the following faculty members to attend the meeting on 6.7.2018 in principal chamber to design the curriculum for the ADD-ON program on **" CATIA".**

S.NO	Faculty Name	Designation	Signature
1	Mr. Maridurai	Associate Professor	
2	Mr. S.Prasath	Associate Professor	
3	Mr.V.G.Sathish	Assistant Professor	
4	Mr. Syed Abuthahir	Assistant Professor	

Principal

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DEPARTMENT OF MECHANICAL ENGINEERING

From ,

Mr.Maridurai,

Professor,

Department of Mechanical Engineering,

Mohamed Sathak A.J.College of Engineering,

Chennai – 603103.

To

The Principal,

Mohamed Sathak A.J.College of Engineering,

Chennai – 603103.

Respected Madam/Sir,

Sub: Permission for conducting ADD on course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of Mechanical department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

Year/Sem	Title	Dates
IV/V-Mechanical	CATIA	07.01.2019 to 12.01.2019

Thanking you

Place : Chennai

Date : 15.12.2018

Your's faithfully

T. Maridurai

Head of the Department
Department of Mechinical Engineering
Mohamed Sathak A.J.College of Engineering
Egattur, Chennai - 603 103.

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Siruseri IT Park, Egattur, Chennai 603 103

DEPARTMENT OF MECHANICAL ENGINEERING

From ,

Mr.Maridurai,

Professor,

Department of Mechanical Engineering,

Mohamed Sathak A.J.College of Engineering,

Chennai – 603103.

Respected Madam/Sir,

Sub: Assigning of faculty for VAC course curriculum design for the academic year 2018-2019-Reg

Ref: Letter of Requisition for the appointment of faculty for ADD on course curriculum design for the academic year 2018-2019 Dated: 07.01.2019 to 12.01.2019.

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD on course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
CATIA	Mr.V.G.Sathish AP/MECH

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DEPARTMENT OF MECHANICAL ENIGINEERING

Ref:MSAJCE/VAC02MECH/2018-2019

Date: 20.12.2018

CIRCULAR

Our department is organizing a "ADD ON " on **CATIA** during 07.01.2019 to 12.01.2019. The following IV Year Mechanical Students register with Mr.V.G.Sathish AP/MECH on or before 02.01.2019.

The session schedule is as follows

Timing: 9.00 AM to 1.00 PM

Location : CAD Laboratory

T. Manidurai

HoD

Head of the Department
Department of Mechinical Engineering
Mohamed Sathak A.J.College of Engineering
Egattur, Chennai - 603 103.

Copy To:

Dept. of Mechanical

III Year Mechanical

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DEPARTMENT OF MECHANICAL ENGINEERING

COURSE MODULE

CourseObjectives:

The Students will acquire to

- Understand basis of graphical representation in the general context of Industrial Engineering.
- Apply expression and communication for the design, creation, definition and development of an industrial installation and/or product making practical use of the current technologies
- Create design shapes with 3D modeling, assembly, sheet metal design and visualization features
- Learn the implementation of solid modeling and get hands-on experience with the real world projects

MODULE

1	Surface Modeling & Assembly - An Overview
2	Wireframe & Surface design
3	Surfaces – Sweep - Multi section - surfaces - Trim operations - Generative shape design
4	Introduction to Assembly - Bottom up approach
5	Top down approach
6	Inserting of components
7	Assembly constrains
8	Introduction to Drafting
9	Visual Realism
10	Digital mockup Kinematics
11	Simple Mechanism Analysis
12	Introductio to Sheet Metal Design
13	Generative sheet metal design
14	Sheet metal design
15	Sketching

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16	Lofted bend
17	Jog feature
18	Forming tools
19	Swept flange
20	Pattern and Drafting

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DEPARTMENT OF MECHANICAL ENGINEERING

Course Outcome

Students will able to

- Interpret and/or convey the technical information in an industrial drawing
- Apply graphical representation techniques using traditional metric geometry and Know, identify, interpret and apply the current standards
- do assembly designing, sheet metal designing, and template based designing
- perform visual analysis and validation which will give them high quality performance insights for product decisions

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DEPARTMENT OF MECHANICAL ENGINEERING

CO PO Mapping

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Interpret and/or convey the technical information in an industrial drawing	3	3			3			2		2	3	2
Apply graphical representation techniques using traditional metric geometry and Know, identify, interpret and apply the current standards			2	2	2	2						
do assembly designing, sheet metal designing, and template based designing												
perform visual analysis and validation which will give them high quality performance insights for product decisions												

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DEPARTMENT OF MECHANICAL ENGINEERING

Sl. No.	Topic	T / R* Book	Periods Required	Mode of Teaching
1	Surface Modeling & Assembly - An Overview	T	2	PPT
2	Wireframe & Surface design	T	2	Practical
3	Surfaces – Sweep - Multi section - surfaces - Trim operations - Generative shape design	T	2	Practical
4	Introduction to Assembly - Bottom up approach	T	2	PPT
5	Top down approach	T	2	Practical
6	Inserting of components	T	2	Practical
7	Assembly constrains	T	2	Practical
8	Introduction to Drafting	T	2	PPT
9	Visual Realism	T	2	Practical
10	Digital mockup Kinematics	T	3	Practical
11	Simple Mechanism Analysis	T	3	Practical
12	Introductio to Sheet Metal Design	T	2	PPT
13	Generative sheet metal design	T	3	PPT
14	Sheet metal design	T	3	Practical
15	Sketching	T	3	Practical
16	Lofted bend	T	2	Practical
17	Jog feature	T	2	Practical
18	Forming tools	T	2	Practical
19	Swept flange	T	2	Practical
20	Pattern and Drafting	T	2	Practical

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DEPARTMENT OF MECHANICAL ENGINEERING

Quiz / Mini Projects / Model Develpoed if any	
Nil	
Text / Reference Books	
1	Notes on 3D Modelling and CAD Practice. Teachers of the Department of Graphic Expression. University College of Engineering of Vitoria-Gasteiz. 2010
Website / URL References	
1	https://nptel.ac.in/courses/112/102/112102102/

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DEPARTMENT OF MECHANICAL ENGINEERING

Sl.No	Name of the Student	Register No.	Status of Qualifying
1	311815114001	AABITH HUSSAIN. J	**Qualified**
2	311815114002	ABDUL RAZIQ. A	**Qualified**
3	311815114003	ABISHANTH. A	**Qualified**
4	311815114005	ADHITHYAN. S	**Qualified**
5	311815114006	AHAMED ASMI. S	**Qualified**
6	311815114007	AHAMED MUBASHIR. N	**Qualified**
7	311815114008	AHAMED OWISE. M	**Qualified**
8	311815114009	AHAMED RIDWAN. J	**Qualified**
9	311815114010	ARULKUMAR. S	**Qualified**
10	311815114011	ARUNKUMAR. J	**Qualified**
11	311815114012	ARVINDHAN. D	**Qualified**
12	311815114013	ASHOK KUMAR. S	**Qualified**
13	311815114014	AZARUDEEN. A	**Qualified**
14	311815114015	BABU. R	**Qualified**
15	311815114016	BHARATHI. D	**Qualified**
16	311815114017	DENIT KUMAR. A	**Qualified**
17	311815114018	DHANARAJ. M	**Qualified**
18	311815114020	DHARMA SEELAN	**Qualified**
19	311815114021	DHINAHARAN. R	**Qualified**
20	311815114022	DINESH. R	**Qualified**
21	311815114024	FAHAD NIZAMUDDIN. F	**Qualified**
22	311815114025	GOKULAKRISHNAN. S	**Qualified**
23	311815114026	GOPALAKRISHNAN. R	**Qualified**
24	311815114027	GOVINDARAJ. P	**Qualified**
25	311815114028	GOWTHAMRAJ R.K	**Qualified**
26	311815114029	GRACE SAMSON G. P	**Qualified**
27	311815114030	HALILUR RAHMAN. B	**Qualified**
28	311815114031	HARISH BABU. R	**Qualified**
29	311815114032	HIMAYATHULLAH. N	**Qualified**
30	311815114033	HISHAM MOHAMED GANI. H	**Qualified**
31	311815114034	IMTHIYAS. N	**Qualified**

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32	311815114035	INBASEKARAN. R	**Qualified**
33	311815114036	JALALUDEEN. S	**Qualified**
34	311815114037	JAYA KUMAR. S	**Qualified**
35	311815114038	JINSON. L	**Qualified**
36	311815114039	JISHNU MADHAV	**Qualified**
37	311815114040	KADER FIRTHOUSE. A.Y.M.B	**Qualified**
38	311815114041	KASIMUTHURAJA. K	**Qualified**
39	311815114042	KISHORE. S	**Qualified**
40	311815114043	MADHAN.K	**Qualified**
41	311815114044	MOHAMED AMEENUL RAHMAN	**Qualified**
42	311815114045	MOHAMED ASLAM. B	**Qualified**
43	311815114046	MOHAMED AZHARUDDIN. S	**Qualified**
44	311815114047	MOHAMED BASIM. S	**Qualified**
45	311815114048	MOHAMED FAIZ. S	**Qualified**
46	311815114049	MOHAMED FASIL . S	**Qualified**
47	311815114301	ABUTHAHIR.K	**Qualified**
48	311815114304	MOHAMMED AZARUDEEN. A	**Qualified**
49	311815114309	YOUNUS SHAREF	**Qualified**
50	311815114502	G.KAAVIYA	**Qualified**
51	311815114701	AZIR KHAN. S	**Qualified**
52	311815114702	ZUHAIL N	**Qualified**
53	311815114051	MOHAMED JAFER M.Z	**Qualified**
54	311815114052	MOHAMED JAVID. S	**Qualified**
55	311815114054	MOHAMED MAHASIN. J	**Qualified**
56	311815114055	MOHAMED NIYAS. M	**Qualified**
57	311815114056	MOHAMED SAMEER. S	**Qualified**
58	311815114057	MOHAMED YUSUF JAMAL	**Qualified**
59	311815114058	MOHAMMED AZARUDIN. M	**Qualified**
60	311815114059	MOHAMMED MUKTHAR. H	**Qualified**
61	311815114060	MOHAMMED MUSTAFA. H	**Qualified**
62	311815114061	MOHAMUDUL KATHIR. P	**Qualified**
63	311815114062	MOHEMMED ASIF KHADIRI. F	**Qualified**
64	311815114063	MOHIDEEN BASITH. S	**Qualified**
65	311815114064	MOHIDEEN IRFAN.I	**Qualified**
66	311815114065	MUHAMMED ROSHAN.V.P	**Qualified**
67	311815114066	MUNISH KUMAR.M	**Qualified**
68	311815114067	NAGOOR ANIBA. M	**Qualified**
69	311815114068	NAGUTHA M. A	**Qualified**
70	311815114069	NARESH KUMAR. B	**Qualified**

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71	311815114071	NAVEEN KUMAR. R	**Qualified**
72	311815114072	NAVIN KUMAR. P	**Qualified**
73	311815114073	NOORUL AMEEN.J	**Qualified**
74	311815114074	PANDI DURAI. N	**Qualified**
75	311815114075	PRADEEP KUMAR. K	**Qualified**
76	311815114077	RAGHUL GANDHI. R	**Qualified**
77	311815114078	RAJARAJAN. K	**Qualified**
78	311815114079	RAJ KUMAR. R	**Qualified**
79	311815114080	RISHABESHWARAN.S	**Qualified**
80	311815114081	SAFEEQ AHAMED. S	**Qualified**
81	311815114082	SANTHOSHRAJAN. M	**Qualified**
82	311815114083	SARAN. M	**Qualified**
83	311815114084	SARAVANAN. M	**Qualified**
84	311815114085	SHAIK MUZZAMIL BASHA	**Qualified**
85	311815114086	SIDDHARTH. M	**Qualified**
86	311815114087	SIDHARTHBALU. S	**Qualified**
87	311815114088	SUBASH. A	**Qualified**
88	311815114089	SYED ABDUL RAHMAN. A	**Qualified**
89	311815114090	SYED ABDUL RAZAK .A	**Qualified**
90	311815114091	SYED SALMAN. S	**Qualified**
91	311815114092	SYED SULAIMAN. T	**Qualified**
92	311815114093	SYED THJAMMUL HUSSAIN. F	**Qualified**
93	311815114094	UMAR SHARIFF M. O	**Qualified**
94	311815114302	K.ARUN	**Qualified**
95	311815114303	JUNAITH.B	**Qualified**
96	311815114305	H.MOHAMMED JAFFER ALI	**Qualified**
97	311815114307	K.R.SANAULLA	**Qualified**
98	311815114308	SHAIK IJAS NASIM .P.S.M	**Qualified**
99	311815114703	JAGANATH KRISHNAN S G	**Qualified**

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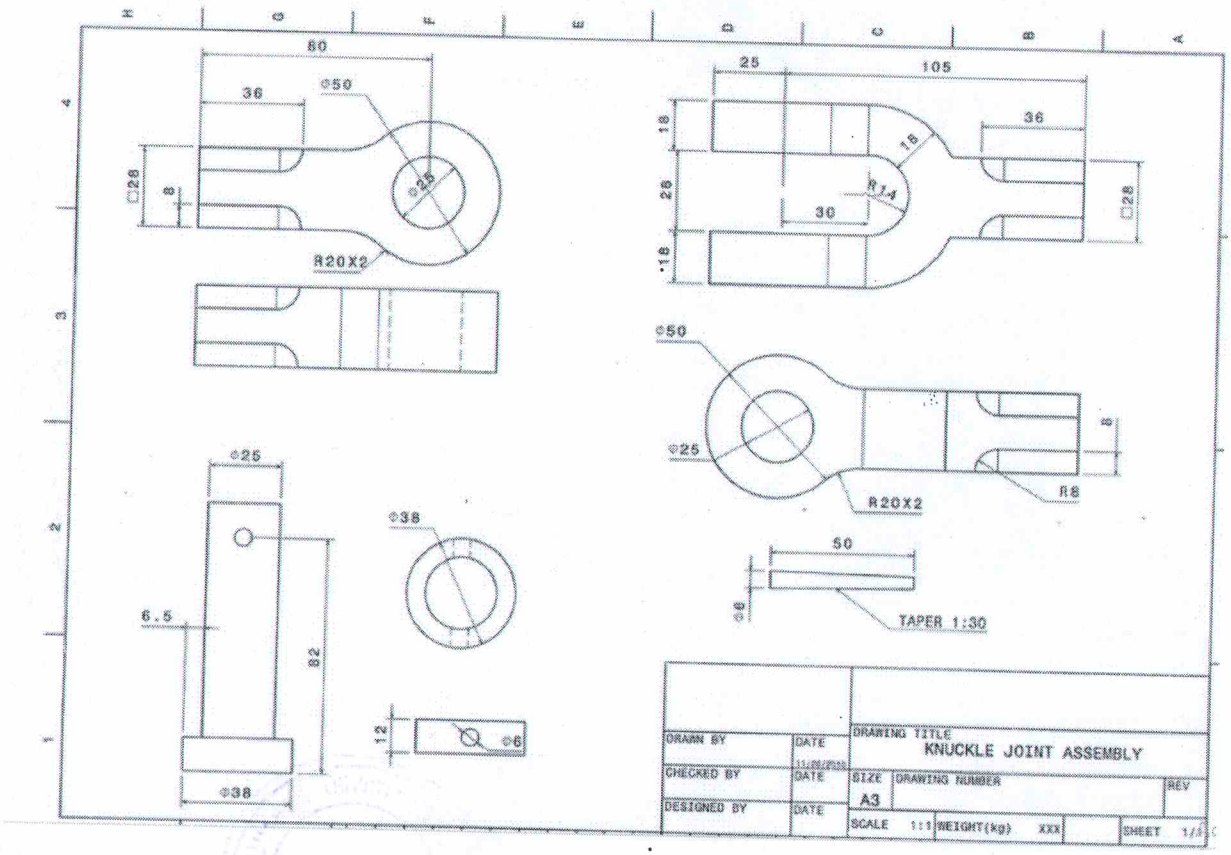
DEPARTMENT OF MECHANICAL ENGINEERING

CATIA –Value Added Course

Date: 13-1-2019 **Time: 2 Hrs**

1. Create the 3D model and assemble the parts of the following KNUCKLE JOINT using CATIA V5 software (50 marks)



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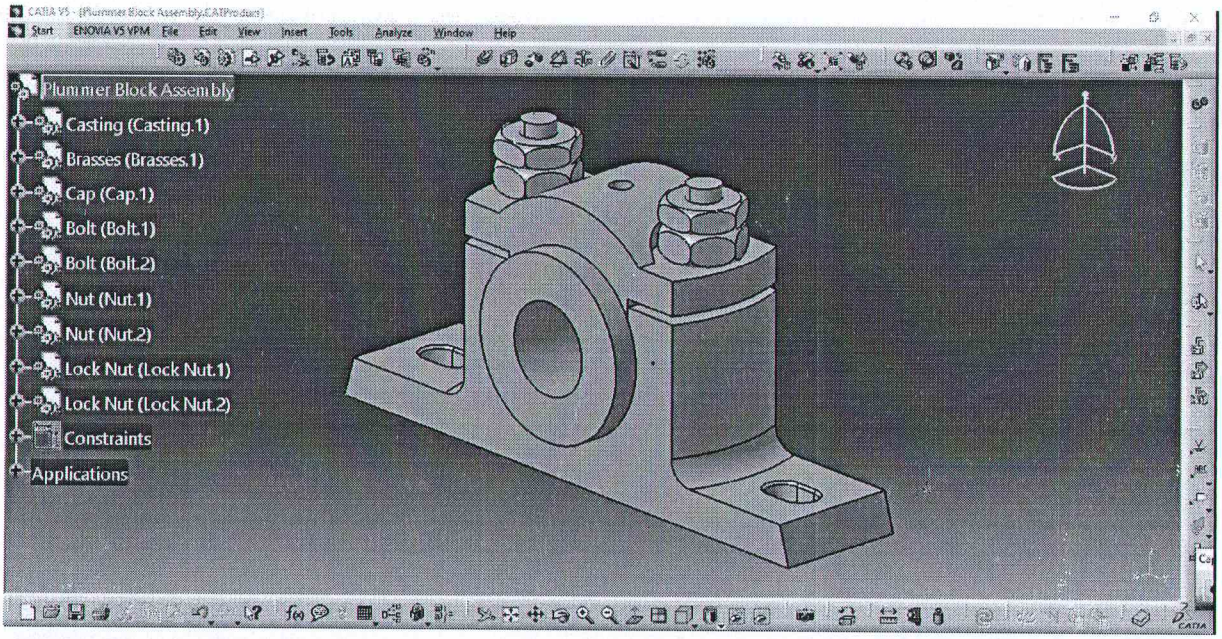

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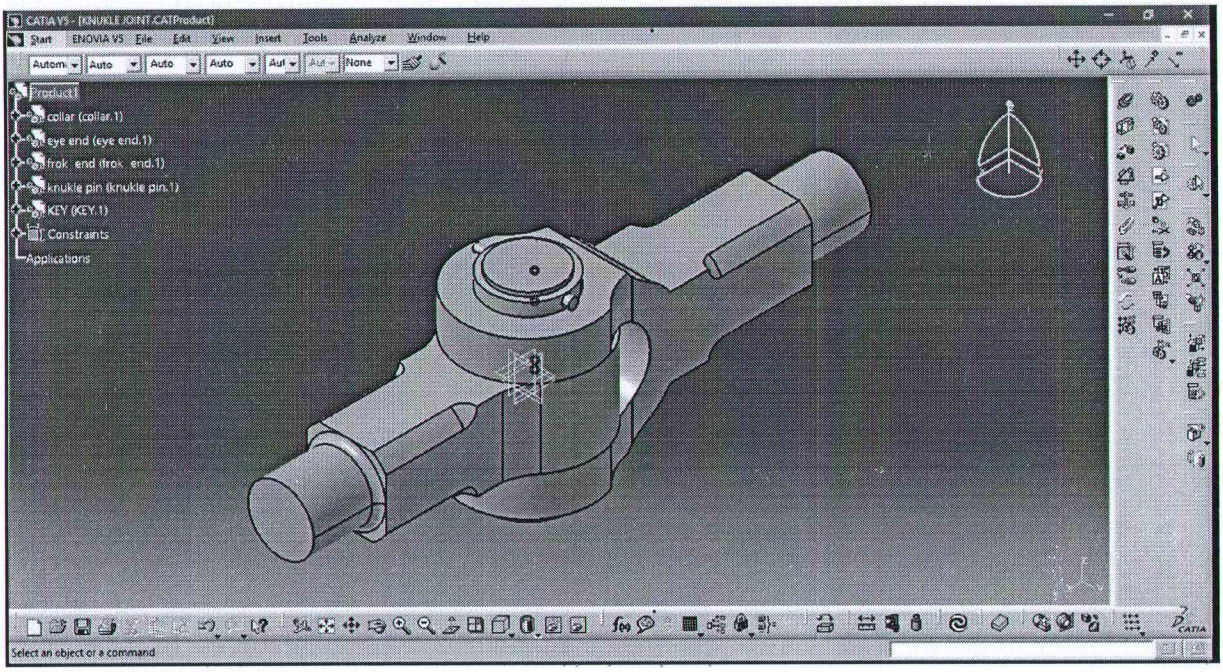

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Ref: MSAJCE / PO 101 / 2018-2019

Date: 5.7.2018

CIRCULAR

This is to inform the following faculty members to attend the meeting on 6.7.2018 in principal chamber to design the curriculum for the ADD-ON program on **" CREO".**

S.NO	Faculty Name	Designation	Signature
1	Mr. Maridurai	Associate Professor	
2	Mr. S.Prasath	Associate Professor	
3	Mr. S.Bharath	Assistant Professor	
4	Mr. Syed Abuthahir	Assistant Professor	

Principal

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DEPARTMENT OF MECHANICAL ENGINEERING

From ,

Mr.Maridurai,

Professor,

Department of Mechanical Engineering,

Mohamed Sathak A.J.College of Engineering,

Chennai – 603103.

To

The Principal,

Mohamed Sathak A.J.College of Engineering,

Chennai – 603103.

Respected Madam/Sir,

Sub: Permission for conducting ADD on course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of Mechanical department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

Year/Sem	Title	Dates
III/V-Mechanical	CREO	24.12.2018 to 29.12.2018

Thanking you

Place : Chennai
Date : 15.12.2018

Your's faithfully

T. Maridurai

Head of the Department
Department of Mechinical Engineering
Mohamed Sathak A.J.College of Engineering
Egattur, Chennai - 603 103.

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DEPARTMENT OF MECHANICAL ENGINEERING

From ,

Mr.Maridurai,

Professor,

Department of Mechanical Engineering,

Mohamed Sathak A.J.College of Engineering,

Chennai – 603103.

Respected Madam/Sir,

Sub: Assigning of faculty for VAC course curriculum design for the academic year 2018-2019-Reg

Ref: Letter of Requisition for the appointment of faculty for ADD on course curriculum design for the academic year 2018-2019 Dated: 24.12.2018 to 29.12.2018.

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD on course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
CREO	Mr.S.Bharath AP/MECH

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DEPARTMENT OF MECHANICAL ENIGINEERING

Ref:MSAJCE/VAC01MECH/2018-2019

Date: 20.12.2018

CIRCULAR

Our department is organizing a "ADD ON " on **CREO** during 24.12.2018 to 29.12.2018. The following III Year Mechanical Students register with Mr.S.Bharath AP/MECH on or before 20.12.2018.

The session schedule is as follows

Timing: 9.00 AM to 1.00 PM

Location : CAD Laboratory

T. Manivannan

HoD

Head of the Department
Department of Mechinical Engineering
Mohamed Sathak A.J.College of Engineering
Egattur, Chennai - 603 103.

Copy To:

Dept. of Mechanical

III Year Mechanical

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DEPARTMENT OF MECHANICAL ENGINEERING

COURSE MODULE

CourseObjectives:

The Students will acquire to

1. To gain practical experience in handling 2D drafting and 3D modelling software systems.
2. To know the drawing of various engineering part and assembly
3. To convert the creo part modelling into suitable additive manufacturing method for part development

MODULE

1	Introduction to Industrial design requirements and Drawing study
2	Creating datum features , Axis, Creating sweeps and blends
3	Creating holes and shells, rounds, chamfers and Drafts
4	Creating punch and die for emboss feature
5	Variable section sweeps, Helical sweeps and Swept blends Creating patterns –polar and rectangular
6	Group, copy, and mirror tools Measuring and inspecting models like Volume, mass, CoG
7	Assembling with constraints
8	Exploding assemblies Using advanced assembly constraints
9	Creating and using component interfaces Using assembly features and shrinkwrap
10	Replacing and Repeat components in an assembly Understanding simplified reps
11	Creating cross-sections, display styles, and combined views Substituting components by rep, envelope, and model
12	Creating and using assembly structure and skeletons Introduction to sheet metal design
13	Primary walls, Secondary and unattached walls Unbend, bend back and cuts , Notches and punches
14	Practice I
15	Practice II

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DEPARTMENT OF MECHANICAL ENGINEERING

Course Outcome

Upon the completion of this course the students will be able to

1. Draw 3D and Assembly drawing using CAD software

2. Convert the Creo modelling into STL format for 3D Printing Part Development

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DEPARTMENT OF MECHANICAL ENGINEERING

CO PO Mapping

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Draw 3D and Assembly drawing using CAD software	3	3			3			2		2	3	2
Convert the Creo modelling into STL format for 3D Printing Part Development			2	2	2	2						

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DEPARTMENT OF MECHANICAL ENGINEERING

Sl. No.	Topic	T / R* Book	Periods Required	Mode of Teaching
1	Introduction to Industrial design requirements and Drawing study	T	3	PPT
2	Creating datum features , Axis, Creating sweeps and blends	T	3	Practical
3	Creating holes and shells, rounds, chamfers and Drafts	T	3	Practical
4	Creating punch and die for emboss feature	T	3	Practical
5	Variable section sweeps, Helical sweeps and Swept blends Creating patterns –polar and rectangular	T	3	Practical
6	Group, copy, and mirror tools Measuring and inspecting models like Volume, mass, CoG	T	3	Practical
7	Assembling with constraints	T	3	Practical
8	Exploding assemblies Using advanced assembly constraints	T	3	Practical
9	Creating and using component interfaces Using assembly features and shrinkwrap	T	3	Practical
10	Replacing and Repeat components in an assembly Understanding simplified reps	T	3	Practical
11	Creating cross-sections, display styles, and combined views Substituting components by rep, envelope, and model	T	3	Practical
12	Creating and using assembly structure and skeletons Introduction to sheet metal design	T	3	Practical
13	Primary walls, Secondary and unattached walls Unbend, bend back and cuts , Notches and punches	T	3	Practical
14	Practice I	T	3	Practical
15	Practice II	T	3	Practical

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Quiz / Mini Projects / Model Develpoed if any	
Nil	
Text / Reference Books	
1	Designing with Creo Parametric 2.0 by Michael J Rider SDC Publication
Website / URL References	
1	https://nptel.ac.in/courses/112/104/11210403

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DEPARTMENT OF MECHANICAL ENGINEERING

Sl.No	Name of the Student	Register No.	Status of Qualifying
1	311816114001	Abdul Rahuman A	**Qualified**
2	311816114002	Abinash V	**Qualified**
3	311816114003	Abuthahir N	**Qualified**
4	311816114005	Afrose Sherif S	**Qualified**
5	311816114006	Ahmed Thaher A	**Qualified**
6	311816114007	Akil Ahamed A	**Qualified**
7	311816114008	Arun N	**Qualified**
8	311816114009	Azarudeen M F	**Qualified**
9	311816114010	Balamurugan R	**Qualified**
10	311816114011	Charan Kumar V G	**Qualified**
11	311816114012	Dhananchezian K	**Qualified**
12	311816114013	Dharanitharan A	**Qualified**
13	311816114014	Dinesh D	**Qualified**
14	311816114015	Guhan A	**Qualified**
15	311816114016	Hariharan Akash A	**Qualified**
16	311816114018	Harisundar V	**Qualified**
17	311816114019	Hithayath Rilwan M	**Qualified**
18	311816114020	Izsath A	**Qualified**
19	311816114021	Jayaprakash D	**Qualified**
20	311816114022	Junaid Ahamed M	**Qualified**
21	311816114023	Kamal Amirtha Raj S	**Qualified**
22	311816114024	Karthy M	**Qualified**
23	311816114026	Manikandan S	**Qualified**
24	311816114027	Marsith Mohamed N	**Qualified**
25	311816114028	Mohamad Asgar S	**Qualified**
26	311816114029	Mohamed Abdullah A	**Qualified**
27	311816114030	Mohamed Althaf M H	**Qualified**
28	311816114031	Mohamed Anas N	**Qualified**
29	311816114032	Mohamed Anas Kassim L	**Qualified**
30	311816114033	Mohamed Ashik S	**Qualified**
31	311816114034	Mohamed Faheem M F	**Qualified**

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32	311816114035	Mohamed Ibrahim T S	**Qualified**
33	311816114036	Mohamed Imran S	**Qualified**
34	311816114037	Mohamedimran Khan M	**Qualified**
35	311816114038	Mohamed Irfan D	**Qualified**
36	311816114039	Mohamed Ismail P	**Qualified**
37	311816114040	Mohamed Mubarak S S	**Qualified**
38	311816114041	Mohamed Muzahith S A K	**Qualified**
39	311816114042	Mohamed Shafique K	**Qualified**
40	311816114043	Mohamed Shahin T	**Qualified**
41	311816114044	Mohamedshathik M	**Qualified**
42	311816114045	Mohamed Sirajudeen S	**Qualified**
43	311816114046	Mohamed Sohail	**Qualified**
44	311816114047	Mohamed Vahith D	**Qualified**
45	311816114048	Mohamed Zubair M A	**Qualified**
46	311816114049	Mohamed Zulfighar H	**Qualified**
47	311816114050	Mohammed Aashik S	**Qualified**
48	311816114051	Mohammed Afzal A	**Qualified**
49	311816114052	Mohammed Dhanish H S	**Qualified**
50	311816114053	Mohammed Mubashir	**Qualified**
51	311816114054	Mohan B	**Qualified**
52	311816114055	Muhammed Maideen K S	**Qualified**
53	311816114056	Nirmal R	**Qualified**
54	311816114057	Nuril Ameen M	**Qualified**
55	311816114058	Padmaganesh S	**Qualified**
56	311816114059	Parthipan V	**Qualified**
57	311816114060	Rahul M	**Qualified**
58	311816114062	Romic Fernandez B	**Qualified**
59	311816114063	Sadhurudheen M	**Qualified**
60	311816114064	Sahul Hameed D	**Qualified**
61	311816114065	Salmaan Hussain N	**Qualified**
62	311816114066	Salmanul Faris K	**Qualified**
63	311816114067	Santhosh S	**Qualified**
64	311816114068	Saravanan K	**Qualified**
65	311816114069	Saravanan S	**Qualified**
66	311816114071	Siddiq Ali K A	**Qualified**
67	311816114072	Sriram R	**Qualified**
68	311816114073	Stewart Simon	**Qualified**
69	311816114074	Suriyaprakash S	**Qualified**
70	311816114075	Syed Mohammed Bafaky S	**Qualified**

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71	311816114076	Syed Rafeeq Ahmed A	**Qualified**
72	311816114077	Syed Thanveer Maqsood J	**Qualified**
73	311816114078	Thariq Anwar S	**Qualified**
74	311816114079	Thirumavalavan K	**Qualified**
75	311816114080	Vishal D	**Qualified**
76	311816114081	Yasirarafath S	**Qualified**
77	311816114301	Meeran Mohideen M	**Qualified**
78	311816114302	Mohamed Sharfras S	**Qualified**
79	311816114303	Mohamedziaudeen A	**Qualified**
80	311816114304	Mohammed Yaseen I	**Qualified**
81	311816114305	Seeni Mohamed N	**Qualified**
82	311816114701	Syed Afrith M	**Qualified**

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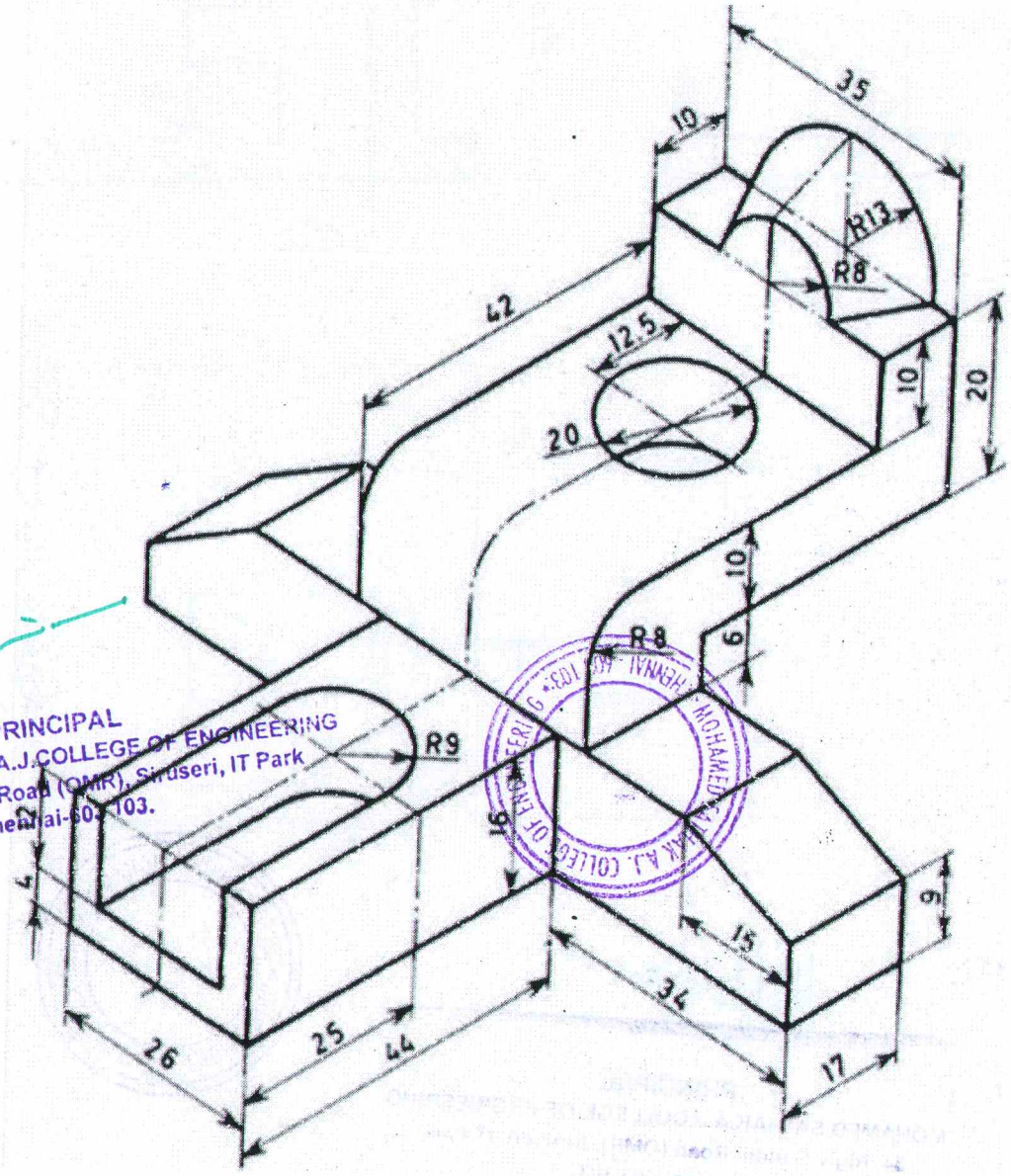
DEPARTMENT OF MECHANICAL ENGINEERING
CREO-VAC

Date: 30-12-2018

Time: 90 Min

1. Develop the 3D model and assemble the parts of the following diagram using CREO 5 software (25 marks) All the dimensions are in mm



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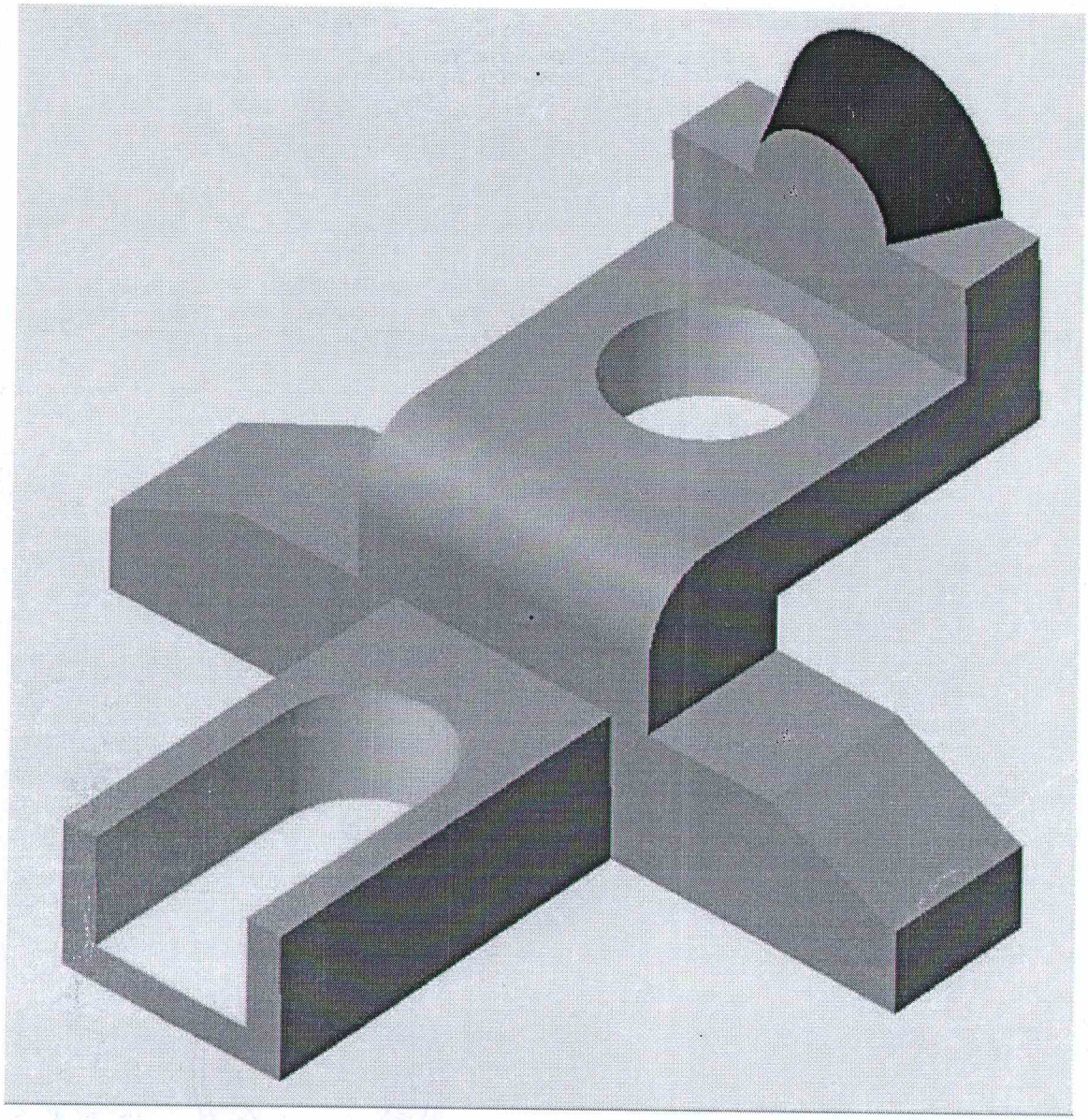

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Ref: MSAJCE / PO 105 / 2018-2019

Date: 5.7.2018

CIRCULAR

This is to inform the following faculty members to attend the meeting on 6.7.2018 in principal chamber to design the curriculum for the ADD-ON program on **" PC Hardware and Networking Issues".**

S.NO	Faculty Name	Designation	Signature
1	Dr. K. Manivannan	Professor	
2	Mr. Sampath	Associate Professor	
3	Mr.K.Suresh	Assistant Professor	
4	Ms. B. Yuvasri	Assistant Professor	

Principal

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DEPARTMENT OF SCIENCE & HUMANITIES

From ,

Dr. A.Bala Krishnan

Associate Professor

Department of S&H

Mohamed Sathak A.J.College of Engineering,

Chennai – 603103.

To

The Principal,

Mohamed Sathak A.J.College of Engineering,

Chennai – 603103.

Respected Madam/Sir,

Sub: Permission for conducting ADD ON course – reg.

With reference to the subject mentioned below, we have proposed to conduct ADD ON courses for all the I Year students. The selected courses will be useful to the students for learning the emerging technical fields.

Kindly provide permission for the same.

Year / Sem	Title	Dates
I Year / II Sem	PC Hardware & Networking Issues	04/03/2019 to 10/03/2019

Thanking you

Your's faithfully

Place : Chennai

Date: 21/02/2019

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From,

Mr. R. Sampath
Associate Professor
Department of Computer Science and Engineering
Mohamed Sathak A.J.College of Engineering,
Chennai- 603103.

Respected Madam/Sir,

Sub: Assigning of faculty for ADD ON course curriculum design for the academic year 2018-2019 reg.

Ref: Letter of Requisition for the appointment of faculty for ADD ON course curriculum design for the academic year 2018-2019 Dated: 04/03/2019 to 10/03/2019

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD ON course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking into consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
PC Hardware & Networking Issues	Mr. K. Suresh AP/CSE

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DEPARTMENT OF SCIENCE & HUMANITIES

Date: 21/02/2019

Ref:01/MSAJCE/S&H/EVEN/2018- 2019

CIRCULAR

It is hereby informed to all the 1st Year students that the value-added course "**PC Hardware & Networking Issues**" during 04/03/2019 to 10/03/2019. All are advised to attend the training course without fail.

The session schedule is as follows

Timing: 9.00 AM to 3.30 PM

Resource Person: Mr. K. Suresh

Venue	4thFloor Auditorium	TF- 403	TF- 409	TF- 411
Faculties	Mr. K. Suresh	Ms. B. Yuvasri	Mr. D. Vinoth	Mrs. S. Vennila

HoD

COPY TO: S&H

Dept. of S&H

I Year

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COURSE MODULE

Course Objectives:

1.To define a problem.

2.To gain knowledge about peripheral devices.

3.To create executable code.

4.To acquire knowledge about Installation and preventive maintenance.

5. To know about troubleshooting.

MODULE-1: Introduction

Organization of computer –Number systems and codes – Memory – ALU – Personal computer concepts – Virtual memory

MODULE-2: Peripheral devices

Keyboard – CRT display monitor – Printer- Modem – Fax – Scanner – Digital camera

MODULE-3: Overview of PC Hardware

Hardware BIOS DOS Interaction – Inside the system box – mother board logic- Peripheral interfaces and controller – Keyboard interface

MODULE-4: Installation and Preventive Maintenance

System configuration – Installation Practice – PC assembling and Integration – BIOS setup – Preventive maintenance – DOS – Virus

MODULE-5: Troubleshooting

Nature of faults- types of faults – Faults elimination process – fault diagnosis – Troubleshooting levels.

Course Outcomes:

The students will be able to

CO1. Student will adequate skills in programming.

CO2. Students will be able to know about peripheral devices.

CO3. The student will able to know the basic of PC hardware

CO4. Students will have brief knowledge about Installation

CO5. The student will able to know the faults and fault rectification.

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CO PO Mapping

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Computer Organization	3	3	3					2		2	3	3
Have in-depth knowledge of Peripheral devices	3	3	2									
PC Hardware Overview	3	2	2									
knowledge about Installation and Maintenance.	3	2	3					2		2	3	3
Troubleshooting	3	2										2

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S.No	Title	Topics to be Covered	T/R Books	Periods Required	Remarks
1	Basics of computer	Organization	T1/Website	1	PPT
		Number systems and codes	T1/Website	2	BB
2	Memory	Primary & Secondary memory	T1/Website	1	PPT
		ALU	T1/Website	2	BB
3	Peripheral devices	Keyboard, monitor, Printer	T1/Website	2	BB/PPT
		Modem, Fax, Scanner	T1/Website	2	BB
4	PC Hardware	Hardware BIOS DOS Interaction	T1/Website	2	PPT
		Inside the system box	T1/Website	2	BB
5	Hardware	Mother board logic	T1/Website	2	PPT
		Peripheral interface	T1/Website	2	BB
6	Installation	System configuration	T1/Website	2	PPT
		Installation practice	T1/Website	2	BB
7	Installation of PC	PC assembling & Integartion	T1/Website	3	PPT
		BIOS setup	T1/Website	2	BB

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8	Preventive Maintenance	DOS	T1/Website	2	PPT
		Virus	T1/Website	2	BB
9	Faults	Nature of faults	T1/Website	1	PPT
		Types of faults	T1/Website	2	BB
10	Fault elimination process	Fault diagnosis	T1/Website	1	PPT
		Troubleshooting levels	T1/Website	2	PPT

	Text / Reference Books
1	Computer Hardware and Networking 1. Jyotika Deshmukh (Author)
	Website / URL References
1	https://www.geeksforgeeks.org/computer-hardware/
2	https://techspirited.com/most-common-computer-network-problems

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Assessment

1. Base 10 refers to which number system?
   a) Hexadecimal
   b) Octal
   c) Decimal
   d) Binary coded decimal

2. The number of bits used to store a BCD digit is:
   a) 8
   b) 4
   c) 1
   d) 2

3. The weight of the LSB as a binary number is:
   a) 4
   b) 3
   c) 2
   d) 1

4. Which of the following memories must be refreshed many times per second?
   a) Static RAM
   b) Dynamic RAM
   c) ROM
   d) EPROM

5. When we work on any document on PC, it is stored temporarily on
   a) RAM
   b) ROM
   c) CD -ROM
   d) CPU

6. The faster, costlier and relatively small form of storage computer system hardware is:
   a) Main memory
   b) Flash memory
   c) Cache
   d) Disk

7. Main memory of computer is-
   a) Internal
   b) External
   c) Auxiliary
   d) None

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8. What is a device connecting a network without using a cable?
   a) Wireless
   b) Centralized
   c) Distributed
   d) Open source

9. Where data is recorded in floppy disk?
   a) Sectors
   b) Runs
   c) Tracks
   d) Rounders

10. From where can the boot option be selected?
   a) Advanced BIOS feature
   b) Advanced chipset feature
   c) CPU soft menu
   d) Power management setup

11. Which chip can be reprogrammed to update its content?
   a) Flash ROM
   b) RAM
   c) ROM
   d) System BIOS

12. Where is POST located?
   a) System ROM
   b) CMOS
   c) POST expansion card
   d) RAM

13. MSD.exe does not have information on:
   a) Cache
   b) Video
   c) Operating system
   d) Com ports

14. In laser printing, there area six steps the printer follows. What comes between the conditioning phase and the developing phase?
   a) Transfer phase
   b) Writing phase
   c) Fusing phase
   d) Cleaning phase

15. During the boot process, a system first counts memory from where?
   a) Expansion memory board
   b) Video adapter
   c) System board
   d) Cache

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16. What is a simple way to fix many problems with USB devices?
    a) Buy a new device
    b) Use a shorter cord
    c) Plug the device into the USB port upside down
    d) Run the device through a USB adapter to clean up the signal

17. All of the following are examples of storage devices EXCEPT:
    a) hard disk drives
    b) printers
    c) floppy disk drives
    d) cd drives

18. CPU and memory located on the ----------
    a) Expansion board
    b) Mother board
    c) Storage device
    d) Output device

19. System software is the set of programs that enables your computers hardware devices and software to work together.
    a) management
    b) processing
    c) utility
    d) application

20. The PC (personal computer) and the Apple Macintosh are examples of two different:
    a) platforms
    b) applications
    c) programs
    d) storage devices

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DEPARTMENT OF SCIENCE & HUMANITIES

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   b) Writing phase
   c) Fusing phase
   d) Cleaning phase

15. During the boot process, a system first counts memory from where?
   a) Expansion memory board
   b) Video adapter
   c) System board
   d) Cache

16. What is a simple way to fix many problems with USB devices?
   a) Buy a new device
   b) Use a shorter cord
   c) Plug the device into the USB port upside down
   d) Run the device through a USB adapter to clean up the signal

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17. All of the following are examples of storage devices EXCEPT:

a) hard disk drives
b) printers
c) floppy disk drives
d) cd drives

18. CPU and memory located on the ----------
a) Expansion board
b) Mother board
c) Storage device
d) Output device

19. System software is the set of programs that enables your computers hardware devices and _____ software to work together.

a) management
b) processing
c) utility
d) application

20. The PC (personal computer) and the Apple Macintosh are examples of two different:

a) platforms
b) applications
c) programs
d) storage devices

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