



CRITERIAN: 1 CURRICULAR ASPECTS

KET INDICATOR 1.2 ACADEMIC FLEXIBILITY

**Metric No. 1.2.2.1 Number of value-added courses (beyond the curriculum) during the year
2022-2023**

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Principal
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DEPARTMENT OF CIVIL ENGINEERING

Certificate Course on 3D Modeling on Google Sketchup

COURSE NAME: 3D Modeling on Google Sketchup

COURSE CODE: 22CECC01

ACADEMIC YEAR: 2022-2023

SEMESTER: ODD

DURATION: 32 HOURS

INDEX

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C. Selvam

PROGRAM
COORDINATOR

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HOD-CIVIL

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Head of the Department

AP/Civil
Department of Civil Engineering
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DEPARTMENT OF CIVIL ENGINEERING

Certificate Course on 3D Modeling on Google Sketchup

Permission Letter

Date: 05.08.2022

From

Mr.K.Selvam,
Assistant Professor,
Department of Civil Engineering,
NPR College of Engineering & Technology,
Natham.

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Respected Sir,

Sub: Requesting permission to conduct Certificate course for Civil Engineering students – Reg.

We have planned to conduct a Certificate Course on “3D Modeling on Google Sketchup” for our B.E-Civil Engineering & M.E- Structural Engineering students from 22.08.2022 to 12.09.2022 for 32 hours in our college premises. We have proposed Mr. S. Soma Sundara Moorthy, Con-Tech Research Lab, Chennai as an external resource person for this certificate course. Kindly, permit us to conduct the same.

Thanking you.

Yours faithfully,





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CIRCULAR

NPRCET/OFF/CIVIL/VAC/2022-2023

Date: 02.08.2022

We are glad to inform you that our Department of Civil Engineering planned to conduct a certificate course on "3D Modeling on Google Sketchup" for our students in this semester. Interested students can enroll their names to the program coordinator on or before 18.08.2022.

The details of the Certificate course are given below:

Resource Person	: Mr. S. Soma Sundara Moorthy, Con-Tech Research Lab, Chennai.
Venue	: Civil CADD Lab
Date & Duration	: 22.08.2022 to 12.09.2022 & 32 hours
Program Coordinator	: Mr.K.Selvam, AP/Civil, NPRCET

Copy to:

1. IQAC
2. All the HoDs
3. All the Class Rooms
4. Notice Board
5. File
6. Administrative office for information



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DEPARTMENT OF CIVIL ENGINEERING

INVITATION

The Management, Principal, and Department of Civil Engineering cordially invite you
for the

CERTIFICATE COURSE on "3D MODELING ON GOOGLE SKETCHUP"

Date : 28.08.2022

Time : 9.00 AM

Venue: Civil CAD Lab

Chief Guest

Mr. S. Soma Sundara Moorthy,
Con-Tech Research Lab,
Chennai.

Patron

Dr.J. Sundararajan,
Principal.

Convener

Dr.A.Hemalatha,
Head of the Department.

Organised by

Department of Civil Engineering,
NPR College of Engineering & Technology,
Natham, Dindigul.





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DEPARTMENT OF CIVIL ENGINEERING

Certificate Course on 3D Modeling on Google Sketchup

COURSE CONTENT

CHAPTER	TOPICS
1	<ul style="list-style-type: none"> • Introduction about Sketchup • Study about Landscape Engineering • Study about Dimensions & Rules for the building
2	<ul style="list-style-type: none"> • Plan creation in SketchUp • Creation of Ground floor Elevation • Creation of Flat Roof
3	<ul style="list-style-type: none"> • Creation of a sloped Roof • Study about interior design & Dimensions • Creation of Interior Elevation
4	<ul style="list-style-type: none"> • Light settings & Sunlights • Applying Asian paint colors & Components • Creation of SketchUp layout
5	<ul style="list-style-type: none"> • Report Preparation in layout • Print out seating • Assessment

Criteria to get Certificate:

- Students should register their names for this course.
- Students should secure 75% of their marks in the MCQ Test.

Prepared by Mr.K.Selvam, AP/Civil. - *CSelvam*

Approved by,

CSelvam
HoD-CIVIL

Head of the Department

Department of Civil Engineering
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CSelvam
IQAC

Coordinator - IQAC
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DEPARTMENT OF CIVIL ENGINEERING

Certificate Course on 3D Modeling on Google Sketchup

LIST OF REGISTERED STUDENTS

S/N.	Register Number	Name of the Student	Year/Department
1	920819103001	Arun Kumar N	IV-Civil
2	920819103002	Jeevitha C	IV-Civil
3	920819103003	Naveenraj S	IV-Civil
4	920819103004	Sanjay K	IV-Civil
5	920819103005	Saranya Devi S	IV-Civil
6	920819103007	Subash S	IV-Civil
7	920819103008	Sudharsan K	IV-Civil
8	920819103009	Venkatesan R	IV-Civil
9	920819103301	Nithishkumar A R	IV-Civil
10	920819103302	Purusothaman K	IV-Civil
11	920819103303	Sachin R	IV-Civil
12	920819103304	Kishore S P	IV-Civil
13	920820103001	Alagar K	III-Civil
14	920820103002	Anandhan Alaguvel P	III-Civil
15	920820103003	Chandira Moorthi B	III-Civil
16	920820103004	Gowtham C	III-Civil
17	920820103005	Harish M	III-Civil
18	920820103006	Mohanraj G	III-Civil
19	920820103007	Naveen Kumar S	III-Civil
20	920820103008	Pranaveshvar J S	III-Civil
21	920820103009	Sharan Sakthivel J	III-Civil
22	920820103010	Sundaraprakadeeswaran B	III-Civil
23	920820103011	Suriya M	III-Civil
24	920820103012	Vijaya Sri Hari I	III-Civil
25	920820103013	Vikneshwaran S	III-Civil
26	920820103014	Yazhini.S	III-Civil
27	920820103301	Alex Pandi.M	III-Civil
28	920820103302	Arul Murugan M	III-Civil
29	920820103303	Gunapandi T	III-Civil
30	920820103304	Hari Prasath M	III-Civil
31	920820103305	Jegan.S	III-Civil
32	920820103307	Logeshwaran R	III-Civil
33	920820103308	Naveen Prasad R	III-Civil





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S/N.	Register Number	Name of the Student	Year/Department
34	920820103309	Parthiban R	III-Civil
35	920820103310	Prithviraj T	III-Civil
36	920820103311	Rajvignesh R	III-Civil
37	920820103312	Srilakshmi S	III-Civil
38	920820103313	Tatta Thamimul Ansari M	III-Civil
39	920820103314	Thiraviyam S	III-Civil
40	920820103315	Videshwaran R	III-Civil
41	920820103316	Vignesh K	III-Civil
42	920820103317	Dhanalakshmi P	III-Civil
13	920821103002	Bharath Kumar S	II -Civil
44	920821103003	Dinakaran K	II -Civil
45	920821103004	Elamparuthi B	II -Civil
46	920821103005	Kirthik Ananth M	II -Civil
47	920821103006	Mohammed Abdula S	II -Civil
48	920821103007	Mutharivu K	II -Civil
49	920821103008	Praveen C	II -Civil
50	920821103010	Ritika S A	II -Civil
51	920821103011	Sanjay Yukendra M	II -Civil
52	920821103012	Subanu M	II -Civil
53	920821103013	Syedali Fathima K	II -Civil
54	920821103014	Veeramari S	II -Civil
55	920821103301	Anbuselvam S	II -Civil
56	920821103302	Logarani A	II -Civil
57	920820413001	Jeyadharani J	II - M.E
58	920822413001	Bavithra T	I - M.E
59	920822413002	Datchinamoorthy R B	I - M.E
60	920822413003	Jerin J	I - M.E
61	920822413004	Karthikeyan M	I - M.E
62	920822413005	Kavimalan R	I - M.E
63	920822413006	Sundari B	I - M.E
64	920822413007	Suryavarshan M	I - M.E


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DEPARTMENT OF CIVIL ENGINEERING

Certificate Course on 3D Modeling on Google Sketchup

Course Schedule

Date	Time	Session Topics and Resource Person
22.08.2022	4.00 p.m. to 4.30 p.m.	Innuguration-Dr.J. Sundararajan, Principal, NPRCET
	4.30 p.m. to 6.00 p.m.	Introduction about Sketchup Mr. S. Soma Sundara Moorthy, Con-Tech Research Lab.
23.08.2022	4.00 p.m. to 6.00 p.m.	Studying Landscape Engineering Mr.P.Manikandan, AP-Civil, NPRCET.
24.08.2022	4.00 p.m. to 6.00 p.m.	Study about Dimensions & Rules for the building Mr.N.Karthic, AP-Civil, NPRCET.
25.08.2022	4.00 p.m. to 6.00 p.m.	Plan creation in SketchUp Mr. S. Soma Sundara Moorthy, Con-Tech Research Lab.
26.08.2022	4.00 p.m. to 6.00 p.m.	Assessment 1
29.08.2022	4.00 p.m. to 6.00 p.m.	Creation on Ground floor Elevation Mr.P.Manikandan, AP-Civil, NPRCET.
30.08.2022	4.00 p.m. to 6.00 p.m.	Creation on Flat Roof Mr. S. Soma Sundara Moorthy, Con-Tech Research Lab.
01.09.2022	4.00 p.m. to 6.00 p.m.	Creation on sloped Roof Mr. S. Soma Sundara Moorthy, Con-Tech Research Lab.
02.09.2022	4.00 p.m. to 6.00 p.m.	Study about interior design & Dimensions Mr.N.Karthic, AP-Civil, NPRCET.
05.09.2022	4.00 p.m. to 6.00 p.m.	Creation on Interior Elevation Mr.P.Manikandan, AP-Civil, NPRCET.
06.09.2022	4.00 p.m. to 6.00 p.m.	Assessment 2
07.09.2022	4.00 p.m. to 6.00 p.m.	Light settings & Sun lights & Applying Asian paint colors & Components
08.09.2022	4.00 p.m. to 6.00 p.m.	Creation on SketchUp layout Mr. S. Soma Sundara Moorthy, Con-Tech Research Lab.
09.09.2022	4.00 p.m. to 6.00 p.m.	Report Preparation in layout Mr. S. Soma Sundara Moorthy, Con-Tech Research Lab.
10.09.2022	4.00 p.m. to 6.00 p.m.	Print out seating Mr.N.Karthic, AP-Civil, NPRCET
12.09.2022	4.00 p.m. to 4.30 p.m.	Assessment 3
	4.30 p.m. to 6.00 p.m.	Valedictory – Dr.A.Hemalatha, HoD-Civil, NPRCET

Cochan

PROGRAM
COORDINATOR

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Dr. J. Sundararajan
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DEPARTMENT OF CIVIL ENGINEERING

Certificate Course on 3D Modeling on Google Sketchup

STUDENT ATTENDANCE

S/N	Register Number	Name of the Student	22/08	23/08	24/08	25/08	26/08	27/08	28/08	29/08	30/08	31/08	01/09	02/09	03/09	04/09	05/09	06/09	07/09	08/09	09/09	10/09	11/09	12/09
32	920820103307	Logeshwaran R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
33	920820103308	Naveen Prasad R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
34	920820103309	Parthiban R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
35	920820103310	Prithviraj T	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
36	920820103311	Rajvignesh R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
37	920820103312	Srilakshmi S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
38	920820103313	Tatta Thamimul Ansari M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
39	920820103314	Thiraviyan S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
40	920820103315	Videshwaran R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
41	920820103316	Vignesh K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
42	920820103317	Dhanalakshmi P	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
43	920821103002	Bharath Kumar S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
44	920821103003	Dinakaran K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
45	920821103004	Elamparuthi B	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
46	920821103005	Kirthik Ananth M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
47	920821103006	Mohammed Abdula S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
48	920821103007	Mutharivu K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
49	920821103008	Praveen C	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
50	920821103010	Ritika S A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
51	920821103011	Sanjay Yukendra M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
52	920821103012	Subanu M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
53	920821103013	Syedali Fathima K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
54	920821103014	Veeramari S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
55	920821103301	Anbuselvam S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
56	920821103302	Logarani A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
57	920820413001	Jeyadharani J	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
58	920822413001	Bavithra T	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
59	920822413002	Datchinamoorthy R B	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
60	920822413003	Jerin J	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
61	920822413004	Karthikeyan M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
62	920822413005	Kavimalan R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
63	920822413006	Sundari B	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
64	920822413007	Suryavarshan M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

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Head of the Department

Department of Civil Engineering

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DEPARTMENT OF CIVIL ENGINEERING

Certificate Course on 3D Modeling on Google Sketchup

SAMPLE QUESTION PAPER & ANSWER

1. What is Google SketchUp primarily used for?

- A) Video Editing
- B) 3D Modeling
- C) Word Processing
- D) Web Development

Answer: B) 3D Modeling

2. Which of the following tools in SketchUp is used for drawing basic shapes like rectangles and circles?

- A) Push/Pull Tool
- B) Line Tool
- C) Move Tool
- D) Rectangle Tool

Answer: D) Rectangle Tool

3. What does the Push/Pull Tool do in Google SketchUp?

- A) Rotate objects
- B) Extrude or push objects in and out
- C) Move objects horizontally
- D) Create curved surfaces

Answer: B) Extrude or push objects in and out

4. Which menu in SketchUp allows you to control the visibility of different elements in your model?

- A) File Menu
- B) Edit Menu
- C) View Menu
- D) Tools Menu

Answer: C) View Menu





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5. What is the purpose of the Orbit Tool in Google SketchUp?

- A) Move objects vertically
- B) Rotate the camera view around the model
- C) Resize objects
- D) Create sections in the model

Answer: B) Rotate the camera view around the model

6. In SketchUp, what does the term "Components" refer to?

- A) 2D drawings
- B) 3D models made of groups
- C) Texture maps
- D) SketchUp plugins

Answer: B) 3D models made of groups

7. Which tool is used for measuring distances in Google SketchUp?

- A) Line Tool
- B) Tape Measure Tool
- C) Protractor Tool
- D) Move Tool

Answer: B) Tape Measure Tool

8. What file formats can SketchUp export to?

- A) JPEG and PNG
- B) DWG and DXF
- C) MP4 and AVI
- D) PDF and DOCX

Answer: B) DWG and DXF

9. How can you soften and smooth edges in SketchUp?

- A) Using the Eraser Tool
- B) Using the Paint Bucket Tool





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C) Adjusting the Soften Edges settings

D) Applying textures

Answer: C) Adjusting the Soften Edges settings

10. What is the purpose of the Follow Me Tool in SketchUp?

A) Create 3D text

B) Extrude a profile along a path

C) Rotate objects around a point

D) Measure distances

Answer: B) Extrude a profile along a path

11. Which tool is used for creating a copy or duplicates of selected objects in SketchUp?

A) Move Tool

B) Copy Tool

C) Rotate Tool

D) Scale Tool

Answer: A) Move Tool

12. What does the term "Inference" mean in SketchUp?

A) An educated guess

B) A prediction tool

C) A suggested alignment or point based on the model's geometry

D) An error in the model

Answer: C) A suggested alignment or point based on the model's geometry

13. Which axis is represented by the color blue in SketchUp?

A) X-axis

B) Y-axis

C) Z-axis

D) W-axis

Answer: C) Z-axis





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14. What is the purpose of the Section Plane Tool in SketchUp?

- A) Cut through a 3D model to create sectional views
- B) Change the color of sections in a model
- C) Create 2D floor plans
- D) Add shadows to a model

Answer: A) Cut through a 3D model to create sectional views

15. Which menu in SketchUp allows you to access pre-made 3D components from the 3D Warehouse?

- A) File Menu
- B) Edit Menu
- C) View Menu
- D) Window Menu

Answer: A) File Menu

16. What is the purpose of the Follow Me Tool in SketchUp?

- A) Create 3D text
- B) Extrude a profile along a path
- C) Rotate objects around a point
- D) Measure distances

Answer: B) Extrude a profile along a path

17. Which tool is used for drawing freehand lines in SketchUp?

- A) Line Tool
- B) Pencil Tool
- C) Arc Tool
- D) Rectangle Tool

Answer: B) Pencil Tool

18. What is the purpose of the Outliner in SketchUp?

- A) View and manage layers
- B) Organize and manage components and groups
- C) Control the visibility of the model





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D) Adjust rendering settings

Answer: B) Organize and manage components and groups

19. Which tool is used for creating and editing curves in SketchUp?

A) Line Tool

B) Arc Tool

C) Rectangle Tool

D) Push/Pull Tool

Answer: B) Arc Tool

20. In SketchUp, what does the "In Model" library refer to?

A) A collection of 2D textures

B) A repository of 3D models created in the current project

C) A database of default materials

D) A list of installed plugins

Answer: B) A repository of 3D models created in the current project

PROGRAM COORDINATOR

[L. SELVAM,
AP/Civil]



Head-Civil

Head of the Department
Department of Civil Engineering
NPR College of Engineering & Technology
Natham, Dindigul - 624 401.



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DEPARTMENT OF CIVIL ENGINEERING

Certificate Course on 3D Modeling on Google Sketchup

FEEDBACK FORM

Date: 19/09/2022

Name of the Student	:	M. ALEXPANDE
Year / Semester	:	III / V
Department	:	CIVIL

S/N.	Description	Excellent	Good	Satisfactory	Poor	Very Poor
1	Content of the Speaker	✓				
2	Fluency/Communication	✓				
3	Information received	✓				
4	Interaction with participants	✓				
5	Overall function arrangements	✓				


Student Signature





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DEPARTMENT OF CIVIL ENGINEERING

Certificate Course on 3D Modeling on Google Sketchup

FEEDBACK FORM

Date: 19.09.2022

Name of the Student	:	M. SUBAND
Year / Semester	:	II / III
Department	:	Civil Engineering

S/N.	Description	Excellent	Good	Satisfactory	Poor	Very Poor
1	Content of the Speaker	✓				
2	Fluency/Communication	✓				
3	Information received		✓			
4	Interaction with participants	✓				
5	Overall function arrangements	✓				

M. Subandu
Student Signature





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DEPARTMENT OF CIVIL ENGINEERING

Certificate Course on 3D Modeling on Google Sketchup

FEEDBACK SUMMARY

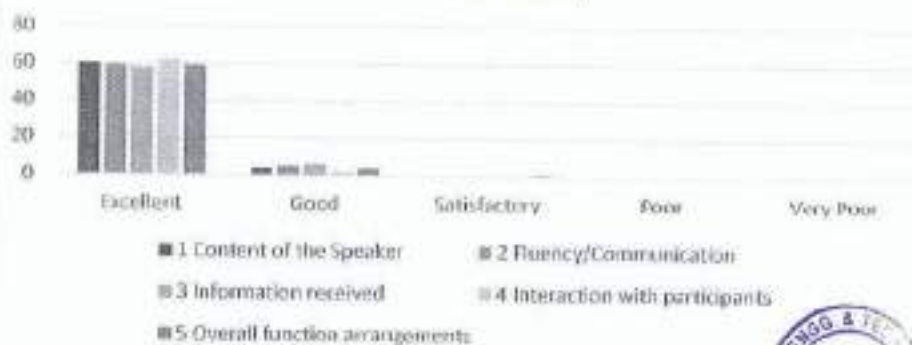
TOTAL STRENGTH:64

Date: 19.09.2022

Content	Excellent	Good	Fair	Satisfactory	Poor
Content of the Speaker	60	4	0	0	0
Fluency/Communication	59	5	0	0	0
Information received	58	6	0	0	0
Interaction with participants	62	2	0	0	0
Overall function arrangements	59	4	1	0	0

NUMBER OF STUDENTS SUCCESSFULLY COMPLETED:64

Certificate Course on 3D Modeling on Google Sketchup



Cochran
PROGRAM COORDINATOR

[Signature]
HOD-Civil

[L. SELVAM,
-AP/Civil]

Head of the Department
Department of Civil Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.



PRINCIPAL

Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal

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DEPARTMENT OF CIVIL ENGINEERING

Certificate Course on 3D Modeling on Google Sketchup

Summary Report

Course Overview:

The certificate course on 3D Modeling using Google SketchUp aimed to provide participants with comprehensive knowledge and hands-on experience in creating 3D models for various applications. The course covered essential concepts, tools, and techniques within the Google SketchUp environment.

Duration:

The course spanned from 22.08.2022 to 12.09.2022, comprising 16 sessions and 32 hours.

Objectives:

- To know the Overview of 3D modeling concepts and their applications.
- Understanding the relevance of 3D modeling in various industries.

General:

The program commenced with a welcome address by Mr. K. Sanjay final-year Civil Engineering. Dr. J. Sundararajan, Principal inaugurated the program and delivered the inaugural address. The session was enriched by the valuable insights shared by Mr. S. Soma Sundara Moorthy, an external Resource Person, Con-Tech Research Lab, Chennai. Over the course of 32 hours, students were provided with a comprehensive overview of "3D Modeling on Google Sketchup " through the expertise and knowledge imparted by Mr. S. Soma Sundara Moorthy.

The keynote delved into crucial aspects of the industry, offering participants a deeper understanding of current trends, challenges, and opportunities. Mr. S. Soma Sundara Moorthy, also spotlighted real-world applications of 3D modeling, presenting compelling case studies and success stories that illustrated the practical impact of these skills. The session extended beyond the conventional curriculum, exploring emerging technologies and advancements in 3D modeling, and providing participants with an indication of the future of the industry.





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64 students attended from Civil & M.E-Structural Engineering. 64 students who participated and completed the quiz program. During the valedictory, the certificate was distributed by Dr.A.Hemalatha Head of the Department. Finally Ms.M.Subanu second-year Civil Engineering was delivered the vote of thanks.

Outcome of the Programme:

- Participants will gain the ability to independently create, design, and visualize 3D models using Google SketchUp.
- Participants will be able to undertake real-world projects, demonstrating practical application of learned 3D modeling concepts.
- Equipping participants with versatile skills applicable across diverse professional settings, such as architecture, design, and more.

PROGRAM COORDINATOR

[K. SELVAM,
AP/Civil]

HOD-Civil

Head of the Department
Department of Civil Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.



PRINCIPAL

Dr. J.SUNDARARAJAN,

B.E., M.Tech., Ph.D.

Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.



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Certificate Course on 3D Modeling on Google Sketchup

Course Material

Material Link:

1. <https://help.sketchup.com/en/3d-warehouse/browsing-and-downloading-materials>
2. <https://help.sketchup.com/en/3d-warehouse/searching-and-downloading-models>
3. <https://help.sketchup.com/en/3d-warehouse/downloading-models-3d-warehouse-google-earth>
4. <https://help.sketchup.com/en/3d-warehouse/uploading-models>
5. <https://help.sketchup.com/en/3d-warehouse/organizing-models-private-folders>
6. <https://help.sketchup.com/en/3d-warehouse/downloading-model-file-formats>
7. <https://www.bgsu.edu/content/dam/BGSU/libraries/documents/collab-lab/Sketchup-Tutorial.pdf>
8. <https://forums.sketchup.com/t/import-pdf-files/2173>
9. https://www.ucl.ac.uk/bartlett/planning/sites/bartlett_planning/files/sketchup.pdf
10. https://download.e-bookshelf.de/download/0000/8329/56/L_G-0000832956-0002854809.pdf





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DEPARTMENT OF CIVIL ENGINEERING

CERTIFICATE COURSE on

"3D MODELING ON GOOGLE SKETCHUP"

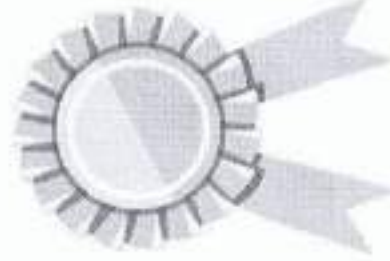
Certificate of Participation

This is to certify that ----- Mr. R. Parthiban - 19 - civil ----- has successfully completed the Certificate Course on "3D MODELING ON GOOGLE SKETCHUP" held from 22.08.2022 to 12.09.2022 for 32 hours in our College.

Handwritten signature

HOD/CIVIL

Head of the Department
Department of Civil Engineering
College of Engineering & Technology



Handwritten signature

PRINCIPAL
Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal

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CERTIFICATE COURSE on

"3D MODELING ON GOOGLE SKETCHUP"

Certificate of Participation

This is to certify that ----- Ms. M. SUBARUN ----- PI - CIVIL has successfully completed the Certificate Course on "3D MODELING ON GOOGLE SKETCHUP" held from 22.08.2022 to 12.09.2022 for 32 hours in our College.



HOD/CIVIL

Head of the Department
Department of Civil Engineering
NPR College of Engineering & Technology





PRINCIPAL
Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
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NPR College of Engineering & Technology



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DEPARTMENT OF CIVIL ENGINEERING

Add on Course on CPM and PERT in Construction Project Management

INDEX

COURSE NAME: CPM and PERT in Construction Project Management

COURSE CODE: 22CEAO01

ACADEMIC YEAR: 2022-2023

SEMESTER: ODD

DURATION: 36 HOURS

S/N.	PARTICULARS	PAGE NO.
1	Permission letter	2
2	Circular	3
3	Invitation	4
4	Course content	5
5	Registered students' Name list	6
6	Course Schedule	8
7	Student's attendance	11
8	Quiz sample question paper with answers	13
9	Students' feedback	18
10	Feedback analysis	20
11	Summary report	21
12	Course material/manual	22
13	Sample certificate of the program	23



P. Manikandan
**PROGRAM
COORDINATOR**

[Signature]
HOD-CIVIL

[Signature]
IQAC

[Signature]
PRINCIPAL

P. Manikandan
Head of the Department
Department of Civil Engineering
NPR College of Engineering & Technology
Nathan, Dindigul (Dt)-624 401.

Coordinator - IQAC
NPR College of Engineering & Technology
Nathan, Dindigul (Dt)-624 401

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Date: 07.11.2022

From

Mr.P. Manikandan,
Assistant Professor
Department of Civil Engineering,
NPR College of Engineering & Technology,
Natham.

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Respected Sir,

Subject: Request for Permission to Conduct Add-On Course on "CPM and PERT in Construction Project Management" – Reg.

We intend to organize an additional course on " CPM and PERT in Construction Project Management" for our Civil Engineering students from 12.12.2022 to 17.12.2022, spanning 36 hours at our college. We have proposed Er.R. Udhayasankar, Managing Director, B.T.R Construction, Erode. as the resource person for this course. We seek your permission to proceed with this initiative.

Thanking you,

Yours faithfully,

P. Manikandan
(P. MANIKANDAN)





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CIRCULAR

NPRCET/OFF/CIVIL/VAC/2022-2023

Date: 29.11.2022

We are glad to inform you that the Department of Civil Engineering has planned to conduct an add-on course on "CPM and PERT in Construction Project Management" for the students during this odd semester 2022-2023. If interested, students can enroll their name to the coordinator of this program on or before 05.12.2022.

The details of the training program are given below:

Resource Person	: Er. R. Udhayasankar, Managing Director, B.T.R Construction, Erode.
Venue	: Computer-Aided Design & Drafting Laboratory
Date & Duration	: 12.12.2022 to 17.12.2022 & 36 Hours
Program Coordinator	Mr.P. Manikandan, Assistant Professor

Copy to:

1. IQAC
2. All the HoDs
3. Notice Board
4. File
5. Administrative office for information

PRINCIPAL
Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
NPR College of Engineering & Technology
Natham, Dindigul (TN) - 624 401





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DEPARTMENT OF CIVIL ENGINEERING

INVITATION

The Management, Principal, and Department of Civil Engineering cordially invite you
for the

ADD on COURSE on “CPM and PERT in Construction Project Management”

Date : 12.12.2022

Time : 9.00 AM

Venue: Civil CAD Lab

Chief Guest

Er. R. Udhayasankar,
Managing Director,
B.T.R Construction, Erode.

Patron

Dr.J. Sundararajan,
Principal.

Convener

Dr.A.Hemalatha,
Head of the Department.

Organised by

Department of Civil Engineering,
NPR College of Engineering & Technology,
Natham, Dindigul.





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DEPARTMENT OF CIVIL ENGINEERING
Add on Course on CPM and PERT in Construction Project Management
COURSE CONTENT

CHAPTER	TOPICS
1	Overview of CPM and PERT Historical development and significance in construction project management Understanding project scheduling Identifying critical path
2	Probability theory and project scheduling Three-time estimates in PERT Expected completion time and variance calculation Introduction to project management software (Microsoft Project, Primavera)
3	Comparative analysis of CPM and PERT Advantages and limitations Selection criteria based on project characteristics Microsoft Project software
4	Work breakdown structure (WBS) Activity identification and estimation Resource allocation and leveling Microsoft Project software
5	Progress tracking and monitoring Schedule compression techniques Delay analysis and mitigation strategies Microsoft Project software
6	Microsoft Project Creating project schedules using software tools Incorporating CPM and PERT methodologies into project management software Microsoft Project software for activity, Resource creation Microsoft Project software for project creation

Criteria to get Certificate:

- Students should register their names for this course.
- Students must have 75% attendance and score 50% of marks in the MCQ Test.

Prepared by- Mr.P.Manikandan, AP/Civil


Head of the Department
Department of Civil Engineering
College of Engineering & Technology


Coordinator - IQAC
NPR College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401


Dr. JSUNDARARAJAN
PRINCIPAL
Principal
NPR College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401



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DEPARTMENT OF CIVIL ENGINEERING

Add on Course on CPM and PERT in Construction Project Management

LIST OF REGISTERED STUDENTS

S.No.	Register Number	Name of the Student	Year/Department
1	920819103001	Arun Kumar N	IV-Civil
2	920819103002	Jeevitha C	IV-Civil
3	920819103003	Naveenraj S	IV-Civil
4	920819103004	Sanjay K	IV-Civil
5	920819103005	Saranya Devi S	IV-Civil
6	920819103007	Subash S	IV-Civil
7	920819103008	Sudharsan K	IV-Civil
8	920819103009	Venkatesan R	IV-Civil
9	920819103301	Nithishkumar A R	IV-Civil
10	920819103302	Purusothaman K	IV-Civil
11	920819103303	Sachin R	IV-Civil
12	920819103304	Kishore S P	IV-Civil
13	920820103001	Alagar K	III-Civil
14	920820103002	Anandhan Alaguvel P	III-Civil
15	920820103003	Chandira Moorthi B	III-Civil
16	920820103004	Gowtham C	III-Civil
17	920820103005	Harish M	III-Civil
18	920820103006	Mohanraj G	III-Civil
19	920820103007	Naveen Kumar S	III-Civil
20	920820103008	Pranaveshvar J S	III-Civil
21	920820103009	Sharan Sakthivel J	III-Civil
22	920820103010	Sundaraprakadeeswaran B	III-Civil
23	920820103011	Suriya M	III-Civil
24	920820103012	Vijaya Sri Hari I	III-Civil
25	920820103013	Vikneshwaran S	III-Civil
26	920820103014	Yazhini.S	III-Civil
27	920820103301	Alex Pandi.M	III-Civil
28	920820103302	Arul Murugan M	III-Civil
29	920820103303	Gunapandi T	III-Civil
30	920820103304	Hari Prasath M	III-Civil
31	920820103305	Jegan.S	III-Civil
32	920820103307	Logeshwaran R	III-Civil
33	920820103308	Naveen Prasad R	III-Civil
34	920820103309	Parthiban R	III-Civil
35	920820103310	Prithviraj T	III-Civil





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DEPARTMENT OF CIVIL ENGINEERING

Add on Course on CPM and PERT in Construction Project Management

LIST OF REGISTERED STUDENTS

S.No.	Register Number	Name of the Student	Year/Department
36	920820103311	Rajvignesh R	III-Civil
37	920820103312	Srilakshmi S	III-Civil
38	920820103313	Tatta Thamimul Ansari M	III-Civil
39	920820103314	Thiraviyam S	III-Civil
40	920820103315	Videshwaran R	III-Civil
41	920820103316	Vignesh K	III-Civil
42	920820103317	Dhanalakshmi P	III-Civil
13	920821103002	Bharath Kumar S	II -Civil
44	920821103003	Dinakaran K	II -Civil
45	920821103004	Elamparuthi B	II -Civil
46	920821103005	Kirthik Ananth M	II -Civil
47	920821103006	Mohammed Abdula S	II -Civil
48	920821103007	Mutharivu K	II -Civil
49	920821103008	Praveen C	II -Civil
50	920821103010	Ritika S A	II -Civil
51	920821103011	Sanjay Yukendra M	II -Civil
52	920821103012	Subanu M	II -Civil
53	920821103013	Syedali Fathima K	II -Civil
54	920821103014	Veeramari S	II -Civil
55	920821103301	Anbuselvam S	II -Civil
56	920821103302	Logarani A	II -Civil
57	920820413001	Jeyadharani J	II - M.E
58	920822413001	Bavithra T	I - M.E
59	920822413002	Datchinamoorthy R B	I - M.E
60	920822413003	Jerin J	I - M.E
61	920822413004	Karthikeyan M	I - M.E
62	920822413005	Kavimalan R	I - M.E
63	920822413006	Sundari B	I - M.E
64	920822413007	Suryavarshan M	I - M.E

Class	No. of students
II Year Civil	14
III Year Civil	30
IV Year Civil	12
M.E Structures	8
Total	64



Head of Department
Department of Civil Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.

Dr. J. SUNDARAJAN,
PRINCIPAL
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DEPARTMENT OF CIVIL ENGINEERING

Add on Course on CPM and PERT in Construction Project Management

COURSE SCHEDULE

Day 1 12.12.2022 Monday	9.00 a.m. to 9.30 a.m.	Inauguration-Dr.J.Sundararajan, Principal.	
	9.30 a.m. to 11.00 a.m.	Session 1	Overview of CPM and PERT Er. R. Udhayasankar, Managing Director of B.T.R Construction, Erode.
	11.00 a.m. to 11.15 a.m.	Tea Break	
	11.15 a.m. to 12.45 p.m.	Session 2	Historical development and significance in CPM Mr.N.Karthic, Assistant Professor.
	12.45 p.m. to 1.30 p.m.	Lunch Break	
	1.30 p.m. to 3.00 p.m.	Session 3	Understanding project scheduling Mr.N.Karthic, Assistant Professor.
	3.00 p.m. to 3.15 p.m.	Tea Break	
	3.15 p.m. to 4.15 p.m.	Session 4	Probability theory and project scheduling Er. R. Udhayasankar, Managing Director of B.T.R Construction, Erode.
Day 2 13.12.2022 Tuesday	9.30 a.m. to 11.00 a.m.	Session 1	Three-time estimates in PERT Mr.N.Karthic, Assistant Professor.
	11.00 a.m. to 11.15 a.m.	Tea Break	
	11.00 a.m. to 12.45 p.m.	Session 2	Expected completion time and variance calculation Mr.N.Karthic, Assistant Professor.
	12.45 p.m. to 1.30 p.m.	Lunch Break	
	1.30 p.m. to 3.00 p.m.	Session 3	Introduction to project management software (Microsoft Project, Primavera) Er. R. Udhayasankar, Managing Director of B.T.R Construction, Erode.
	3.00 p.m. to 3.15 p.m.	Tea Break	
	3.15 p.m. to 4.15 p.m.	Session 4	Comparative analysis of CPM and PERT Er. R. Udhayasankar, Managing Director of B.T.R Construction, Erode.
Day 3 14.12.2022 Wednesday	9.30 a.m. to 11.00 a.m.	Session 1	Advantages and limitations Mr.N.Karthic, Assistant Professor.
	11.00 a.m. to 11.15 a.m.	Tea Break	
	11.15 a.m. to 12.45 p.m.	Session 2	Selection criteria based on project characteristics Mr.N.Karthic, Assistant Professor.



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DEPARTMENT OF CIVIL ENGINEERING

Add on Course on CPM and PERT in Construction Project Management

COURSE SCHEDULE

	12.45 p.m. to 1.30 p.m.	<i>Lunch Break</i>	
	1.30 p.m. to 3.00 p.m.	Session 3	Microsoft Project software Er. R. Udhayasankar, Managing Director of B.T.R Construction, Erode.
	3.00 p.m. to 3.15 p.m.	<i>Tea Break</i>	
	3.15 p.m. to 4.15 p.m.	Session 4	Work breakdown structure (WBS) Mr.N.Karthic, Assistant Professor.
Day 4 15.12.2022 Thursday	9.30 a.m. to 11.00 a.m.	Session 1	Activity identification and estimation Mr.N.Karthic, Assistant Professor.
	11.00 a.m. to 11.15 a.m.	<i>Tea Break</i>	
	11.15 a.m. to 12.45 p.m.	Session 2	Resource allocation and leveling Er. R. Udhayasankar, Managing Director of B.T.R Construction, Erode.
	12.45 p.m. to 1.30 p.m.	<i>Lunch Break</i>	
	1.30 p.m. to 3.00 p.m.	Session 3	MS Project software Mr.N.Karthic, Assistant Professor.
	3.00 p.m. to 3.15 p.m.	<i>Tea Break</i>	
	3.15 p.m. to 4.15 p.m.	Session 4	Progress tracking and monitoring Er. R. Udhayasankar, Managing Director of B.T.R Construction, Erode.
Day 5 16.12.2022 Friday	9.30 a.m. to 11.00 a.m.	Session 1	Schedule compression techniques Mr.N.Karthic, Assistant Professor.
	11.00 a.m. to 11.15 a.m.	<i>Tea Break</i>	
	11.15 a.m. to 12.45 p.m.	Session 2	Delay analysis and mitigation strategies Er. R. Udhayasankar, Managing Director of B.T.R Construction, Erode.
	12.45 p.m. to 1.30 p.m.	<i>Lunch Break</i>	
	1.30 p.m. to 3.00 p.m.	Session 3	Primavera software for basic tools Mr.N.Karthic, Assistant Professor.
	3.00 p.m. to 3.15 p.m.	<i>Tea Break</i>	
	3.15 p.m. to 4.15 p.m.	Session 4	Primavera software Creating project schedules tools Mr.N.Karthic, Assistant Professor.



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DEPARTMENT OF CIVIL ENGINEERING

Add on Course on CPM and PERT in Construction Project Management

COURSE SCHEDULE

Day 6 17.12.2022 Saturday	9.30 a.m. to 11.00 a.m.	Session 1	Microsoft Project software Creating project activity tools Mr.N.Karthic, Assistant Professor.
	11.00 a.m. to 11.15 a.m.	<i>Tea Break</i>	
	11.15 a.m. to 12.45 p.m.	Session 2	Incorporating CPM and PERT methodologies into project management software Er. R. Udhayasankar, Managing Director of B.T.R Construction, Erode.
	12.45 p.m. to 1.30 p.m.	<i>Lunch Break</i>	
	1.30 p.m. to 3.00 p.m.	Session 3	Microsoft Project software for activity, Resource creation Er. R. Udhayasankar, Managing Director of B.T.R Construction, Erode.
	3.00 p.m. to 3.15 p.m.	<i>Tea Break</i>	
	3.15 p.m. to 3.45 p.m.	Session 4	Microsoft Project software for project creation Er. R. Udhayasankar, Managing Director of B.T.R Construction, Erode.
	3.45 p.m. to 4.15 p.m.	Valedictory	


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Coordinator - IQAC
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DEPARTMENT OF CIVIL ENGINEERING

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STUDENT'S ATTENDANCE

S/N.	Register Number	Name of the student	12-12-22	13-12-22	14-12-22	15-12-22	16-12-22	17-12-22
1	920819103001	Arun Kumar N	/	/	/	/	/	/
2	920819103002	Jeevitha C	/	/	a	/	/	/
3	920819103003	Naveenraj S	/	/	/	/	/	/
4	920819103004	Sanjay K	a	/	/	/	/	/
5	920819103005	Saranya Devi S	/	/	/	/	/	/
6	920819103007	Subash S	/	/	/	/	a	/
7	920819103008	Sudharsan K	/	/	/	/	/	/
8	920819103009	Venkatesan R	/	/	/	/	/	/
9	920819103301	Nithishkumar A R	/	/	/	/	/	/
10	920819103302	Purusothaman K	a	/	/	/	/	/
11	920819103303	Sachin R	/	/	/	/	/	/
12	920819103304	Kishore S P	/	/	/	/	/	/
13	920820103001	Alagar K	/	/	/	/	/	/
14	920820103002	Anandhan Alaguvel P	/	/	/	a	/	/
15	920820103003	Chandira Moorthi B	/	/	/	/	/	/
16	920820103004	Gowtham C	/	/	/	/	/	/
17	920820103005	Harish M	/	/	/	/	/	/
18	920820103006	Mohanraj G	/	/	/	/	/	/
19	920820103007	Naveen Kumar S	/	a	/	/	/	/
20	920820103008	Pranaveshvar J S	/	/	/	/	/	/
21	920820103009	Sharan Sakthivel J	/	/	/	/	a	/
22	920820103010	Sundaraprakadeeswaran B	e	/	/	/	/	a
23	920820103011	Suriya M	a	/	/	/	/	/
24	920820103012	Vijaya Sri Hari I	/	/	/	/	/	a
25	920820103013	Vikneshwaran S	/	/	/	/	/	/
26	920820103014	Yazhini.S	/	/	/	/	/	/
27	920820103301	Alex Pandi.M	/	/	/	/	/	/
28	920820103302	Arul Murugan M	/	/	/	/	/	/
29	920820103303	Gunapandi T	/	/	/	/	/	/
30	920820103304	Hari Prasath M	/	/	/	a	/	/
31	920820103305	Jegan.S	/	/	/	/	/	/
32	920820103307	Logeshwaran R	/	/	/	/	/	/
33	920820103308	Naveen Prasad R	/	/	/	/	/	/
34	920820103309	Parthiban R	a	/	/	/	/	/
35	920820103310	Prithviraj T	/	/	/	/	/	/
36	920820103311	Rajvignesh R	/	/	/	/	/	/
37	920820103312	Srilakshmi S	/	/	/	/	a	/





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STUDENT'S ATTENDANCE

S/N.	Register Number	Name of the student	12.12.23	13.12.23	14.12.23	15.12.23	16.12.23	17.12.23
38	920820103313	Tatta Thamimul Ansari M	/	/	/	/	/	/
39	920820103314	Thiraviyam S	/	/	/	/	/	/
40	920820103315	Videshwaran R	/	/	/	/	/	/
41	920820103316	Vignesh K	/	/	/	/	/	/
42	920820103317	Dhanalakshmi P	/	/	/	/	/	/
13	920821103002	Bharath Kumar S	/	/	/	/	/	/
44	920821103003	Dinakaran K	/	/	/	/	/	/
45	920821103004	Elamparuthi B	/	/	/	/	/	/
46	920821103005	Kirthik Ananth M	/	/	/	/	/	/
47	920821103006	Mohammed Abdula S	/	/	/	/	/	/
48	920821103007	Mutharivu K	/	/	/	/	/	/
49	920821103008	Praveen C	/	/	/	/	/	/
50	920821103010	Ritika S A	/	/	/	/	/	/
51	920821103011	Sanjay Yukendra M	/	/	/	/	/	/
52	920821103012	Subanu M	/	/	/	/	/	/
53	920821103013	Syedali Fathima K	/	/	/	/	/	/
54	920821103014	Veeramari S	/	/	/	/	/	/
55	920821103301	Anbuselvam S	/	/	/	/	/	/
56	920821103302	Logarani A	/	/	/	/	/	/
57	920820413001	Jeyadharani J	/	/	/	/	/	/
58	920822413001	Bavithra T	/	/	/	/	/	/
59	920822413002	Datchinamoorthy R B	/	/	/	/	/	/
60	920822413003	Jerin J	/	/	/	/	/	/
61	920822413004	Karthikeyan M	/	/	/	/	/	/
62	920822413005	Kavimalan R	/	/	/	/	/	/
63	920822413006	Sundari B	/	/	/	/	/	/
64	920822413007	Suryavarshan M	/	/	/	/	/	/

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DEPARTMENT OF CIVIL ENGINEERING

Add on Course on CPM and PERT in Construction Project Management

SAMPLE QUESTION PAPER & ANSWER

1. Which of the following statements best describes the Critical Path Method (CPM) in construction project management?

- A) CPM focuses on optimizing resource allocation.
- B) CPM identifies the longest sequence of dependent activities.
- C) CPM utilizes three-time estimates for activity duration.
- D) CPM primarily deals with risk assessment.

Answer: B) CPM identifies the longest sequence of dependent activities.

2. In PERT (Program Evaluation and Review Technique), what does the term "optimistic time" represent?

- A) The shortest possible time required for an activity.
- B) The most likely time required for an activity.
- C) The longest possible time required for an activity.
- D) The time required with the highest probability.

Answer: A) The shortest possible time required for an activity.

3. Which of the following is a key advantage of using CPM and PERT in construction project management?

- A) Improved stakeholder communication
- B) Enhanced risk mitigation
- C) Increased project cost
- D) Reduced project duration

Answer: A) Improved stakeholder communication

4. What is the critical path in a project network diagram?

- A) The path with the shortest duration
- B) The path with the highest float
- C) The path with the lowest resource utilization
- D) The longest path through the network

Answer: D) The longest path through the network





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5. Which of the following techniques is used to shorten the project duration without changing the scope?

- A) Resource leveling
- B) Fast tracking
- C) Schedule compression
- D) Risk management

Answer: C) Schedule compression

6. In PERT analysis, what does the term "expected time" represent?

- A) The time required with the highest probability
- B) The average time required for an activity
- C) The shortest possible time required for an activity
- D) The longest possible time required for an activity

Answer: B) The average time required for an activity

7. Which of the following is NOT a component of a PERT diagram?

- A) Activities
- B) Nodes
- C) Dependencies
- D) Gantt chart

Answer: D) Gantt chart

8. What is the primary purpose of using CPM and PERT in construction project management?

- A) To increase project complexity
- B) To optimize project resources
- C) To improve project scheduling and control
- D) To eliminate project risks

Answer: C) To improve project scheduling and control

9. Which of the following statements is true regarding the critical path in a project?

- A) It can change throughout the project's duration.
- B) It remains constant once identified.
- C) It includes all non-critical activities.





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D) It is the shortest path through the network.

Answer: A) It can change throughout the project's duration.

10. What is the purpose of using three-time estimates in PERT analysis?

- A) To identify the most likely time for an activity
- B) To calculate the average time for an activity
- C) To determine the standard deviation for an activity
- D) To estimate the total project duration

Answer: C) To determine the standard deviation for an activity

11. Which of the following is a characteristic of a critical activity in a project network diagram?

- A) It has the highest float.
- B) It can be delayed without affecting the project duration.
- C) It is on the longest path through the network.
- D) It has the lowest resource utilization.

Answer: C) It is on the longest path through the network.

12. What is the term used to describe the amount of time an activity can be delayed without delaying the project completion time?

- A) Slack
- B) Float
- C) Lead
- D) Lag

Answer: B) Float

13. Which of the following techniques involves performing multiple activities in parallel that were originally planned to be done sequentially?

- A) Fast tracking
- B) Crashing
- C) Resource leveling
- D) Monte Carlo simulation

Answer: A) Fast tracking





14. In CPM, what does the term "dependency" refer to?

- A) The relationship between two or more activities
- B) The total duration of an activity
- C) The number of resources assigned to an activity
- D) The likelihood of a risk occurring

Answer: A) The relationship between two or more activities

15. What is the primary purpose of a Gantt chart in construction project management?

- A) To identify the critical path
- B) To allocate resources
- C) To track project progress over time
- D) To calculate project costs

Answer: C) To track project progress over time

16. Which of the following is NOT a benefit of using PERT analysis in project management?

- A) It provides a probabilistic estimate of project duration.
- B) It allows for the identification of critical activities.
- C) It considers both optimistic and pessimistic estimates.
- D) It minimizes project risks.

Answer: D) It minimizes project risks.

17. What is the formula to calculate the variance of an activity in PERT analysis?

- A) $(\text{Pessimistic time} - \text{Optimistic time}) / 6$
- B) $(\text{Pessimistic time} - \text{Optimistic time}) / 4$
- C) $(\text{Pessimistic time} - \text{Optimistic time}) / 2$
- D) $(\text{Pessimistic time} - \text{Optimistic time}) / 3$

Answer: B) $(\text{Pessimistic time} - \text{Optimistic time}) / 4$

18. Which of the following statements is true about the critical path method (CPM)?

- A) It only considers the most likely estimates for activity durations.
- B) It can be used to determine project risks.
- C) It requires the use of three-time estimates for each activity.





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D) It identifies the shortest path through the project network.

Answer: D) It identifies the shortest path through the project network.

19. What does the term "slack" represent in project management?

- A) The difference between the early start and late start times of an activity
- B) The amount of time an activity can be delayed without delaying the project
- C) The total duration of an activity
- D) The number of resources assigned to an activity


Answer: A) The difference between the early start and late start times of an activity

20. Which of the following is a limitation of PERT analysis?

- A) It does not consider project uncertainties.
- B) It cannot handle complex project networks.
- C) It requires a large amount of computational resources.
- D) It assumes that activity durations are independent.

Answer: D) It assumes that activity durations are independent.


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FEEDBACK FORM

Date: 17.12.2022

Name of the Student	:	M. SURIYA
Year / Semester	:	II / V
Department	:	Civil

S/N.	Description	Excellent	Good	Satisfactory	Poor	Very Poor
1	Content of the Speaker	✓				
2	Fluency/Communication	✓				
3	Information received		✓			
4	Interaction with participants	✓				
5	Overall function arrangements	✓				


Student's Signature





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FEEDBACK FORM

Date: 7.12.2022

Name of the Student	:	S. Vasanthi
Year / Semester	:	II / III
Department	:	Civil Engineering

S/N.	Description	Excellent	Good	Satisfactory	Poor	Very Poor
1	Content of the Speaker	✓				
2	Fluency/Communication	✓				
3	Information received	✓				
4	Interaction with participants	✓				
5	Overall function arrangements	✓				

S. Vasanthi

Student's Signature





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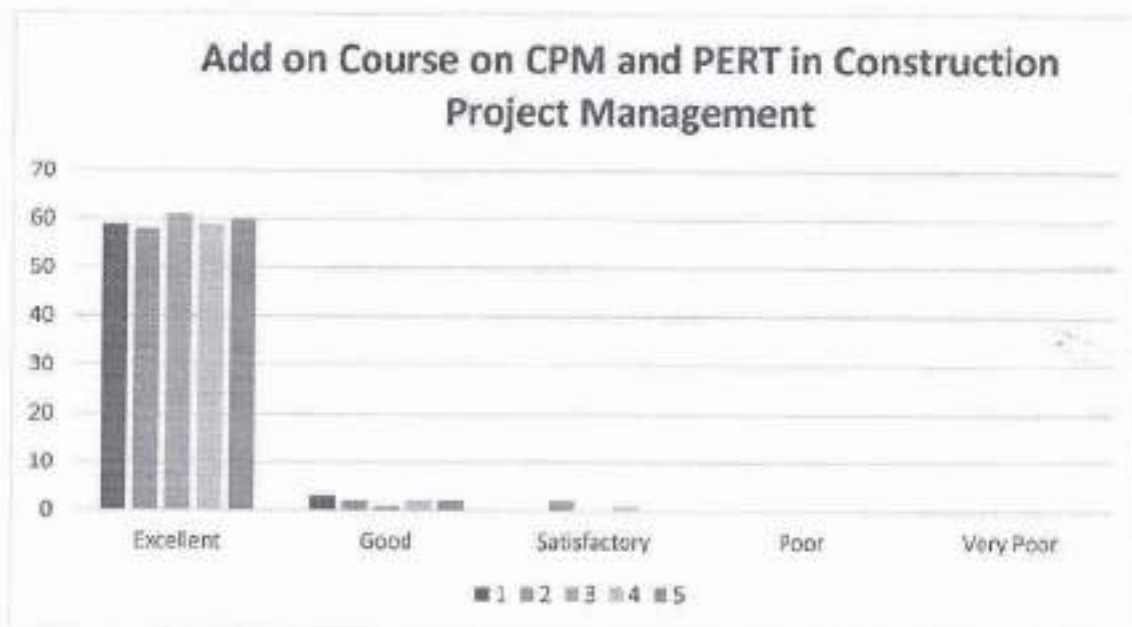
FEEDBACK SUMMARY

TOTAL STRENGTH:64

DATE: 17.12.2022

Content	Excellent	Good	Fair	Satisfactory	Poor
Content of the Speaker	59	3	0	0	0
Fluency/Communication	58	3	3	0	0
Information received	62	2	0	0	0
Interaction with participants	59	3	2	0	0
Overall function arrangements	61	3	0	0	0

NUMBER OF STUDENTS SUCCESSFULLY COMPLETED:62



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COORDINATOR

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DEPARTMENT OF CIVIL ENGINEERING

Add on Course on CPM and PERT in Construction Project Management

SUMMARY REPORT

Department of Civil Engineering, NPR College of Engineering & Technology, Natham organized the add on course on CPM and PERT in Construction Project Management. The course spanned from 12.12.2022 to 17.12.2022, comprising 36 hours. The program started with the prayer song. Ms. S. Saranya Devi final-year Civil Engineering delivered the welcome address.

Dr. J. Sundararajan, Principal inaugurated the program and delivered the inaugural address. The session was enriched by the valuable insights shared by Er. R. Udhayasankar, Managing Director of B.T.R Construction, Erode. Over 36 hours, students received a comprehensive overview of "CPM and PERT in Construction Project Management," addressed by Er. R. Udhayasankar expertise and knowledge.

Er. R. Udhayasankar, Managing Director of B.T.R Construction, Erode, delivered a brief keynote on construction project management, focusing on CPM and PERT methodologies. His expertise provided valuable insights, emphasizing the significance of meticulous planning and execution for project success.

64 students attended from Civil Engineering. 62 students participated and completed the quiz program. During the valedictory, the certificate was distributed by Dr.A.Hemaltha Head of the Department. Finally, Mr. S. Veeramari second-year Civil Engineering has proposed the vote of thanks.

The outcome of the Programme:

- Participants gained a deeper comprehension of construction project management principles, particularly CPM and PERT methodologies.
- Participants learned how to apply theoretical concepts in real-world construction scenarios, improving their project management skills.


PROGRAM
COORDINATOR


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Add on Course on CPM and PERT in Construction Project Management

COURSE MATERIAL

Material Link:

1. <https://depts.washington.edu/inde410/Chapter22.pdf>
2. <https://byjus.com/commerce/difference-between-pert-and-cpm/>
3. <https://theconstructor.org/construction/uses-of-cpm-and-pert-in-construction-projects/9162/>
4. <https://unstop.com/blog/difference-between-pert-and-cpm>
5. <https://u-next.com/blogs/product-management/pert-and-cpm/>





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ADD ON COURSE on

"CPM and PERT in Construction Project Management"

This is to certify that ----- M. SUBANDU - II - YEAR ----- has successfully completed the Add on Course on "CPM and PERT in Construction Project Management" held from 12.12.2022 to 17.12.2022 for 36 hours in our College.

been
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ADD ON COURSE on

"CPM and PERT in Construction Project Management"

This is to certify that ----- K. VIGNESH - III - YEAR ----- has successfully completed the Add on Course on "CPM and PERT in Construction Project Management" held from 12.12.2022 to 17.12.2022 for 36 hours in our College.

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DEPARTMENT OF CIVIL ENGINEERING
Certificate Course on Rapid Total Station Training
INDEX

COURSE NAME: Rapid Total Station Training

COURSE CODE: 22CECC02

ACADEMIC YEAR: 2022-2023

SEMESTER: EVEN

DURATION: 32 HOURS

S/N.	PARTICULARS	PAGE NO.
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2	Circular	3
3	Invitation	4
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Vijay Kumar
PROGRAM
COORDINATOR

C. Vijay Kumar
(Ap/civil)

Anand
HoD-CIVIL

Isfand
IQAC

Coordinator - IQAC
NPR College of Engineering & Technology
Natham, Dindigul (Dt)-624 401.

JSundaraman
PRINCIPAL

Dr. JSUNDARAMAN,
B.E., M.Tech., Ph.D.,
Principal

NPR College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.



Head of the Department
Department of Civil Engineering
NPR College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.



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DEPARTMENT OF CIVIL ENGINEERING
Certificate Course on Rapid Total Station Training
PERMISSION LETTER

Date: 01.02.2023

From

Mr.C. Vijayakumar,
Assistant Professor,
Department of Civil Engineering,
NPR College of Engineering & Technology,
Natham.

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Respected Sir,

Sub: Requesting permission to conduct Certificate course for Civil Engineering students – Reg.

We have planned to conduct a Certificate Course on “**Rapid Total Station Training**” for our B.E-Civil Engineering students from 09.02.2023 to 01.03.2023 for 32 hours in our college premises. We have proposed Mr. Samuel Sivakumar, Vland Best Hub Pvt.Ltd. Coimbatore as an external resource person for this certificate course. Kindly, permit us to conduct the same.

Thanking you,



Yours faithfully,

Vijayakumar
C. Vijayakumar
(AP/Civil)



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CIRCULAR

NPRCET/OFF/CIVIL/VAC/2022-2023

DATE: 03.02.2023

We are glad to inform you that our Department of Civil Engineering planned to conduct a certificate course on "Rapid Total Station Training" for our students during this semester. Interested students can enroll their names to the program coordinator on or before 06.02.2023.

The details of the Certificate course are given below:

Course Name	: Rapid Total Station Training
Resource Person	: Mr. Samuel Sivakumar, Vland Best Hub Pvt.Ltd. Coimbatore.
Venue	: NPRCET Open-Air Auditorium
Date & Duration	: 09.02.2023 to 01.03.2023 & 32 hours
Program Coordinator	: Mr.C.Vijayakumar, AP/Civil

Copy to:

1. IQAC
2. All the HoDs
3. All the Class Rooms
4. Notice Board
5. File
6. Administrative office for information



PRINCIPAL

Dr. J.SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

NPR College of Engineering & Technology
Natham, Dindigul (TN) - 624 401.



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DEPARTMENT OF CIVIL ENGINEERING

INVITATION

The Management, Principal, and Department of Civil Engineering cordially invite you
for the

CERTIFICATE COURSE on "RAPID TOTAL STATION TRAINING"

Date : 09.02.2023

Time : 9.00 AM

Venue: Civil CAD Lab

Chief Guest

Mr. Samuel Sivakumar,
Vland Best Hub Pvt.Ltd.
Coimbatore.

Patron

Dr.J. Sundararajan,
Principal.

Convener

Dr.A.Hemalatha,
Head of the Department.

Organised by

Department of Civil Engineering,
NPR College of Engineering & Technology,
Natham, Dindigul.





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DEPARTMENT OF CIVIL ENGINEERING

Certificate Course on Rapid Total Station Training

COURSE CONTENT

CHAPTER	TOPICS
1	<ul style="list-style-type: none">• Introduction to Angle and Distance Measurements.• Measure Remote Distance and Elevation.• Fieldwork
2	<ul style="list-style-type: none">• Station Establishment and Orientation.• Rectangular vs Polar coordinate system measurements.• Field work
3	<ul style="list-style-type: none">• Demonstration of stake out/ Demarcation of Building Layouts/ alignment of roads.• Traversing and Travers adjustment.• Field work
4	<ul style="list-style-type: none">• Contour Surveying.• Calculate 2D and 3D areas.• Field work
5	<ul style="list-style-type: none">• Calculate surface volume on the field/ site.• Procedure for downloading and uploading data to the total station on the field/ site.• Field work

Criteria to get Certificate:

- Students should register their names for this course.
- Students should secure 75% of their marks in the MCQ Test.

Prepared by Mr.C.Vijayakumar, AP/Civil

Approved by,




HOD-CIVIL

Head of the Department
Department of Civil Engineering
NPR College of Engineering & Technology
Natham, Dindigul (D1) - 624 401


IQAC

Coordinator - IQAC
NPR College of Engineering & Technology
Natham, Dindigul (D1) - 624 401


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DEPARTMENT OF CIVIL ENGINEERING

Certificate Course on Rapid Total Station Training

LIST OF REGISTERED STUDENTS

S.No.	Register Number	Student Name	Year/Department
1	920819103001	Arun Kumar N	IV-Civil
2	920819103002	Jeevittha C	IV-Civil
3	920819103003	Naveenraj S	IV-Civil
4	920819103004	Sanjay K	IV-Civil
5	920819103005	Saranya Devi S	IV-Civil
6	920819103007	Subash S	IV-Civil
7	920819103008	Sudharsan K	IV-Civil
8	920819103009	Venkatesan R	IV-Civil
9	920819103301	Nithishkumar A R	IV-Civil
10	920819103302	Purusothaman K	IV-Civil
11	920819103303	Sachin R	IV-Civil
12	920819103304	Kishore S P	IV-Civil
13	920820103001	Alagar K	III-Civil
14	920820103002	Anandhan Alaguvel P	III-Civil
15	920820103003	Chandira Moorthi B	III-Civil
16	920820103004	Gowtham C	III-Civil
17	920820103005	Harish M	III-Civil
18	920820103006	Mohanraj G	III-Civil
19	920820103007	Naveen Kumar S	III-Civil
20	920820103008	Pranaveshvar J S	III-Civil
21	920820103009	Sharan Sakthivel J	III-Civil
22	920820103011	Suriya M	III-Civil
23	920820103012	Vijaya Sri Hari I	III-Civil
24	920820103013	Vikneshwaran S	III-Civil
25	920820103014	Yazhini.S	III-Civil
26	920820103301	Alex Pandi.M	III-Civil
27	920820103302	Arul Murugan M	III-Civil
28	920820103303	Gunapandi T	III-Civil
29	920820103304	Hari Prasath M	III-Civil
30	920820103305	Jegan.S	III-Civil
31	920820103307	Logeshwaran R	III-Civil





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32	920820103308	Naveen Prasad R	III-Civil
33	920820103309	Parthiban R	III-Civil
34	920820103310	Prithviraj T	III-Civil
35	920820103311	Rajvignesh R	III-Civil
36	920820103312	Srilakshmi S	III-Civil
37	920820103313	Tatta Thamimul Ansari M	III-Civil
38	920820103314	Thiraviyam S	III-Civil
39	920820103315	Videshwaran R	III-Civil
40	920820103316	Vignesh K	III-Civil
41	920820103317	Dhanalakshmi P	III-Civil
42	920821103002	Bharath Kumar S	II -Civil
43	920821103003	Dinakaran K	II -Civil
44	920821103004	Elamparuthi B	II -Civil
45	920821103005	Kirthik Ananth M	II -Civil
46	920821103006	Mohammed Abdula S	II -Civil
47	920821103007	Mutharivu K	II -Civil
48	920821103008	Praveen C	II -Civil
49	920821103010	Ritika S A	II -Civil
50	920821103011	Sanjay Yukendra M	II -Civil
51	920821103012	Subanu M	II -Civil
52	920821103013	Syedali Fathima K	II -Civil
53	920821103014	Veeramari S	II -Civil
54	920821103301	Anbuselvam S	II -Civil
55	920821103302	Logarani A	II -Civil
56	920820413001	Jeyadharani J	II - M.E
57	920822413001	Bavithra T	I - M.E
58	920822413002	Datchinamoorthy R B	I - M.E
59	920822413003	Jerin J	I - M.E
60	920822413004	Karthikeyan M	I - M.E
61	920822413005	Kavimalan R	I - M.E
62	920822413006	Sundari B	I - M.E
63	920822413007	Suryavarshan M	I - M.E

Head
HOD-CIVIL

Head of the Department

Department of Civil Engineering

NPR College of Engineering & Technology

Natham, Dindigul (DT) - 624 401.



Page 7 of 21

PRINCIPAL
Dr. J. SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology

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DEPARTMENT OF CIVIL ENGINEERING

Certificate Course on Rapid Total Station Training

COURSE SCHEDULE

Date	Time	Session Topics and Resource Person
09.02.2023	4.00 p.m. to 4.30 p.m.	Inauguration -Dr.J. Sundararajan, Principal, NPRCET
	4.30 p.m. to 6.00 p.m.	Introduction to Angle and Distance Measurements. Mr. Samuel Sivakumar, VLAND's BEST Hub Pvt Ltd.
10.02.2023	4.00 p.m. to 6.00 p.m.	Measure Remote Distance and Elevation. Mr.K.Selvam, AP-Civil, NPRCET.
13.02.2023	4.00 p.m. to 6.00 p.m.	Fieldwork Mr.N.Karthic, AP-Civil, NPRCET.
14.02.2023	4.00 p.m. to 6.00 p.m.	Station Establishment and Orientation. Mr. Samuel Sivakumar, VLAND's BEST Hub Pvt Ltd.
15.02.2023	4.00 p.m. to 6.00 p.m.	Rectangular vs Polar coordinate system measurements. Mr. Samuel Sivakumar, VLAND's BEST Hub Pvt Ltd.
16.02.2023	4.00 p.m. to 6.00 p.m.	Fieldwork Mr.N.Karthic, AP-Civil, NPRCET
17.02.2023	4.00 p.m. to 6.00 p.m.	Demonstration of stake out/ Demarcation of Building Layouts/ alignment of roads. Mr. S. Soma Sundara Moorthy, Con-Tech Research Lab.
20.02.2023	4.00 p.m. to 6.00 p.m.	Traversing and Travers adjustment. Mr. S. Soma Sundara Moorthy, Con-Tech Research Lab.
21.02.2023	4.00 p.m. to 6.00 p.m.	Fieldwork Mr.N.Karthic, AP-Civil, NPRCET.
22.02.2023	4.00 p.m. to 6.00 p.m.	Contour Surveying. Mr.P.Manikandan, AP-Civil, NPRCET.
23.02.2023	4.00 p.m. to 6.00 p.m.	Calculate 2D and 3D areas. Mr. Samuel Sivakumar, VLAND's BEST Hub Pvt Ltd
24.02.2023	4.00 p.m. to 6.00 p.m.	Fieldwork Mr.N.Karthic, AP-Civil, NPRCET
25.02.2023	4.00 p.m. to 6.00 p.m.	Calculate surface volume on the field/ site. Mr. Samuel Sivakumar, VLAND's BEST Hub Pvt Ltd
27.02.2023	4.00 p.m. to 6.00 p.m.	Procedure for downloading and uploading data to the total station on the field/ site. Mr. Samuel Sivakumar, VLAND's BEST Hub Pvt Ltd
28.02.2023	4.00 p.m. to 6.00 p.m.	Fieldwork Mr.N.Karthic, AP-Civil, NPRCET
01.03.2023	4.00 p.m. to 4.30 p.m.	Assessment
	4.30 p.m. to 6.00 p.m.	Valedictory - Dr.A.Hemalatha, HoD-Civil, NPRCET

Vijaya Kumar
PROGRAM
COORDINATOR

Dr. J. Sundararajan
HOD-CIVIL

Dr. J. Sundararajan
IQAC

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C. Vijaya Kumar
(AP/Civil)

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Department of Civil Engineering

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Natham, Dindigul

Coordinator - IQAC
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Natham, Dindigul (TN) - 624 401

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DEPARTMENT OF CIVIL ENGINEERING

Certificate Course on Rapid Total Station Training

STUDENT ATTENDANCE

S/N	Register Number	Name of the Student	9/2	10/2	11/2	12/2	13/2	14/2	15/2	16/2	17/2	18/2	19/2	20/2	21/2	22/2	23/2	24/2	25/2	26/2	27/2	28/2	29/2
1	920819103001	Arun Kumar N																					
2	920819103002	Jeevitha C																					
3	920819103003	Naveenraj S																					
4	920819103004	Sanjay K																					
5	920819103005	Saranya Devi S																					
6	920819103007	Subash S																					
7	920819103008	Sudharsan K																					
8	920819103009	Venkaatesan R																					
9	920819103301	Nithishkumar A R																					
10	920819103302	Purusothaman K																					
11	920819103303	Sachin R																					
12	920819103304	Kishore S P																					
13	920820103001	Alagar K																					
14	920820103002	Anandhan Alaguvel P																					
15	920820103003	Chandira Moorthi B																					
16	920820103004	Gowtham C																					
17	920820103005	Harish M																					
18	920820103006	Mohanraj G																					
19	920820103007	Naveen Kumar S																					
20	920820103008	Pranaveshvar J S																					
21	920820103009	Sharan Sakthivel J																					
22	920820103011	Suriya M																					
23	920820103012	Vijaya Sri Hari I																					
24	920820103013	Vikneshwaran S																					
25	920820103014	Yazhini.S																					
26	920820103301	Alex Pandi.M																					
27	920820103302	Arul Murugan M																					
28	920820103303	Gunapandi T																					
29	920820103304	Hari Prasath M																					
30	920820103305	Jegan.S																					
31	920820103307	Logeshwaran R																					
32	920820103308	Naveen Prasad R																					
33	920820103309	Parthiban R																					
34	920820103310	Prithviraj T																					





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DEPARTMENT OF CIVIL ENGINEERING

Certificate Course on Rapid Total Station Training

STUDENT ATTENDANCE

S/N	Register Number	Name of the Student	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
35	920820103311	Rajvignesh R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
36	920820103312	Srilakshmi S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
37	920820103313	Tatta Thamimul Ansari M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
38	920820103314	Thiraviyam S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
39	920820103315	Videshwaran R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
40	920820103316	Vignesh K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
41	920820103317	Dhanalakshmi P	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
42	920821103002	Bharath Kumar S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
13	920821103003	Dinakaran K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
44	920821103004	Elamparuthi B	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
45	920821103005	Kirthik Ananth M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
46	920821103006	Mohammed Abdula S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
47	920821103007	Mutharivu K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
48	920821103008	Praveen C	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
49	920821103010	Ritika S A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
50	920821103011	Sanjay Yukendra M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
51	920821103012	Subanu M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
52	920821103013	Syedali Fathima K	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
53	920821103014	Veeramari S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
54	920821103301	Anbuselvam S	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
55	920821103302	Logarani A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
56	920820413001	Jeyadharani J	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
57	920822413001	Bavithra T	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
58	920822413002	Datchinamoorthy R B	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
59	920822413003	Jerin J	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
60	920822413004	Karthikeyan M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
61	920822413005	Kavimalan R	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
62	920822413006	Sundari B	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
63	920822413007	Suryavarshan M	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

[Signature]
HOD-CIVIL



[Signature]
PRINCIPAL

Head of the Department
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NPR College of Engineering & Technology,
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Page 10 of 21

Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal

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DEPARTMENT OF CIVIL ENGINEERING

Certificate Course on Rapid Total Station Training

SAMPLE QUESTION PAPER & ANSWER

1. What is the primary purpose of a Total Station in surveying?

- a. Measure temperature
- b. Record rainfall
- c. Measure angles, distances, and coordinates
- d. Calculate wind speed

Answer: c. Measure angles, distances, and coordinates

2. What does the term "Rapid" in Rapid Total Station training typically refer to?

- a. Speed of light measurement
- b. Quick and efficient surveying techniques
- c. Measurement accuracy
- d. Rapid deployment of the instrument

Answer: b. Quick and efficient surveying techniques

3. Which of the following is a key feature of Total Stations used in Rapid Total Station training?

- a. Radar scanning
- b. GPS navigation
- c. Electronic distance measurement (EDM)
- d. Soil analysis

Answer: c. Electronic distance measurement (EDM)

4. In surveying, what is the purpose of leveling a Total Station?

- a. To measure atmospheric pressure
- b. To ensure accurate angle measurements
- c. To calibrate the compass
- d. To check battery levels

Answer: b. To ensure accurate angle measurements





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5. What is the function of the data collector in the context of Rapid Total Station training?

- a. To record surveying data
- b. To measure angles
- c. To provide real-time weather information
- d. To analyze soil composition

Answer: a. To record surveying data

6. Which type of surveying is Total Station commonly used for?

- a. Astrophysical surveying
- b. Geodetic surveying
- c. Hydrographic surveying
- d. Topographic surveying

Answer: d. Topographic surveying

7. What does the acronym EDM stand for in the context of Total Stations?

- a. Electronic Distance Measurement
- b. Efficient Data Management
- c. External Device Module
- d. Energy Density Measurement

Answer: a. Electronic Distance Measurement

8. Which unit of measurement is typically used for distances in Total Station surveying?

- a. Feet
- b. Yards
- c. Meters
- d. Inches

Answer: c. Meters

9. What is the purpose of the reflector prism in Total Station measurement?

- a. To magnify distant objects
- b. To reflect signals to satellites





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- c. To enhance angle measurements
- d. To improve distance accuracy

Answer: d. To improve distance accuracy

10. Which component of a Total Station is responsible for horizontal angle measurements?

- a. Theodolite
- b. Altimeter
- c. Compass
- d. Leveling base

Answer: a. Theodolite

11. What is the primary function of a Total Station's electronic display?

- a. Play videos
- b. Show real-time weather updates
- c. Display measured angles, distances, and coordinates
- d. Illuminate the survey area

Answer: c. Display measured angles, distances, and coordinates

12. In Rapid Total Station training, what is "Resection" used for?

- a. Adjusting the instrument's focus
- b. Determining the position of the Total Station
- c. Calibrating the EDM unit
- d. Measuring atmospheric pressure

Answer: b. Determining the position of the Total Station

13. Which surveying technique involves measuring distances directly on the ground using a Total Station?

- a. Triangulation
- b. Trilateration
- c. Astronomic surveying
- d. Altimetry

Answer: b. Trilateration





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14. What does the term "Station Setup" refer to in Total Station operations?

- a. Installing software updates
- b. Configuring GPS settings
- c. Placing the Total Station in a fixed position for measurements
- d. Adjusting the instrument's power settings

Answer: c. Placing the Total Station in a fixed position for measurements

15. What is the purpose of the horizontal circle on a Total Station?

- a. Measure vertical angles
- b. Measure horizontal angles
- c. Measure distances
- d. Display survey data

Answer: b. Measure horizontal angles

16. What is the advantage of using a prism in conjunction with a Total Station during measurements?

- a. Increases measurement accuracy
- b. Reduces the weight of the instrument
- c. Enhances battery life
- d. Improves data storage capacity

Answer: a. Increases measurement accuracy

17. In Rapid Total Station training, what does the term "Backsight" refer to?

- a. The last survey point in a sequence
- b. A distant reference point with a known location
- c. Turning the instrument off
- d. Checking the weather conditions

Answer: b. A distant reference point with a known location

18. What is the purpose of the "EDM Mode" on a Total Station?

- a. Energy-saving mode
- b. Electronic Data Management





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c. Electronic Distance Measurement

d. Efficient Digital Mapping

Answer: c. Electronic Distance Measurement

19. Which factor is crucial for achieving accurate measurements with a Total Station?

a. Surveyor's footwear

b. Atmospheric pressure

c. Surveyor's experience and skill

d. Instrument color

Answer: c. Surveyor's experience and skill

20. What is the role of the Total Station's leveling system in surveying?

a. Adjusting the instrument's focus

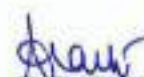
b. Ensuring accurate angle measurements

c. Calculating distances

d. Establishing communication with satellites

Answer: b. Ensuring accurate angle measurements


PROGRAM COORDINATOR
C. Vijaya Kumar
(AP/Civil)


HOD-Civil
Head of the Department
Department of Civil Engineering
NPR College of Engineering & Technology,
Natham, Dindigul (DT) - 624 401.





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DEPARTMENT OF CIVIL ENGINEERING

Certificate Course on Rapid Total Station Training

FEEDBACK FORM

Date: 01.03.23

Name of the Student	:	Jeeritha. C
Year / Semester	:	IV / VIII
Department	:	CIVIL

S/N.	Description	Excellent	Good	Satisfactory	Poor	Very Poor
1	Content of the Speaker	✓				
2	Fluency/Communication	✓				
3	Information received	✓				
4	Interaction with participants	✓				
5	Overall function arrangements	✓				



Jeeritha

Student Signature



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DEPARTMENT OF CIVIL ENGINEERING

Certificate Course on Rapid Total Station Training

FEEDBACK FORM

Date: 01/3/2023

Name of the Student	:	Praveen. C
Year / Semester	:	II / IV
Department	:	Civil

S/N.	Description	Excellent	Good	Satisfactory	Poor	Very Poor
1	Content of the Speaker		✓			
2	Fluency/Communication		✓			
3	Information received	✓				
4	Interaction with participants	✓				
5	Overall function arrangements	✓				


Student Signature





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DEPARTMENT OF CIVIL ENGINEERING
CERTIFICATE COURSE ON RAPID TOTAL STATION TRAINING
STUDENT FEEDBACK SUMMARY REPORT

TOTAL STRENGTH:63

DATE: 01.03.2023

Content	Excellent	Good	Fair	Satisfactory	Poor
Content of the Speaker	58	5	0	0	0
Fluency/Communication	58	4	1	0	0
Information received	60	3	0	0	0
Interaction with participants	61	1	1	0	0
Overall function arrangements	58	5	0	0	0

NUMBER OF STUDENTS SUCCESSFULLY COMPLETED:63



PROGRAM COORDINATOR

C. Vijaya Kumar
(AP/CE)

HoD-CIVIL

Head of the Department
Department of Civil Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.

IQAC

Coordinator, IQAC
NPR College of Engineering & Technology
Natham, Dindigul (DT)-624 401

PRINCIPAL

Dr. J.SUNDARARAJAN
B.E., M.Tech., Ph.D.
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DEPARTMENT OF CIVIL ENGINEERING
CERTIFICATE COURSE ON RAPID TOTAL STATION TRAINING
SUMMARY REPORT

Course Overview:

The certificate course on Rapid Total Station Training was a comprehensive program designed to equip participants with the necessary skills and knowledge in effectively utilizing Total Stations for surveying and mapping applications. The course covered a range of topics from the basics of Total Station operation to advanced techniques for rapid data collection.

Duration:

The course spanned from 09.02.2023 to 01.03.2023 comprising 16 sessions and 32 hours.

Objectives:

- To understand the fundamental principles of Total Station technology.
- To proficiently operate a Total Station for accurate surveying and mapping.
- To utilize Total Station data for diverse applications, including topography and construction projects.

General:

The program commenced with a welcome address by Ms. C. Jeevitha final-year Civil Engineering. Dr. J. Sundararajan, Principal inaugurated the program and delivered the inaugural address. The session was enriched by the valuable insights shared by Mr. Samuel Sivakumar, Vland Best Hub Pvt.Ltd. Coimbatore. Over 32 hours, students were provided with a comprehensive training of "Rapid Total Station Training"

The keynote investigated into crucial aspects of the industry and the course further addressed error analysis and minimization, equipping participants with the ability to identify common errors in Total Station measurements and implementing effective strategies to minimize discrepancies, ultimately ensuring precision in surveying endeavors.





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63 students attended from Civil & M.E-Structural Engineering. 63 students who participated and completed the quiz program. During the valedictory, the certificate was distributed by Dr.A.Hemaltha Head of the Department. Finally, Mr.C.Praveen second-year Civil Engineering was proposed the vote of thanks.

The outcome of the Programme:

- Participants gained proficiency in setting up and operating Rapid Total Station equipment, ensuring accurate and reliable measurements.
- The course focused on precision, resulting in participants being able to collect and process survey data with a high degree of accuracy.



Vijaya Kumar
PROGRAM COORDINATOR

C. Vijaya Kumar
(Ap/civil)

Dr. J. Sundararajan
Head of the Department
Department of Civil Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.

Dr. J. Sundararajan
HoD-Civil

Dr. J. Sundararajan
PRINCIPAL

Dr. J. Sundararajan
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DEPARTMENT OF CIVIL ENGINEERING
CERTIFICATE COURSE ON RAPID TOTAL STATION TRAINING
COURSE MATERIAL

Material Link:

1. <https://dreamcivil.com/total-station-in-surveying/#> a Working of Total Station
2. <https://paragoninstruments.com/surveying-and-construction/total-station-accessories/>
3. <https://paragoninstruments.com/surveying-and-construction/total-station-robotic/>
4. <https://paragoninstruments.com/surveying-and-construction/total-station-accessories/>
5. <https://paragoninstruments.com/surveying-and-construction/electronic-theodolites/>
6. <https://vincivilworld.com/2021/03/17/total-station-principles-components/>
7. <https://vincivilworld.com/category/civil-engineering/>





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DEPARTMENT OF CIVIL ENGINEERING

CERTIFICATE COURSE ON

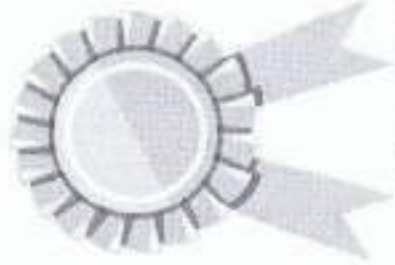
RAPID TOTAL STATION TRAINING

Certificate of Participation

This is to certify that ----- MEK SANKAR IV - CIVIL ----- has successfully completed the Certificate Course on "RAPID TOTAL STATION TRAINING" held from 09.02.2023 to 01.03.2023 for 32 hours in our College.

HOD/CIVIL

Head of the Department
Department of Civil Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401



Dr. J. PRINCIPAL JAYAN,
B.E., M. Tech., Ph.D.,
Principal
NPR College of Engineering & Technology
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DEPARTMENT OF CIVIL ENGINEERING

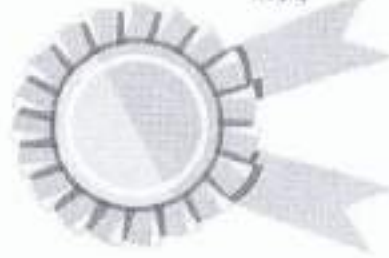
CERTIFICATE COURSE on

RAPID TOTAL STATION TRAINING

Certificate of Participation

This is to certify that ----- Ms. S. YASMINI - III - CIVIL ----- has successfully completed the Certificate Course on "RAPID TOTAL STATION TRAINING" held from 09.02.2023 to 01.03.2023 for 32 hours in our College.

HOD/CIVIL
Head of the Department
Department of Civil Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.



PRINCIPAL
Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
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DEPARTMENT OF CIVIL ENGINEERING

Add on course on "Primavera"

INDEX

COURSE NAME: Add on course on "Primavera"

COURSE CODE: 22CEAO02

ACADEMIC YEAR: 2022-2023

SEMESTER: EVEN

DURATION: 36 HOURS

S/N.	PARTICULARS	PAGE NO.
1	Permission letter	2
2	Circular	3
3	Invitation	4
4	Course content	5
5	Registered students' Name list	6
6	Course Schedule	8
7	Student's attendance	11
8	Quiz sample question paper with answers	13
9	Students' feedback	18
10	Feedback analysis	20
11	Summary report	21
12	Course material/manual	22
13	Sample certificate of the program	23


PROGRAM
COORDINATOR


HoD-CIVIL


IQAC




PRINCIPAL

Head of the Department
Department of Civil Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.

Coordinator - IQAC
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Date: 06.04.2023

From

Mr.N. Karthic,
Assistant Professor
Department of Civil Engineering,
NPR College of Engineering & Technology,
Natham.

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Respected Sir,

Subject: Request for Permission to Conduct Add-On Course on " Primavera" – Reg.

We intend to organize an additional course on "Tendering and Procurement in Construction" for our Civil Engineering students from 22.04.2023 to 22.05.2023, spanning 36 hours at our college. We have proposed Er.N.Suresh, Hi-Tech CAD/CAM Center, Madurai, as the resource person for this course. We seek your permission to proceed with this initiative.

Thanking you,

Yours faithfully,

N. Karthic
Asst. Prof.
Op/lin





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CIRCULAR

NPRCET/OFF/CIVIL/VAC/2022-2023

Date: 10.04.2023

We are glad to inform you that the Department of Civil Engineering has planned to conduct an add-on course on "Primavera" for the students during this even semester 2022-2023. If interested, students can enroll their name to the coordinator of this program on or before 16.04.2023.

The details of the training program are given below:

Resource Person	: Er.N. Suresh, Hi-Tech CAD/CAM Center, Madurai.
Venue	: Computer-Aided Design & Drafting Laboratory
Date & Duration	: 22.04.2023 to 22.05.2023 & 36 Hours
Program Coordinator	Mr.N. Karthic, Assistant Professor

Copy to:

1. IQAC
2. All the HoDs
3. Notice Board
4. File
5. Administrative office for information

PRINCIPAL

Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.





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DEPARTMENT OF CIVIL ENGINEERING

INVITATION

The Management, Principal, and Department of Civil Engineering cordially invite you
for the

ADD on COURSE on
"Primavera"

Date : 22.04.2023

Time : 9.00 AM

Venue: Civil CAD Lab

Chief Guest

Er.N. Suresh,
Hi-Tech CAD/CAM Center,
Madurai.

Patron

Dr.J. Sundararajan,
Principal.

Convener

Dr.A.Hemalatha,
Head of the Department.

Organised by

Department of Civil Engineering,
NPR College of Engineering & Technology,
Natham, Dindigul.





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DEPARTMENT OF CIVIL ENGINEERING

Add on course on "Primavera"

COURSE CONTENT

CHAPTER	TOPICS
1	Introduction to Primavera P6: Overview and Features Setting up a Project in Primavera P6 Creating Work Breakdown Structures (WBS) in Primavera P6 Defining Activities and Milestones
2	Establishing Relationships and Dependencies Between Activities Resource Management in Primavera P6 Assigning Resources to Activities Cost Management and Budgeting in Primavera P6
3	Tracking Project Progress and Performance Using Baselines and Tracking Gantt Charts Analyzing Critical Paths in Primavera P6 Managing Project Calendars and Constraints
4	Advanced Scheduling Techniques Earned Value Analysis (EVA) in Primavera P6 Customizing Layouts and Views Setting up User Preferences and Options
5	Reporting and Dashboards in Primavera P6 Importing and Exporting Data Integration with Other Project Management Tools Managing Multiple Projects and Portfolios
6	Risk Management in Primavera P6 Document Management and Collaboration Features Advanced Topics in Primavera P6 Administration Best Practices and Tips for Efficient Project Management with Primavera P6

Criteria to get Certificate:

- Students should register their names for this course.
- Students must have 75% attendance and score 50% of marks in the MCQ Test

Prepared by- Mr.N.Karthic, AP/Civil,

Approved by,



Head of Department
Department of Civil Engineering
NPR College of Engineering & Technology
Netham, Dindigul - (TN) - 624 401.

Coordinator - IQAC
NPR College of Engineering & Technology
Netham, Dindigul - 624 401

Dr. J. SUNDARARAJAN
Principal
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NPR College of Engineering & Technology
Netham, Dindigul (TN) - 624 401



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DEPARTMENT OF CIVIL ENGINEERING

Add on course on "Primavera"

LIST OF REGISTERED STUDENTS

S.No.	Register Number	Name of the Student	Year/Department
1	920819103001	Arun Kumar N	IV-Civil
2	920819103002	Jeevitha C	IV-Civil
3	920819103003	Naveenraj S	IV-Civil
4	920819103004	Sanjay K	IV-Civil
5	920819103005	Saranya Devi S	IV-Civil
6	920819103007	Subash S	IV-Civil
7	920819103008	Sudharsan K	IV-Civil
8	920819103009	Venkatesan R	IV-Civil
9	920819103301	Nithishkumar A R	IV-Civil
10	920819103302	Purusothaman K	IV-Civil
11	920819103303	Sachin R	IV-Civil
12	920819103304	Kishore S P	IV-Civil
13	920820103001	Alagar K	III-Civil
14	920820103002	Anandhan Alaguvel P	III-Civil
15	920820103003	Chandira Moorthi B	III-Civil
16	920820103004	Gowtham C	III-Civil
17	920820103005	Harish M	III-Civil
18	920820103006	Mohanraj G	III-Civil
19	920820103007	Naveen Kumar S	III-Civil
20	920820103008	Pranaveshvar J S	III-Civil
21	920820103009	Sharan Sakthivel J	III-Civil
22	920820103011	Suriya M	III-Civil
23	920820103012	Vijaya Sri Hari I	III-Civil
24	920820103013	Vikneshwaran S	III-Civil
25	920820103014	Yazhini.S	III-Civil
26	920820103301	Alex Pandi.M	III-Civil
27	920820103302	Arul Murugan M	III-Civil
28	920820103303	Gunapandi T	III-Civil
29	920820103304	Hari Prasath M	III-Civil
30	920820103305	Jegan.S	III-Civil
31	920820103307	Logeshwaran R	III-Civil
32	920820103308	Naveen Prasad R	III-Civil
33	920820103309	Parthiban R	III-Civil
34	920820103310	Prithviraj T	III-Civil
35	920820103311	Rajvignesh R	III-Civil





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DEPARTMENT OF CIVIL ENGINEERING

Add on course on "Primavera"

LIST OF REGISTERED STUDENTS

S.No.	Register Number	Name of the Student	Year/Department
36	920820103312	Srilakshmi S	III-Civil
37	920820103313	Tatta Thamimul Ansari M	III-Civil
38	920820103314	Thiraviyam S	III-Civil
39	920820103315	Videshwaran R	III-Civil
40	920820103316	Vignesh K	III-Civil
41	920820103317	Dhanalakshmi P	III-Civil
42	920821103002	Bharath Kumar S	II -Civil
13	920821103003	Dinakaran K	II -Civil
44	920821103004	Elamparuthi B	II -Civil
45	920821103005	Kirthik Ananth M	II -Civil
46	920821103006	Mohammed Abdula S	II -Civil
47	920821103007	Mutharivu K	II -Civil
48	920821103008	Praveen C	II -Civil
49	920821103010	Ritika S A	II -Civil
50	920821103011	Sanjay Yukendra M	II -Civil
51	920821103012	Subanu M	II -Civil
52	920821103013	Syedali Fathima K	II -Civil
53	920821103014	Veeramari S	II -Civil
54	920821103301	Anbuselvam S	II -Civil
55	920821103302	Logarani A	II -Civil
56	920820413001	Jeyadharani J	II - M.E
57	920822413001	Bavithra T	I - M.E
58	920822413002	Datchinamoorthy R B	I - M.E
59	920822413003	Jerin J	I - M.E
60	920822413004	Karthikeyan M	I - M.E
61	920822413005	Kavimalan R	I - M.E
62	920822413006	Sundari B	I - M.E
63	920822413007	Suryavarshan M	I - M.E

Class	No. of students
II Year Civil	14
III Year Civil	29
IV Year Civil	12
M.E Structures	8
Total	63

[Signature]
Head of the Department
Department of Civil Engineering

NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.



Dr. J. SUNDHARAJAN
B.E., M.Tech., Ph.D.
Principal

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DEPARTMENT OF CIVIL ENGINEERING

Add on course on "Primavera"

COURSE SCHEDULE

Day 1 22.04.2023 Saturday	9.00 a.m. to 9.30 a.m.	Inauguration-Dr.J.Sundararajan, Principal.	
	9.30 a.m. to 11.00 a.m.	Session 1	Introduction to Primavera P6: Overview and Features Er.N. Suresh, Hi-Tech CAD/CAM Center, Madurai.
	11.00 a.m. to 11.15 a.m.	Tea Break	
	11.15 a.m. to 12.45 p.m.	Session 2	Setting Up a Project in Primavera P6 Er.N. Suresh, Hi-Tech CAD/CAM Center, Madurai.
	12.45 p.m. to 1.30 p.m.	Lunch Break	
	1.30 p.m. to 3.00 p.m.	Session 3	Creating Work Breakdown Structures (WBS) in Primavera P6 Mr.N.Karthic, Assistant Professor.
	3.00 p.m. to 3.15 p.m.	Tea Break	
	3.15 p.m. to 4.15 p.m.	Session 4	Defining Activities and Milestones Er.N. Suresh, Hi-Tech CAD/CAM Center, Madurai.
Day 2 06.05.2023 Saturday	9.30 a.m. to 11.00 a.m.	Session 1	Establishing Relationships and Dependencies Between Activities Mr.N.Karthic, Assistant Professor.
	11.00 a.m. to 11.15 a.m.	Tea Break	
	11.00 a.m. to 12.45 p.m.	Session 2	Expected completion time and variance calculation Mr.N.Karthic, Assistant Professor.
	12.45 p.m. to 1.30 p.m.	Lunch Break	
	1.30 p.m. to 3.00 p.m.	Session 3	Introduction to project management software (Microsoft Project, Primavera) Er.N. Suresh, Hi-Tech CAD/CAM Center, Madurai.
	3.00 p.m. to 3.15 p.m.	Tea Break	
	3.15 p.m. to 4.15 p.m.	Session 4	Resource Management in Primavera P6 Er.N. Suresh, Hi-Tech CAD/CAM Center, Madurai.
Day 3 13.05.2023 Saturday	9.30 a.m. to 11.00 a.m.	Session 1	Assigning Resources to Activities Mr.N.Karthic, Assistant Professor.
	11.00 a.m. to 11.15 a.m.	Tea Break	
	11.15 a.m. to 12.45 p.m.	Session 2	Cost Management and Budgeting in Primavera P6 Mr.N.Karthic, Assistant Professor.



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DEPARTMENT OF CIVIL ENGINEERING

Add on course on "Primavera"

COURSE SCHEDULE

	12.45 p.m. to 1.30 p.m.	<i>Lunch Break</i>	
	1.30 p.m. to 3.00 p.m.	Session 3	Tracking Project Progress and Performance Er.N. Suresh, Hi-Tech CAD/CAM Center, Madurai.
	3.00 p.m. to 3.15 p.m.	<i>Tea Break</i>	
	3.15 p.m. to 4.15 p.m.	Session 4	Using Baselines and Tracking Gantt Charts Mr.N.Karthic, Assistant Professor.
Day 4 19.05.2023 Friday	9.30 a.m. to 11.00 a.m.	Session 1	Analyzing Critical Paths in Primavera P6 Mr.N.Karthic, Assistant Professor, NPRCET.
	11.00 a.m. to 11.15 a.m.	<i>Tea Break</i>	
	11.15 a.m. to 12.45 p.m.	Session 2	Managing Project Calendars and Constraints Er.N. Suresh, Hi-Tech CAD/CAM Center, Madurai.
	12.45 p.m. to 1.30 p.m.	<i>Lunch Break</i>	
	1.30 p.m. to 3.00 p.m.	Session 3	Advanced Scheduling Techniques Mr.N.Karthic, Assistant Professor.
	3.00 p.m. to 3.15 p.m.	<i>Tea Break</i>	
	3.15 p.m. to 4.15 p.m.	Session 4	Earned Value Analysis (EVA) in Primavera P6 Er.N. Suresh, Hi-Tech CAD/CAM Center, Madurai.
Day 5 20.05.2023 Saturday	9.30 a.m. to 11.00 a.m.	Session 1	Customizing Layouts and Views Mr.N.Karthic, Assistant Professor.
	11.00 a.m. to 11.15 a.m.	<i>Tea Break</i>	
	11.15 a.m. to 12.45 p.m.	Session 2	Setting up User Preferences and Options Er.N. Suresh, Hi-Tech CAD/CAM Center, Madurai.
	12.45 p.m. to 1.30 p.m.	<i>Lunch Break</i>	
	1.30 p.m. to 3.00 p.m.	Session 3	Reporting and Dashboards in Primavera P6 Mr.N.Karthic, Assistant Professor.
	3.00 p.m. to 3.15 p.m.	<i>Tea Break</i>	
	3.15 p.m. to 4.15 p.m.	Session 4	Importing and Exporting Data Er.N. Suresh, Hi-Tech CAD/CAM Center, Madurai..





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DEPARTMENT OF CIVIL ENGINEERING

Add on course on "Primavera"

COURSE SCHEDULE

Day 6 22.05.2023 Monday	9.30 a.m. to 11.00 a.m.	Session 1	Integration with Other Project Management Tools Mr.N.Karthic, Assistant Professor.
	11.00 a.m. to 11.15 a.m.	<i>Tea Break</i>	
	11.15 a.m. to 12.45 p.m.	Session 2	Managing Multiple Projects and Portfolios Er.N. Suresh, Hi-Tech CAD/CAM Center, Madurai.
	12.45 p.m. to 1.30 p.m.	<i>Lunch Break</i>	
	1.30 p.m. to 3.00 p.m.	Session 3	Risk Management and document management in Primavera P6 Er.N. Suresh, Hi-Tech CAD/CAM Center, Madurai.
	3.00 p.m. to 3.15 p.m.	<i>Tea Break</i>	
	3.15 p.m. to 3.45 p.m.	Session 4	Best Practices, Advancement and Tips for Efficient Project Management with Primavera P6 Er.N. Suresh, Hi-Tech CAD/CAM Center, Madurai.
	3.45 p.m. to 4.15 p.m.	Valedictory	

HOD-CIVIL

Head of the Department
Department of Civil Engineering
NPR College of Engineering & Technology,
Natham, Dindigul (DT) - 624 401.

IQAC
Coordinator - IQAC
NPR College of Engineering & Technology
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PRINCIPAL

Dr. SUNDARARAJAN
B.E. M.Tech, Ph.D.
Principal
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DEPARTMENT OF CIVIL ENGINEERING

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STUDENT ATTENDANCE

S/N.	Register Number	Name of the student	22.4.23	6.5.23	19.5.23	20.5.23	21.5.23	22.5.23
1	920819103001	Arun Kumar N	/	/	/	/	/	/
2	920819103002	Jeevitha C	/	/	a	/	/	G
3	920819103003	Naveenraj S	/	/	/	/	/	/
4	920819103004	Sanjay K	/	a	/	/	/	/
5	920819103005	Saranya Devi S	/	/	/	/	/	/
6	920819103007	Subash S	/	/	/	/	/	/
7	920819103008	Sudharsan K	/	/	/	G	/	/
8	920819103009	Venkatesan R	/	/	/	/	/	/
9	920819103301	Nithishkumar A R	/	/	/	/	/	/
10	920819103302	Purusothaman K	/	/	/	/	/	/
11	920819103303	Sachin R	/	/	a	/	/	/
12	920819103304	Kishore S P	/	/	/	/	/	/
13	920820103001	Alagar K	/	/	/	/	/	/
14	920820103002	Anandhan Alaguvel P	G	/	/	/	/	a
15	920820103003	Chandira Moorthi B	/	/	/	/	/	/
16	920820103004	Gowtham C	/	/	/	/	a	/
17	920820103005	Harish M	/	/	/	/	/	/
18	920820103006	Mohanraj G	a	/	/	a	/	/
19	920820103007	Naveen Kumar S	/	/	/	a	/	/
20	920820103008	Pranaveshvar J S	/	/	/	/	/	/
21	920820103009	Sharan Sakthivel J	/	/	/	/	/	/
22	920820103011	Suriya M	/	/	/	/	/	/
23	920820103012	Vijaya Sri Hari I	/	/	/	/	/	/
24	920820103013	Vikneshwaran S	/	/	a	/	/	/
25	920820103014	Yazhini.S	/	/	/	/	/	/
26	920820103301	Alex Pandi.M	/	/	/	/	/	/
27	920820103302	Arul Murugan M	/	/	/	/	/	a
28	920820103303	Gunapandi T	a	/	/	/	/	/
29	920820103304	Hari Prasath M	/	/	/	a	/	/
30	920820103305	Jegan.S	/	/	/	/	/	/
31	920820103307	Logeshwaran R	/	/	/	/	a	/
32	920820103308	Naveen Prasad R	/	/	/	/	/	/
33	920820103309	Parthiban R	/	/	/	/	/	/
34	920820103310	Prithviraj T	/	/	/	a	/	/
35	920820103311	Rajvignesh R	/	/	/	/	/	/
36	920820103312	Srilakshmi S	/	/	a	/	/	/
37	920820103313	Tatta Thamimul Ansari M	/	/	/	/	/	/





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STUDENT ATTENDANCE

S/N	Register Number	Name of the student	22-4-23	6-5-23	19-5-23	26-5-23	21-25-23	22-5-23
38	920820103314	Thiraviyam S	/	/	/	a	/	/
39	920820103315	Videshwaran R	/	/	/	/	/	/
40	920820103316	Vignesh K	/	/	a	/	/	/
41	920820103317	Dhanalakshmi P	/	/	/	/	h	/
42	920821103002	Bharath Kumar S	/	a	/	/	/	/
13	920821103003	Dinakaran K	/	/	/	/	/	/
44	920821103004	Elamparuthi B	/	/	/	/	/	/
45	920821103005	Kirthik Ananth M	Ca	/	/	/	/	/
46	920821103006	Mohammed Abdula S	/	/	/	/	/	/
47	920821103007	Mutharivu K	/	/	a	/	/	/
48	920821103008	Praveen C	/	a	/	/	/	/
49	920821103010	Ritika S A	a	/	/	/	/	/
50	920821103011	Sanjay Yukendra M	/	/	/	/	/	a
51	920821103012	Subanu M	/	/	/	/	/	/
52	920821103013	Syedali Fathima K	/	/	/	/	/	/
53	920821103014	Veeramari S	/	/	a	/	/	/
54	920821103301	Anbuselvam S	/	/	/	/	/	/
55	920821103302	Logarani A	/	/	/	a	/	/
56	920820413001	Jeyadharani J	/	/	/	/	/	/
57	920822413001	Bavithra T	/	/	a	/	/	/
58	920822413002	Datchinamoorthy R B	/	/	/	/	/	/
59	920822413003	Jerin J	/	/	/	/	/	/
60	920822413004	Karthikeyan M	a	/	/	/	/	/
61	920822413005	Kavimalan R	/	a	/	/	/	/
62	920822413006	Sundari B	/	/	/	/	/	/
63	920822413007	Suryavarshan M	/	/	/	/	/	/

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PRINCIPAL

Dr. J.SUNDARARAJAN,
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Principal

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DEPARTMENT OF CIVIL ENGINEERING

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SAMPLE QUESTION PAPER & ANSWER

1. Which module in Primavera P6 is used for creating and managing project schedules?

- a) Activity Management
- b) Project Management
- c) Resource Management
- d) Portfolio Management

Answer: b) Project Management

2. In Primavera P6, what does WBS stand for?

- a) Work Breakdown Schedule
- b) Work Breakdown Structure
- c) Work Breakdown System
- d) Work Breakdown Software

Answer: b) Work Breakdown Structure

3. Which feature in Primavera P6 allows users to assign resources to specific activities?

- a) Activity Assignments
- b) Resource Assignments
- c) Task Assignments
- d) Work Assignments

Answer: b) Resource Assignments

4. Which module in Primavera P6 is used for tracking project performance and progress?

- a) Activity Management
- b) Project Management
- c) Resource Management
- d) Portfolio Management

Answer: a) Activity Management





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5. In Primavera P6, what does EPS stand for?

- a) Enterprise Project Schedule
- b) Enterprise Project Structure
- c) Enterprise Project System
- d) Enterprise Project Software

Answer: b) Enterprise Project Structure

6. Which module in Primavera P6 is used for managing project costs and budgets?

- a) Activity Management
- b) Project Management
- c) Cost Management
- d) Resource Management

Answer: c) Cost Management

7. In Primavera P6, what does ETC stand for?

- a) Estimate to Complete
- b) Estimate to Continue
- c) Estimated Time for Completion
- d) Estimated Time for Continuation

Answer: a) Estimate to Complete

8. Which feature in Primavera P6 allows users to create relationships between project activities?

- a) Activity Links
- b) Task Links
- c) Relationship Links
- d) Dependency Links

Answer: d) Dependency Links

9. Which module in Primavera P6 is used for managing project resources such as labor, equipment, and materials?

- a) Activity Management
- b) Project Management
- c) Resource Management
- d) Portfolio Management

Answer: c) Resource Management





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10. In Primavera P6, what does CPM stand for?

- a) Critical Path Management
- b) Critical Project Management
- c) Critical Path Method
- d) Critical Project Method

Answer: c) Critical Path Method

11. Which module in Primavera P6 allows users to create and manage project portfolios?

- a) Activity Management
- b) Project Management
- c) Portfolio Management
- d) Resource Management

Answer: c) Portfolio Management

12. In Primavera P6, what does CPI stand for?

- a) Cost Performance Index
- b) Cost Productivity Index
- c) Cost Progress Index
- d) Cost Project Index

Answer: a) Cost Performance Index

13. Which feature in Primavera P6 allows users to define project constraints such as start dates, finish dates, and deadlines?

- a) Activity Constraints
- b) Task Constraints
- c) Schedule Constraints
- d) Time Constraints

Answer: a) Activity Constraints

14. In Primavera P6, what does RBS stand for?

- a) Resource Breakdown Structure
- b) Resource Budgeting System
- c) Resource Booking System
- d) Resource Budgeting Structure

Answer: a) Resource Breakdown Structure





15. Which module in Primavera P6 is used for creating and managing project calendars?

- a) Calendar Management
- b) Project Calendar
- c) Time Management
- d) Schedule Management

Answer: b) Project Calendar

16. In Primavera P6, what does S-curve represent?

- a) Schedule curve
- b) Spend curve
- c) Status curve
- d) Supply curve

Answer: a) Schedule curve

17. Which feature in Primavera P6 allows users to assign priorities to project activities?

- a) Activity Prioritization
- b) Task Prioritization
- c) Importance Assignment
- d) Activity Weights

Answer: a) Activity Prioritization

18. In Primavera P6, what does EVA stand for?

- a) Earned Value Assessment
- b) Estimated Value Analysis
- c) Earned Value Analysis
- d) Estimated Value Assessment

Answer: c) Earned Value Analysis

19. Which module in Primavera P6 is used for managing project documents and communications?

- a) Document Management
- b) Communication Management
- c) Project Management
- d) Collaboration Management

Answer: a) Document Management





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20. In Primavera P6, what does OBS stand for?

- a) Organization Breakdown Structure
- b) Organizational Budgeting System
- c) Organization Booking System
- d) Organizational Budgeting Structure

Answer: a) Organization Breakdown Structure


PROGRAM COORDINATOR


Head of the Department
Department of Civil Engineering
NPR College of Engineering & Technology
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FEEDBACK FORM

Date: 22.05.23

Name of the Student	:	S. Srilakshmi
Year / Semester	:	III / VI
Department	:	Civil

S/N.	Description	Excellent	Good	Satisfactory	Poor	Very Poor
1	Content of the Speaker	✓				
2	Fluency/Communication		✓			
3	Information received		✓			
4	Interaction with participants	✓				
5	Overall function arrangements	✓				

S. Srilakshmi
Student's Signature





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DEPARTMENT OF CIVIL ENGINEERING

Add on course on "Primavera"

FEEDBACK FORM

Date: 22.5.2023

Name of the Student	:	C. PRAVEEN
Year / Semester	:	II / IV
Department	:	CIVIL

S/N.	Description	Excellent	Good	Satisfactory	Poor	Very Poor
1	Content of the Speaker	✓				
2	Fluency/Communication		✓			
3	Information received	✓				
4	Interaction with participants	✓				
5	Overall function arrangements	✓				


Student's Signature





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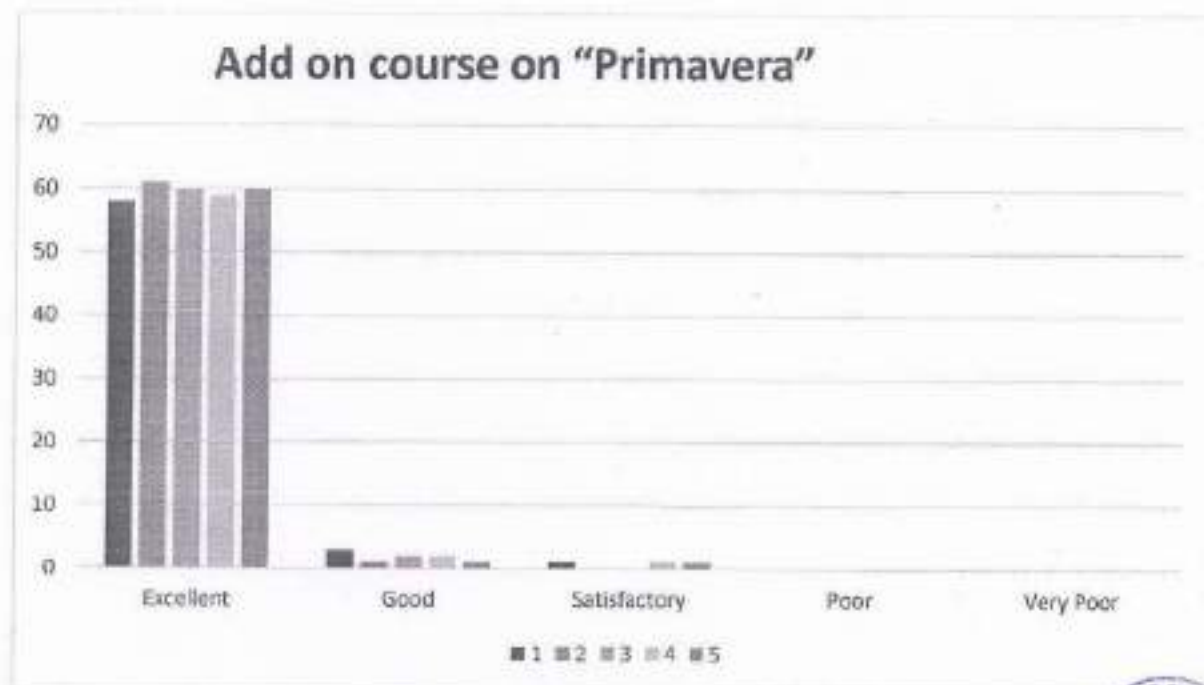
FEEDBACK SUMMARY

TOTAL STRENGTH: 63

DATE: 22.05.2023

Content	Excellent	Good	Fair	Satisfactory	Poor
Content of the Speaker	59	3	1	0	0
Fluency/Communication	62	1	0	0	0
Information received	60	3	0	0	0
Interaction with participants	59	2	2	0	0
Overall function arrangements	60	1	2	0	0

NUMBER OF STUDENTS SUCCESSFULLY COMPLETED: 62



N. S. S. C.
**PROGRAM
COORDINATOR**

[Signature]
HOD-CIVIL

[Signature]
IQAC

PRINCIPAL

Dr. J. SUNDARARAJU

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Coordinator - IQAC
NPR College of Engineering & Technology
Natham, Dindigul (Dt)-624 401

Principal
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DEPARTMENT OF CIVIL ENGINEERING

Add on course on "Primavera"

SUMMARY REPORT

Department of Civil Engineering, NPR College of Engineering & Technology, Natham, organized the add on course on Primavera. The course spanned from 22.04.2023 to 22.05.2023, comprising 36 hours. The program started with the prayer song. Mr. R. Sachin final-year Civil Engineering delivered the welcome address.

Dr. J. Sundararajan, Principal inaugurated the program and delivered the inaugural address. The session was enriched by the valuable insights shared by Er.N.Suresh, Hi-Tech CAD/CAM Center, Madurai. Over 36 hours, students received a comprehensive overview of "Primavera", addressed by Er.N.Suresh expertise and knowledge.

N.Suresh, Hi-Tech CAD/CAM Center, Madurai, delivered a brief keynote on Project management and schedule in Primavera P6. His keynote provide with effective cost management and resource allcoacation in Primavera P6 software.

63 students attended from Civil Engineering. 62 students participated and completed the quiz program. During the valedictory, the certificate was distributed by Dr.A.Hemaltha Head of the Department. Finally, Mr.S.Anbuselvam second-year Civil Engineering has proposed the vote of thanks

The outcome of the Programme:

1. Participants were able to create and manage project schedules confidently using Primavera P6.
2. Participants learned how to allocate and track project resources effectively in Primavera P6.
3. Participants understood how to generate and present project reports easily using Primavera P6.



PROGRAM
COORDINATOR

HoD-CIVIL

IQAC
Coordinator - IQAC

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COURSE MATERIAL

Material Link:

1. https://docs.oracle.com/cd/F37128_01/English/User_Guides/p6_pro_user/p6_pro_user.pdf
2. <https://ftp.idu.ac.id/wpcontent/uploads/ebook/ip/BUKU%20MANAJEMEN%20PROYEK/PMRefMan.pdf>
3. <https://www.slideshare.net/SivaSubramanian40/primavera-p6-notes-for-beginners>
4. https://media.techtarget.com/constructionsoftwarereview/downloads/primavera_p6_book_excerpt.pdf
5. https://www.academia.edu/6980547/Project_Scheduling_with_Primavera_P6_Training_Manual
6. <https://onebimvn.com/en/software/construction-scheduling-with-primavera-p6-pdf>
7. <https://www.dot.state.mn.us/pm/documents/introductory-course-manual.PDF>
8. <https://tensix.com/wp-content/uploads/2013/09/Primavera-P6-Exercise-Worksheet-Rev-2.0-2013-09-26.pdf>
9. <https://www.scribd.com/document/655699958/PRIMAVERA-P6-ESSENTIAL-TRAINING-NOTES>





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ADD ON COURSE on
"Primavera"

This is to certify that ----- N. ARUN KUMAR - IV - CIVIL ----- has
successfully completed the Add on Course on "Primavera" held from
22.04.2023 to 22.05.2023 for 36 hours in our College.

HOD/CIVIL

Head of the Department

Department of Civil Engineering

NPR College of Engineering & Technology

Natham, Dindigul (TN) - 624 401.

Dr. J. SUNDARAJAN

PRINCIPAL

B.E., M.Tech., Ph.D.

Principal

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ADD ON COURSE on

"Primavera"

This is to certify that S. YA 241 NI. II - CIVIL has
successfully completed the Add on Course on "Primavera" held from
22.04.2023 to 22.05.2023 for 36 hours in our College.

[Signature]
HOD/CIVIL

Head of the Department
Department of Civil Engineering
NPR College of Engineering & Technology
Natham, Dindigul - 624 401.

[Signature]

PRINCIPAL

Dr. J. SUNDARARAJAN,
Principal

N.P.R. College of Engineering & Technology
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE ON "FULL STACK WEB DEVELOPMENT-JAVA"

INDEX

COURSE CODE & NAME: 22CSCC01& FULL STACK WEB DEVELOPMENT

ACADEMIC YEAR: 2022 -2023

SEMESTER: ODD

DURATION: 35 HOURS

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PROGRAM
COORDINATOR

Dr. PRISCILLA MARY
AP-CSE

HoD/CSE

Dr. J. SUNDARARAJAN
Head of the Department
Department of Computer Science & Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.

IQAC

Coordinator - IQAC
NPR College of Engineering & Technology
Natham, Dindigul (DT)-624 401

PRINCIPAL

Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.





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PERMISSION LETTER

From

Dr.K.Ramanan,
Head of the Department,
Computer Science and Engineering,
NPR College of Engineering & Technology,
Natham.

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Respected Sir,

Sub: Requisition to conduct Certificate Course for CSE students – Regarding

We have planned to conduct a Certificate Course on **"Full Stack Web Development-Java"** to our students from 22.08.2022 to 26.08.2022(5 Days) in our college premises. We suggest **Mr.V.G.Shanmugam, Founder and CEO, Shan Software Services, Chennai** as the resource person for this Certificate Course. Kindly permit us to conduct the same.

Thanking You,

Yours Truly,



Head of the Department
Department of Computer Science & Technology
NPR College of Engineering & Technology,
Natham, Dindigul (DT) - 624 401.



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE ON "FULL STACK WEB DEVELOPMENT-JAVA"
RESOURCE PERSON'S PROFILE

Name : Mr.V.Shannugam

Designation : Founder and CEO

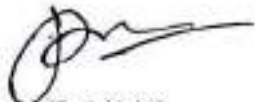
Company Name : Shan Software Services, Chennai



About Resource Person : He has given quality training in most of the programming languages for working professionals and students across South India and has been successful. Engaging, Understanding, and knowledgeable technical trainer with over 10 years of experience educating engineering students, seasoned employees and new hires in the field of information systems and technology. Also adept at teaching users a variety of software programs and technologies. Dynamic communicator with excellent presentation skills, able to translate complex concepts into understandable terms using creative teaching methods. Proven track record of preparing employees to produce quality work across a variety of fields.




PROGRAM COORDINATOR
J. PRISCILLA MARY
AP-CSE


HoD/CSE
Dr. S. SUNDARARAJAN

Head of the Department
Department of Computer Science & Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.


PRINCIPAL
Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.



NPRCET/OFF/CSE/VAC/2022-2023/01

11.08.2022

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE ON "FULL STACK WEB DEVELOPMENT-JAVA"

CIRCULAR

This is to inform that Department of Computer Science and Engineering has planned to conduct a Certificate Course on "FULL STACK WEB DEVELOPMENT-JAVA" for the students from 22.08.2022 to 26.08.2022 (5 Days) for the students during the Odd Semester of 2022-2023. Interested students can enroll their name to the program coordinator on or before 17.08.2022. The details of the Certificate Course program are given below:

RESOURCE PERSON	:	Mr.V.Shanmugam, Founder & CEO, Shan Software Services, Chennai
VENUE	:	Programming Laboratory I
DATE & DURATION	:	22.08.2022 to 26.08.2022 (5 Days) & 35 Hours
PROGRAM COORDINATOR	:	Mrs. J. Prisca Mary, AP/CSE, NPRCET.

Copy to:-

1. Administrative office for information
2. IQAC
3. All HoD's
4. College Notice Board

~~PRINCIPAL~~





INVITATION

*The Management, Principal, Staff and Students
Cordially invite you for the Inauguration of*

**CERTIFICATE COURSE on
"FULL STACK WEB DEVELOPMENT - JAVA"**

On 22nd August 9.00 a.m.

Venue : Programming Laboratory I

Chief Guest

Mr. V.G. Shanmugam,
Founder & CEO,
Shan Software Services, Chennai

Dr. J. Sundararajan
Principal,
NPR College of Engineering & Technology

Felicitates the function

Organized By

Department of Computer Science and Engineering,
NPR College of Engineering & Technology,
NPR Nagar, Natham.





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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE COURSE ON "FULL STACK WEB DEVELOPMENT-JAVA"

COURSE CONTENT

DATE:22.08.2022

Day 1 - Chapter 1: Programming Fundamentals

- Introduction to Core Java.
- Installation and First Program.
- Language Fundamentals.
- Data Types, Operators in Java.

Day 2 - Chapter 2: Object Oriented Programming

- Classes and Objects in OOPS.
- Access modifiers and Concept of Inheritance.
- Concept of Polymorphism.
- Concept of Encapsulation.

Day 3 - Chapter 3: Exception Handling and Threading

- Try and Catch Block.
- Handling Throws.
- Concept of Threads.
- Synchronization & Thread Interaction.

Day 4 - Chapter 4: Front End Development

- Semantic Elements in HTML.
- Different CSS Selectors.
- Javascript Modules.
- AJAX and usage of API's

Day 5 - Back End Development

- Database Integration - MongoDB
- Mongo Data Validation
- Modeling Relationships
- Caching & Performance

Criteria to get Certificate:

- Students should register their names for this course.
- Students must have 85% attendance.
- Student should secure 75% marks in the Exam.

Prepared By: Mrs.J.Prisca Mary,
AP/CSE

Approved By,



PROGRAM
COORDINATOR

J. PRISCA MARY
AP-CSE

HoD/CSE

Head of the Department
Department of Computer Science & Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.

IQAC

Coordinator - IQAC
NPR College of Engineering & Technology
Natham, Dindigul (Dt)-624 401

PRINCIPAL

Dr. J. SUNDARARAJAN
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Principal
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE COURSE ON "FULL STACK WEB DEVELOPMENT-JAVA"

AGENDA

- ❖ Prayer Song
- ❖ Welcome Address : Ms.M. Kowsalya
IV -CSE, NPRCET
- ❖ Felicitation Address : Dr.J. Sundararajan
Principal
- ❖ Introduction to Chief Guest : Mr.R.Keerthi Haran
III – CSE, NPRCET
- ❖ Honoring the chief Guest : Mr.V.Mathivanan
IV – CSE, NPRCET
- ❖ Chief Guest Address : Mr. V.G.Shanmugam,
Founder and CEO,
Shan Software Services,
Chennai.
- ❖ Vote of thanks : Mr. N.Siva Subramanian
III Year CSE, NPRCET
- ❖ National Anthem





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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE COURSE ON "FULL STACK WEB DEVELOPMENT-JAVA"

REGISTERED STUDENT'S NAME LIST

S.No.	Register Number	Name of the Student	Year
1.	920821104002	Ajaykumar K	II YEAR
2.	920821104004	Anbarasu S	II YEAR
3.	920821104005	Anbulingam E	II YEAR
4.	920821104007	Arasu Thanga Pandi M	II YEAR
5.	920821104009	Baby Shalini C	II YEAR
6.	920821104010	Bellarmine Joshi V	II YEAR
7.	920821104012	Bhuvaneshwaran S	II YEAR
8.	920821104014	Dhanush M	II YEAR
9.	920821104015	Dharani T	II YEAR
10.	920821104016	Dharinish K	II YEAR
11.	920821104018	Durga Gnana Devi S	II YEAR
12.	920821104019	Fahmitha Sirin N	II YEAR
13.	920821104020	Frossekhan M	II YEAR
14.	920821104021	Gantharaja M	II YEAR
15.	920821104023	Harish T	II YEAR
16.	920821104024	Jayasurya S A	II YEAR
17.	920821104025	Jothimani P	II YEAR
18.	920821104026	Jothiprakash M	II YEAR
19.	920821104027	Karthikeyan D K	II YEAR
20.	920821104029	Keerthi Haran R	II YEAR
21.	920821104030	Madhesh G	II YEAR
22.	920821104050	Siva Subramanian N	II YEAR
23.	920821104052	Sri Sudharsana Lakshmi D	II YEAR
24.	920820104001	Abinaya A	III YEAR
25.	920820104003	Deepika V	III YEAR
26.	920820104004	Dharshanapriya K	III YEAR
27.	920820104006	Geethanjali S	III YEAR
28.	920820104007	Hari Vignesh K	III YEAR
29.	920820104009	Joshuva Baskaran M	III YEAR
30.	920820104010	Kabilesh K	III YEAR
31.	920820104012	Karthik K	III YEAR
32.	920820104013	Karthikeyan M	III YEAR
33.	920820104014	Kaviarasan C	III YEAR
34.	920820104015	Keerthi S	III YEAR





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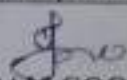
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE ON "FULL STACK WEB DEVELOPMENT-JAVA"

REGISTERED STUDENT'S NAME LIST

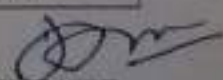
S.No.	Register Number	Name of the Student	Year
35.	920820104016	Kowsalya M	III YEAR
36.	920820104017	Lakshmipathy K	III YEAR
37.	920820104018	Leo T	III YEAR
38.	920820104019	Mathivanan V	III YEAR
39.	920820104020	Muthulakshmi M	III YEAR
40.	920820104021	Nafeela Nasrin S	III YEAR
41.	920820104022	Naveen K	III YEAR
42.	920820104023	Nivetha K	III YEAR
43.	920820104024	Palani Kumar V	III YEAR
44.	920820104025	Ponnalagu N	III YEAR
45.	920820104026	Pradeep Raj R S	III YEAR
46.	920820104027	Praveen N	III YEAR
47.	920819104001	Abdul Jalil S	IV YEAR
48.	920819104002	Afhran Nisha A	IV YEAR
49.	920819104003	Ajaykumar M	IV YEAR
50.	920819104004	Akash T	IV YEAR
51.	920819104005	Anandakumar A	IV YEAR
52.	920819104006	Bavithra C	IV YEAR
53.	920819104007	Bramma S	IV YEAR
54.	920819104008	Deva Dharshini N	IV YEAR
55.	920819104009	Divya S	IV YEAR
56.	920819104011	Guhan P	IV YEAR
57.	920819104012	Guna Seakar J	IV YEAR
58.	920819104013	Hari Deevagan M	IV YEAR
59.	920819104014	Hifaya Thaqfeen M	IV YEAR
60.	920819104015	Indhumathi V	IV YEAR
61.	920819104016	Janani R	IV YEAR
62.	920819104018	Mangala Dharsini R	IV YEAR
63.	920819104019	Manoj Kumar T	IV YEAR
64.	920819104020	Mohamed Ribak B	IV YEAR
65.	920819104021	Monica R	IV YEAR
66.	920819104022	Muthu Kumar P	IV YEAR
67.	920819104037	Sharumathi P	IV YEAR
68.	920819104038	Sivapriya R	IV YEAR
69.	920819104040	Soundharya V	IV YEAR
70.	920819104042	Srivaths Karthic G	IV YEAR


PROGRAM COORDINATOR

A. PRISIA MADRY



8


Head of the Department
Department of Computer Science & Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE ON "FULL STACK WEB DEVELOPMENT-JAVA"
COURSE SCHEDULE

Venue: Programming Laboratory 1

Date: 22.08.2022

External Resource Person: Mr.V.Shanmugam

Internal Resource Person: Mrs.J.PriscaMary

Day 1 22.08.2022	9.30 a.m. to 10.00 a.m.	Inauguration	
	10.00 a.m. to 11.10 a.m.	Session 1	Introduction to Core Java. Mr.V.Shanmugam
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Installation and First Program. Mr.V.Shanmugam
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	Language Fundamentals. Mr.V.Shanmugam
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	Data Types, Operators in Java. Mrs.J.PriscaMary
Day 2 23.08.2022	9.30 a.m. to 11.10 a.m.	Session 1	Classes and Objects in OOPS. Mr.V.Shanmugam
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Access modifiers and Concept of Inheritance. Mr.V.Shanmugam
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	Concept of Polymorphism. Mr.V.Shanmugam
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	Concept of Encapsulation. Mrs.J.PriscaMary
Day 3 24.08.2022	9.30 a.m. to 11.10 a.m.	Session 1	Try and Catch Block. Mr.V.Shanmugam
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Handling throws. Mrs.J.PriscaMary
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	Concepts of Threads. Mr.V.Shanmugam
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	Synchronization & Thread Interaction. Mr.V.Shanmugam





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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE ON "FULL STACK WEB DEVELOPMENT-JAVA"
COURSE SCHEDULE

Day 4 25.08.2022	9.30 a.m. to 11.10 a.m.	Session 1	Semantic Elements in HTML. Mr.V.Shanmugam
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Different CSS Selectors. Mr.V.Shanmugam
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	Javascript Modules. Mrs.J.PriscaMary
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	AJAX and usage of API's Mr.V.Shanmugam
Day 5 26.08.2022	9.30 a.m. to 11.10 a.m.	Session 1	Database Integration – MongoDB Mr.V.Shanmugam
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Mongo Data Validation Mr.V.Shanmugam
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	Modeling Relationships Mr.V.Shanmugam
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	Caching & Performance. Mrs.J.PriscaMary



**PROGRAM
COORDINATOR**

HoD/CSE

IQAC

PRINCIPAL

Dr. J. SUNDARARAJAN

Head of the Department
Department of Computer Science & Engineering
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Coordinator - IQAC
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE ON "FULL STACK WEB DEVELOPMENT-JAVA"

ATTENDANCE OF STUDENTS

S. No.	Register Number	Student Name	Year	22.08.22		23.08.22		24.08.22		25.08.22		26.08.22	
				IN	AN	IN	AN	IN	AN	IN	AN	IN	AN
1.	920821104002	Ajaykumar K	II	/	/	/	/	/	/	/	/	/	/
2.	920821104004	Anbata S	II	/	/	/	/	/	/	a	a	/	/
3.	920821104005	Anbulingam E	II	a	a	a	a	/	/	a	a	a	a
4.	920821104007	Arasu Thanga Pandi M	II	/	/	/	/	/	/	/	/	/	/
5.	920821104009	Baby Shalini C	II	/	/	/	/	/	/	/	/	/	/
6.	920821104010	Bellamine Joshi V	II	/	/	/	/	/	/	/	/	/	/
7.	920821104012	Bhuvaneshwaran S	II	/	/	/	/	/	/	/	/	/	/
8.	920821104014	Dhanush M	II	/	/	/	/	/	/	/	/	/	/
9.	920821104015	Dharani T	II	/	/	/	/	/	/	/	/	/	/
10.	920821104016	Dharmish K	II	/	/	/	/	/	/	/	/	/	/
11.	920821104018	Durga Gnana Devi S	II	/	/	a	a	/	/	/	/	/	/
12.	920821104019	Fahmitha Sirin N	II	/	/	/	/	/	/	/	/	/	/
13.	920821104020	Frossekhan M	II	/	/	/	/	/	/	/	/	/	/
14.	920821104021	Gantharaja M	II	a	a	a	a	/	/	/	/	/	/
15.	920821104023	Harish T	II	a	a	/	/	/	/	/	/	a	a
16.	920821104024	Jayasurya S A	II	/	/	/	/	/	/	/	/	/	/
17.	920821104025	Jothimani P	II	/	/	/	/	/	/	/	/	/	/
18.	920821104026	Jothiprakash M	II	a	a	/	/	/	/	/	/	/	/
19.	920821104027	Karthikeyan D K	II	a	a	/	/	/	/	/	/	/	/
20.	920821104029	Keerthi Haran R	II	/	/	/	/	/	/	/	/	/	/
21.	920821104030	Madhesh G	II	/	/	/	/	/	/	/	/	/	/
22.	920821104050	Siva Subramanian N	II	/	/	/	/	/	/	/	/	/	/
23.	920821104052	Sri Sudharsana Lakshmi D	II	/	/	/	/	/	/	/	/	/	/
24.	920820104001	Abinaya A	III	/	/	/	/	/	/	/	/	/	/
25.	920820104003	Deepika V	III	a	a	/	/	/	/	/	/	/	/
26.	920820104004	Dharshanapriya K	III	/	/	/	/	/	/	/	/	/	/





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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE ON "FULL STACK WEB DEVELOPMENT-JAVA"
ATTENDANCE OF STUDENTS

S. No.	Register Number	Student Name	Year	22.08.22		23.08.22		24.08.22		25.08.22		26.08.22	
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
27.	920820104006	Geethanjali S	III	/	/	/	/	/	/	/	/	/	/
28.	920820104007	Hari Vignesh K	III	a	a	/	/	/	/	/	/	a	a
29.	920820104009	Joshuva Baskaran M	III	/	/	/	/	/	/	/	/	/	/
30.	920820104010	Kabilesh K	III	a	a	/	/	/	/	/	/	/	/
31.	920820104012	Karthik K	III	a	a	/	/	/	/	/	/	/	/
32.	920820104013	Karthikeyan M	III	/	/	/	/	/	/	/	/	/	/
33.	920820104014	Kaviarasan C	III	/	/	/	/	/	/	/	/	/	/
34.	920820104015	Keerthi S	III	/	/	/	/	/	/	/	/	/	/
35.	920820104016	Kowsalya M	III	/	/	/	/	/	/	/	/	/	/
36.	920820104017	Lakshmipathy K	III	/	/	/	/	/	/	/	/	/	/
37.	920820104018	Leo T	III	/	/	/	/	/	/	/	/	/	/
38.	920820104019	Mathivanan V	III	a	a	/	/	/	/	/	/	/	/
39.	920820104020	Muthulakshmi M	III	/	/	/	/	/	/	/	/	/	/
40.	920820104021	Nafeela Nasrin S	III	/	/	/	/	/	/	/	/	/	/
41.	920820104022	Naveen K	III	/	/	/	/	/	/	/	/	/	/
42.	920820104023	Nivetha K	III	/	/	/	/	/	/	/	/	/	/
43.	920820104024	Palani Kumar V	III	/	/	/	/	/	/	/	/	/	/
44.	920820104025	Ponnalagu N	III	a	a	a	a	a	a	a	a	a	a
45.	920820104026	Pradeep Raj R S	III	/	/	a	a	/	/	/	/	/	/
46.	920820104027	Praveen N	III	/	/	/	/	/	/	/	/	/	/
47.	920819104001	Abdul Jalil S	IV	/	/	/	/	/	/	/	/	a	a
48.	920819104002	Afhran Nisha A	IV	/	/	/	/	/	/	/	/	/	/
49.	920819104003	Ajaykumar M	IV	/	/	/	/	/	/	/	/	/	/
50.	920819104004	Akash T	IV	/	/	/	/	a	a	/	/	a	a
51.	920819104005	Anandakumar A	IV	/	/	/	/	a	a	/	/	/	/
52.	920819104006	Bavithra C	IV	/	/	/	/	/	/	/	/	/	/





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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE ON "FULL STACK WEB DEVELOPMENT-JAVA"
ATTENDANCE OF STUDENTS

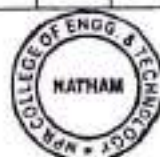
S. No.	Register Number	Student Name	Year	22.08.22		23.08.22		24.08.22		25.08.22		26.08.22	
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
53.	920819104007	Bramma S	IV	/	/	/	/	/	/	/	/	/	/
54.	920819104008	Deva Dharshini N	IV	/	/	/	/	/	/	/	/	a	a
55.	920819104009	Divya S	IV	/	/	/	/	/	/	/	/	/	/
56.	920819104011	Guhan P	IV	a	a	/	/	/	/	/	/	/	/
57.	920819104012	Guna Seakar J	IV	/	/	/	/	/	/	/	/	a	a
58.	920819104013	Hari Deevagan M	IV	/	/	/	/	/	/	/	/	/	/
59.	920819104014	Hifaya Thaqfeen M	IV	/	/	/	/	/	/	/	/	/	/
60.	920819104015	Indhumathi V	IV	/	/	/	/	/	/	/	/	/	/
61.	920819104016	Janani R	IV	/	/	/	/	/	/	/	/	/	/
62.	920819104018	Mangala Dharsini R	IV	/	/	/	/	/	/	/	/	/	/
63.	920819104019	Manoj Kumar T	IV	/	/	/	/	/	/	/	/	/	/
64.	920819104020	Mohamed Ribak B	IV	a	a	/	/	/	/	/	/	/	/
65.	920819104021	Monica R	IV	a	a	a	a	a	a	a	a	/	/
66.	920819104022	Muthu Kumar P	IV	/	/	/	/	/	/	/	/	/	/
67.	920819104037	Sharumathi P	IV	/	/	/	/	/	/	/	/	/	/
68.	920819104038	Sivapriya R	IV	/	/	/	/	/	/	/	/	/	/
69.	920819104040	Soundharya V	IV	/	/	/	/	/	/	/	/	/	/
70.	920819104042	Srivaths Karthic G	IV	/	/	/	/	/	/	/	/	/	/
PRESENT				62	62	64	64	66	66	66	66	62	62
ABSENT				08	08	06	06	04	04	04	04	08	08
PROGRAM COORDINATOR													

PROGRAM COORDINATOR

D. PRISCILLA MARY
PR-CSE

HoD/CSE

Head of the Department
Department of Computer Science & Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.



PRINCIPAL

Dr. JSUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE ON "FULL STACK WEB DEVELOPMENT-JAVA"
SAMPLE QUESTION PAPER WITH ANSWER KEY

1. What does the term "Full Stack Development" refer to?
 - A. Development that involves stack data structures
 - B. Development that involves front-end and back-end programming
 - C. Development that involves only backend programming
 - D. None of the above
2. Which of the following is not a front-end technology?
 - A. HTML
 - B. CSS
 - C. JavaScript
 - D. SQL
3. The purpose of the Front-end framework in Full stack development is _____.
 - A. To provide the client-side interface
 - B. To manage database
 - C. To reduce the server load
 - D. To send http requests
4. Amongst which of the following programming language is used as a server-side language?
 - A. Python
 - B. C++
 - C. JavaScript
 - D. Both A and C
5. What is a Front-end framework?
 - A. A development platform for developing user-interface for software applications
 - B. A database to store and manage the data of an application
 - C. A development platform for writing server-side logic
 - D. None of the above
6. Database in Full stack development is used to _____.
 - A. Styling HTML pages
 - B. Storing and retrieving data
 - C. Handling errors on server-side
 - D. Rendering web pages



7. What is Git?

- A. Framework
- B. Version control system
- C. Database
- D. Package manager

8. CRUD stands for ____.

- A. Create, Read, Upload, Delete
- B. Create, Read, Upgrade, Deploy
- C. Create, Remove, Upgrade, Delete
- D. Create, Read, Update, Delete

9. The term "deployment" refers to

- A. Running the project on a server to make it accessible to all
- B. Bundling all the project files into a single file
- C. Removing unnecessary files
- D. Updating existing project

10. A web server in Full Stack Development is ____.

- A. Rendering the user interface
- B. Handling client-side interactions
- C. Executing server-side code and processing requests
- D. Writing server-side logics

11. Is JavaScript synchronous or asynchronous?

- A. Synchronous
- B. Asynchronous
- C. Both
- D. Synchronous but can be used as asynchronous

12. SPA stands for ____.

- A. Standard Page Application
- B. Single Page Application
- C. Smart Protocol Authentication
- D. Scalable Performance Architecture





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13. Amongst which of the following is a back-end framework in Python?

- A. Django
- B. Flask
- C. Both A and B
- D. None of the above

14. Amongst which of the following type of database is used in Full stack development?

- A. Relational
- B. JSON
- C. XML
- D. GraphQL

15. Amongst which of the following protocol is used to exchange the data between client and server?

- A. HTTP
- B. TCP/IP
- C. SMTP
- D. FTP

ANSWERS :

1-B 2-D 3-A 4-D 5-A 6-B 7-B 8-D 9-A 10-C 11-D 12-B 13-C 14-A
15-A



[Signature]
PROGRAM CO-ORDINATOR

A. PRISCILLA MARY
AP-ISE

[Signature]
HoD/CSE

[Signature]

Head of the Department
Department of Computer Science & Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE COURSE ON "FULL STACK WEB DEVELOPMENT-JAVA"

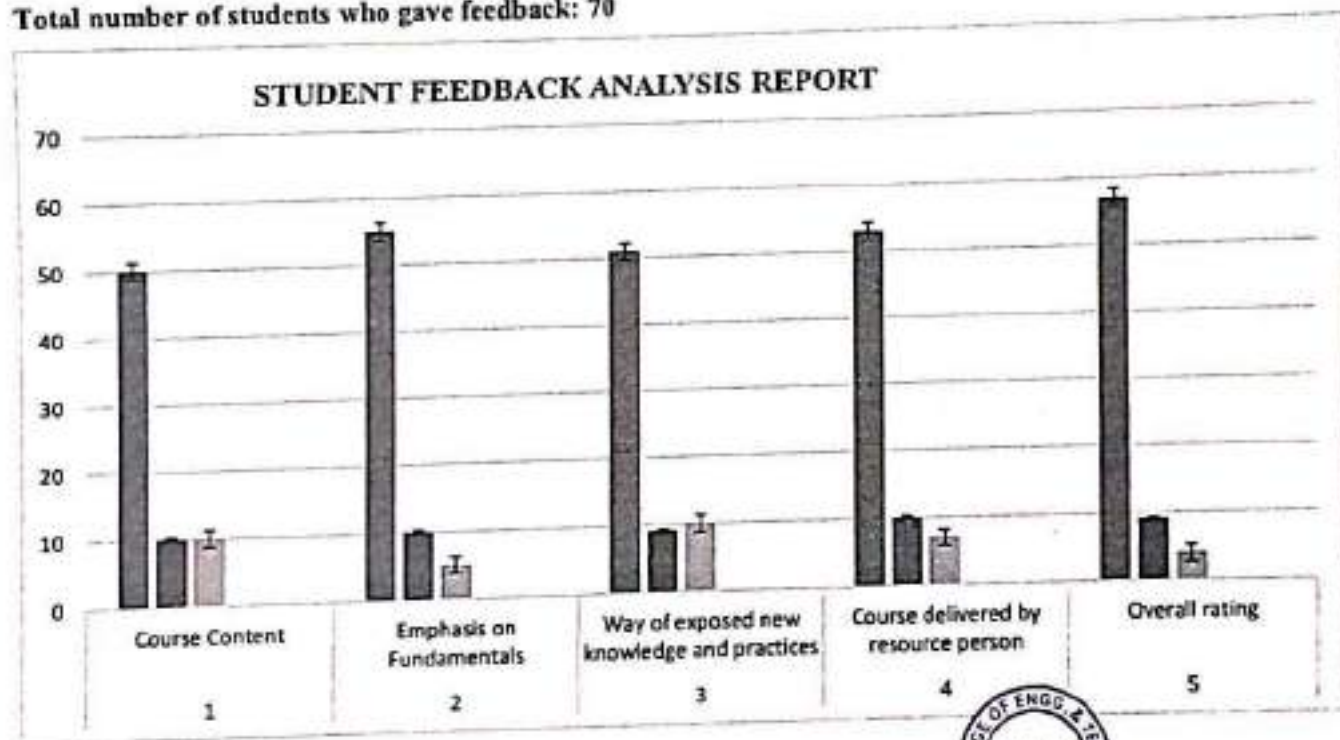
FEEDBACK ANALYSIS

ATTENDED STUDENTS: 70

DATE: 07.09.2022

S. No	CONTENT	EXCELLENT	GOOD	AVERAGE	POOR	VERY POOR
1.	Course Content	50	10	10	0	0
2.	Emphasis on Fundamentals	55	10	5	0	0
3.	Way of exposed new knowledge and practices	51	9	10	0	0
4.	Course delivered by resource person	53	10	7	0	0
5.	Overall rating	57	9	4	0	0
	Average	53.2	9.6	7.2	0	0

Total number of students who gave feedback: 70



PROGRAM COORDINATOR

J. PRISLA MARY
PRINCIPAL

HoD/CSE

Dr. J. SUNDARARAJAN

Head of the Department
Department of Computer Science & Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624401.

IQAC

Coordinator - IQAC

PRINCIPAL

Dr. J. SUNDARARAJAN,

B.E., M.Tech., Ph.D.

Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul (DT) - 624401.



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE COURSE ON "FULL STACK WEB DEVELOPMENT-JAVA"

SUMMARY REPORT

DATE: 09.09.2022

The Department of Computer Science and Engineering organized a Certificate Course on "FULL STACK WEB DEVELOPMENT-JAVA" from 22.08.2022 to 26.08.2022 (5 Days) in our college premises.

Ms.M. Kowsalya, IV Year CSE student welcomed the gathering. Dr.J.Sundararajan, principal felicitated the function with his inspiring words. He mentioned the importance of Java Programming. He also suggested the students to do projects in Java.

Mr.R.Keerthi Haran of III Year CSE, introduced the Resource Person Mr.V.G. Shanmugam, Founder & CEO, Shan Software Services, Chennai who described the importance and uses of Java Programming in software development. He explained the concepts of object-oriented programming from the scratch followed by data types, variables, keywords, access specifiers, methods, arguments and parameter passing in Java.

70 Students attended from CSE II, III and IV year classes. Students those who have participated and successfully completed the quiz program on "FULL STACK WEB DEVELOPMENT-JAVA" have been awarded with certificates.

Mr. N. Siva Subramanian, IIIrd year CSE delivered the vote of thanks.

PROGRAM
COORDINATOR

D. PRISCILLA TERRY
DP-CSE

Head of the Department

Department of Computer Science & Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.

HoD/CSE

Dr. K. Kowsalya

IQAC

Coordinator - IQAC Dr. J. SUNDARARAJAN,
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401



PRINCIPAL

Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE ON "FULL STACK WEB DEVELOPMENT-JAVA"
COURSE MATERIAL

Course Link:


1. <https://www.codecademy.com/learn/paths/full-stack-engineer-career-path>
2. <https://www.edureka.co/masters-program/full-stack-developer-training>
3. <https://www.coursera.org/professional-certificates/ibm-full-stack-cloud-developer>

Book References

1. MongoDB: The Definitive Guide by Kristina Chodrow
2. A Guide to Python's Magic Methods by Rafe Kettler
3. Building Skills in Object-Oriented Design by Steven Lott
4. Explore Flask by Robert Picard Revision


PROGRAM COORDINATOR

2. PRISON MARY
AP-CSE


HoD/CSE
Dr. J. Sundarajan
Head of the Department
Department of Computer Science & Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.




PRINCIPAL
Dr. J. SUNDARARAJAN
B.E., M.Tech., Ph.D.
Principal
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Natham, Dindigul (DT) - 624 401.



NPR COLLEGE OF ENGINEERING & TECHNOLOGY

NPR Nagar, Natham, Dindigul – 624401, Tamil Nadu, India.

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Website: www.nprcolleges.org, www.nprcet.org -mail: nprgi@nprcolleges.org



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING Certificate of Completion

This certificate is presented to

Mr. ANBARASUS - III Year CSE

*for completing a Certificate Course on "FULL STACK WEB
DEVELOPMENT-JAVA" from 22.08.2022 to 26.08.2022 (5 Days).*


HOD/CSE
Dr.K.Ramanan


PRINCIPAL
Dr.J.Sundararajan



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ADD - ON COURSE ON "AWS SOLUTIONS ARCHITECT - FOUNDATION LEVEL"

INDEX

COURSE CODE & NAME: 22AOCC01 & AWS SOLUTIONS ARCHITECT - FOUNDATION LEVEL

ACADEMIC YEAR: 2022 - 2023

SEMESTER: ODD

DURATION: 35 HOURS

S.NO.	PARTICULARS	PAGE NO.
1	Permission letter	1
2	Resource person's profile	2
3	Circular to students	3
4	Invitation	4
5	Agenda	5
6	Course content	6
7	Course schedule	7
8	Registered student's name list	9
9	Attendance of students	11
10	Quiz question paper with answer key	14
11	Feedback form	17
12	Feedback analysis	18
13	Summary report	19
14	Course material/manual	20
15	Certificates of the program	21



**PROGRAM
COORDINATOR**

HoD/CSE

IQAC

PRINCIPAL

P. K. Srinivasan

Dr. K. Srinivasan

Coordinator - IQAC

Dr. J. Sundararajan

Head of the Department
Department of Computer Science & Engineering
NPR College of Engineering & Technology
Natham, Dindigul (TN) - 624 401.

NPR College of Engineering & Technology
Natham, Dindigul (TN) - 624 401

Principal
NPR College of Engineering & Technology
Natham, Dindigul (TN) - 624 401



PERMISSION LETTER

From

Dr.K.Ramanan,
Head of the Department,
Computer Science and Engineering,
NPR College of Engineering & Technology,
Natham.

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Respected Sir,

Sub: Requisition to conduct Add-on Course for CSE students – Regarding

We have planned to conduct an Add-on Course on “AWS Solutions Architect - Foundation Level” to our students from 28.11.2022 to 02.12.2022 (5 Days) in our college premises . We suggest Mr.R. Saravana Kumar, Project Manager, Iconix Software Solution, Tirunelveli as the resource person for this . Kindly permit us to conduct the same.

Thanking You,


Yours Truly,





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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ADD- ON COURSE ON "AWS SOLUTIONS ARCHITECT - FOUNDATION LEVEL"

RESOURCE PERSON'S PROFILE

Name : Mr.R. Saravana Kumar

Designation : Project Manager

Company Name : Iconix Software Solution, Tirunelveli.



About Resource Person : He has given quality training in most of programming languages for working professionals and students across South India and has been successful. Engaging, Understanding, and knowledgeable technical trainer with over 10 years of experience educating engineering students, seasoned employees and new hires in the field of information systems and technology. Also adept at teaching users a variety of software programs and technologies. Dynamic communicator with excellent presentation skills, able to translate complex concepts into understandable terms using creative teaching methods. Proven track record of preparing employees to produce quality work across a variety of fields.




PROGRAM COORDINATOR
K. SARAVANAN AR/LIT


HoD/CSE

Head of the Department
Department of Computer Science & Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.


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NPRCET/OFF/CSE/VAC/2022-2023/02

07.11.2022

CIRCULAR

This is to inform that Department of Computer Science and Engineering has planned to conduct an Add-on Course on **"AWS SOLUTIONS ARCHITECT - FOUNDATION LEVEL"** for the students from 28.11.2022 to 02.12.2022 (5 Days) during the odd Semester of 2022-2023. Interested students can enroll their name to the program coordinator on or before 07.11.2022. The details of the Add-on Course program are given below:

RESOURCE PERSON	:	Mr.R. Saravana Kumar, Founder & CEO, Iconix Software Solution, Tirunelveli.
VENUE	:	Programming Laboratory II
DATE & DURATION	:	28.11.2022 to 02.12.2022 (5 Days) & 35 Hours
PROGRAM COORDINATOR	:	Mrs.K.Rajalakshmi, AP/CSE, NPRCET.

Copy to:-

1. Administrative office for information
2. IQAC
3. All HoDs
4. College Notice Board





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INVITATION



The Management, Principal, Staff and Students



Cordially invite you for the

Add-on Course on

"AWS SOLUTIONS ARCHITECT - FOUNDATION LEVEL"

On 28th November 2022 at 10.00 a.m.

Venue: NPRCET- Programming Laboratory II

Chief Guest

Mr.R. Saravana Kumar

Project Manager,
Iconix Software Solution,
Tirunelveli.

Dr.J.Sundararajan

Principal,
NPR College of Engineering & Technology
Felicitates the function



Organized By
Department of Computer Science and Engineering,
NPR College of Engineering & Technology,
NPR Nagar, Natham





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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
ADD- ON COURSE ON "AWS SOLUTIONS ARCHITECT - FOUNDATION LEVEL"

AGENDA

- ❖ Prayer Song
- ❖ Welcome Address : Ms.N. Fahmitha Sirin
III - Year – CSE.
- ❖ Felicitation Address : Dr.J. Sundararajan
Principal
- ❖ Introduction to Chief Guest : Ms.N. Susmitha
III - Year – CSE.
- ❖ Honoring the chief Guest : Mr.R.Keerthi Haran
III - Year – CSE.
- ❖ Chief Guest Address : Mr.R.Saravana Kumar,
Project Manager,
Iconix Software Solution,
Tirunelveli.
- ❖ Vote of thanks : Mr. N.Siva Subramanian
III - Year CSE.

- ❖ National Anthem





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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ADD- ON COURSE ON "AWS SOLUTIONS ARCHITECT - FOUNDATION LEVEL"

COURSE CONTENT

Date : 12.11.2022

Day 1 - Chapter 1: Role of Cloud Computing

- Public Cloud, Private Cloud, Hybrid Cloud
- Virtualization in Cloud Model
- Hypervisor – Benefits
- Different types of cloud computing Deployment model

Day 2 - Chapter 2: AWS an Overview

- Introduction to AWS
- Describe about various services in AWS
- Create a free tier account in AWS and onboarding
- How to use AWS management console

Day 3 - Chapter 3: understand identify Access Management of AWS

- AWS User Account and groups in detail
- Creating custom policies in AWS
- Creating Roles and associating policies
- Associating policies to the user and group.

Day 4 - Chapter 4: EC2 Instance

- Semantic Elements in HTML.
- Different CSS Selectors.
- Javascript Modules.
- AJAX and usage of API's

Day 5 – Auto - Scaling

- Get started with autoscaling using the console
- Dynamic scaling
- The life cycle of autoscaling
- Policies of autoscaling

Criteria to get Certificate:

- Students should register their names for this course.
- Students must have 85% attendance.
- Student should secure 75% marks in the Exam.

Prepared By: Mrs.K.Rajalakshmi,
AP/CSE

Approved By,



PROGRAM
COORDINATOR

HoD/CSE

IQAC

PRINCIPAL

K. RAJALAKSHMI, Head of the Department

Coordinator - IQAC

Dr. J. SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

Department of Computer Science & Engineering

NPR College of Engineering & Technology

N.P.R. College of Engineering & Technology

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
ADD - ON COURSE ON "AWS SOLUTIONS ARCHITECT - FOUNDATION LEVEL" COURSE
SCHEDULE

Venue: Programming Laboratory I

Date: 18.11.2022

External Resource Person: Mr.R.Saravanna Kumar Internal Resource Person: Mrs.K.Rajalakshmi AP/CSE

Day 1 28.11.2022	9.30 a.m. to 10.00 a.m.	Immigration	
	10.00 a.m. to 11.10 a.m.	Session 1	Public Cloud, Private Cloud, Hybrid Cloud Mr.R. Saravanna Kumar
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Virtualization in Cloud Model Mr.R. Saravanna Kumar
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	Hypervisor – Benefits Mr.R. Saravanna Kumar
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	Different types of cloud computing Deployment model Mrs.K.Rajalakshmi
Day 2 29.11.2022	9.30 a.m. to 11.10 a.m.	Session 1	Introduction to AWS Mr.R. Saravanna Kumar
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Describe about various services in AWS Mr.R. Saravanna Kumar
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	Create a free tier account in AWS and onboarding Mr.R. Saravanna Kumar
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	How to use AWS management console Mrs.K.Rajalakshmi
Day 3 30.11.2022	9.30 a.m. to 11.10 a.m.	Session 1	AWS User Account and groups in detail Mr.R. Saravanna Kumar
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Creating custom policies in AWS Mrs.K.Rajalakshmi





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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ADD- ON COURSE ON "AWS SOLUTIONS ARCHITECT - FOUNDATION LEVEL"

COURSE SCHEDULE

	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	Creating Roles and associating policies Mr.R. Saravana Kumar
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	Associating policies to the user and group Mr.R. Saravana Kumar
Day 4 01.12.2022	9.30 a.m. to 11.10 a.m.	Session 1	Semantic Elements in HTML. Mr.R. Saravana Kumar
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Different CSS Selectors. Mr.R. Saravana Kumar
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	Javascript Modules. Mrs.K.Rajalakshmi
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	AJAX and usage of API's Mr.R Saravana Kumar
Day 5 02.12.2022	9.30 a.m. to 11.10 a.m.	Session 1	Get started with autoscaling using te Mr.R. Saravana Kumar
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Dynamic scaling Mr.R. Saravana Kumar
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	The life cycle of autoscaling Mr.R. Saravana Kumar
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	Policies of autoscaling Mrs.K.Rajalakshmi

PROGRAM
COORDINATOR

P. K. RAJALAKSHMI

Head of the Department

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Natham, Dindigul (DT) - 624 401.

HoD/CSE



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Coordinator - IQAC

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ADD- ON COURSE ON "AWS SOLUTIONS ARCHITECT - FOUNDATION LEVEL"

REGISTERED STUDENT'S NAME LIST

S.No.	Register Number	Name of the Student	Year
1.	920820104001	Abinaya A	III YEAR
2.	920820104003	Deepika V	III YEAR
3.	920820104004	Dharshanapriya K	III YEAR
4.	920820104006	Geethanjali S	III YEAR
5.	920820104007	Hari Vignesh K	III YEAR
6.	920820104009	Joshuva Baskaran M	III YEAR
7.	920820104010	Kabilesh K	III YEAR
8.	920820104012	Karthik K	III YEAR
9.	920820104013	Karthikeyan M	III YEAR
10.	920820104014	Kaviarasan C	III YEAR
11.	920820104015	Keerthi S	III YEAR
12.	920820104016	Kowsalya M	III YEAR
13.	920820104017	Lakshmipathy K	III YEAR
14.	920820104018	Leo T	III YEAR
15.	920820104019	Mathivanan V	III YEAR
16.	920820104020	Muthulakshmi M	III YEAR
17.	920820104021	Nafeela Nasrin S	III YEAR
18.	920820104022	Naveen K	III YEAR
19.	920820104023	Nivetha K	III YEAR
20.	920820104024	Palani Kumar V	III YEAR
21.	920820104025	Ponnalagu N	III YEAR
22.	920820104026	Pradeep Raj R S	III YEAR
23.	920820104027	Praveen N	III YEAR
24.	920819104001	Abdul Jalil S	IV YEAR
25.	920819104002	Aflran Nisha A	IV YEAR
26.	920819104003	Ajaykumar M	IV YEAR
27.	920819104004	Akash T	IV YEAR
28.	920819104005	Anandakumar A	IV YEAR
29.	920819104006	Bavithra C	IV YEAR
30.	920819104007	Bramma S	IV YEAR
31.	920819104008	Deva Dharshini N	IV YEAR
32.	920819104009	Divya S	IV YEAR
33.	920819104011	Guhan P	IV YEAR
34.	920819104012	Guna Seakar J	IV YEAR
35.	920819104013	Hari Deevagan M	IV YEAR





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REGISTERED STUDENT'S NAME LIST

S.No.	Register Number	Name of the Student	Year
36.	920819104014	Hifaya Thaqfeen M	IV YEAR
37.	920819104015	Indhumathi V	IV YEAR
38.	920819104016	Janani R	IV YEAR
39.	920819104018	Mangala Dharsini R	IV YEAR
40.	920819104019	Manoj Kumar T	IV YEAR
41.	920819104020	Mohamed Ribak B	IV YEAR
42.	920819104021	Monica R	IV YEAR
43.	920819104022	Muthu Kumar P	IV YEAR
44.	920819104037	Sharumathi P	IV YEAR
45.	920819104038	Sivapriya R	IV YEAR
46.	920819104040	Soundharya V	IV YEAR
47.	920819104042	Srivaths Karthic G	IV YEAR



PROGRAM COORDINATOR

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ADD- ON COURSE ON "AWS SOLUTIONS ARCHITECT - FOUNDATION LEVEL"

ATTENDANCE OF STUDENTS

S. No.	Register Number	Student Name	Year	28.11.22		29.11.22		30.11.22		01.12.22		02.12.22	
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1.	920820104001	Abinaya A	III	/	/	/	/	/	/	/	/	/	/
2.	920820104003	Deepika V	III	a	a	/	/	/	/	/	/	/	/
3.	920820104004	Dharshanapriya K	III	/	/	a	a	a	a	/	/	/	/
4.	920820104006	Geethanjali S	III	/	/	/	/	/	/	/	/	/	/
5.	920820104007	Hari Vignesh K	III	/	/	/	/	a	a	/	/	/	/
6.	920820104009	Joshua Baskaran M	III	/	/	/	/	/	/	/	/	/	/
7.	920820104010	Kabilesh K	III	/	/	/	/	/	/	a	a	a	a
8.	920820104012	Karthik K	III	/	/	/	/	/	/	/	/	a	a
9.	920820104013	Karthikeyan M	III	/	/	/	/	/	/	/	/	a	a
10.	920820104014	Kaviarasan C	III	a	a	/	/	a	a	a	a	/	/
11.	920820104015	Keerthi S	III	/	/	a	a	/	/	/	/	/	/
12.	920820104016	Kowsalya M	III	/	/	/	/	/	/	a	a	/	/
13.	920820104017	Lakshmipathy K	III	/	/	/	/	/	/	/	/	/	/
14.	920820104018	Leo T	III	/	/	/	/	/	/	/	/	/	/
15.	920820104019	Mathivanan V	III	/	/	a	a	/	/	/	/	/	/
16.	920820104020	Muthulakshmi M	III	a	a	/	/	/	/	/	/	/	/
17.	920820104021	Nafeela Nasrin S	III	/	/	/	/	/	/	a	a	/	/
18.	920820104022	Naveen K	III	/	/	/	/	/	/	/	/	/	/
19.	920820104023	Nivetha K	III	a	a	/	/	/	/	/	/	/	/
20.	920820104024	Palani Kumar V	III	/	/	/	/	/	/	/	/	/	/
21.	920820104025	Ponnalagu N	III	/	/	/	/	/	/	/	/	/	/
22.	920820104026	Pradeep Raj R S	III	a	a	/	/	/	/	/	/	a	a
23.	920820104027	Praveen N	III	a	a	/	/	a	a	/	/	/	/
24.	920819104001	Abdul Jalil S	IV	/	/	/	/	/	/	/	/	/	/
25.	920819104002	Afhran Nisha A	IV	/	/	/	/	/	/	/	/	/	/
26.	920819104003	Ajaykumar M	IV	/	/	/	/	/	/	/	/	/	/



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ADD-ON COURSE ON "AWS SOLUTIONS ARCHITECT - FOUNDATION LEVEL"

ATTENDANCE OF STUDENTS

S.No	Register Number	Student Name		28.11.22		29.11.22		30.11.22		01.12.22		02.12.22	
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
27.	920819104004	Akash T	IV	/	/	/	/	/	/	/	/	/	/
28.	920819104005	Anandakumar A	IV	/	/	/	/	/	/	/	/	/	/
29.	920819104006	Bavithra C	IV	/	/	/	/	/	/	/	/	/	/
30.	920819104007	Bramma S	IV	/	/	/	/	/	/	/	/	/	/
31.	920819104008	Deva Dharshini N	IV	/	/	/	/	/	/	/	/	/	/
32.	920819104009	Divya S	IV	/	/	/	/	/	/	/	/	/	/
33.	920819104011	Guhan P	IV	/	/	/	/	/	/	/	/	/	/
34.	920819104012	Guna Seakar J	IV	/	/	/	/	/	/	/	/	/	/
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37.	920819104015	Indhumathi V	IV	/	/	/	/	/	/	/	/	/	/
38.	920819104016	Janani R	IV	/	/	/	/	/	/	/	/	/	/
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43.	920819104022	Muthu Kumar P	IV	/	/	/	/	/	/	/	/	/	/
44.	920819104037	Sharumathi P	IV	/	/	/	/	/	/	/	/	/	/
45.	920819104038	Sivapriya R	IV	/	/	/	/	/	/	/	/	/	/
46.	920819104040	Soundharya V	IV	/	/	/	/	/	/	/	/	/	/
47.	920819104042	Srivaths Karthic G	IV	/	/	/	/	/	/	/	/	/	/
PRESENT			?	37	37	40	40	42	42	41	41	40	40
ABSENT				10	10	07	07	05	05	06	06	07	07
PROGRAM COORDINATOR													

PROGRAM COORDINATOR

[K. RAJAKUMAR, A/C/112]

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ADD-ON COURSE ON "AWS SOLUTIONS ARCHITECT - FOUNDATION LEVEL"

SAMPLE QUESTION PAPER WITH ANSWER KEY

- Which of the following is a benefit of using Amazon Aurora Replicas for read traffic?
 - They provide read-through caching on the Aurora database.
 - They have their own endpoints to direct read traffic.
 - They allow read traffic to be distributed across multiple Availability Zones.
 - They use the same underlying storage as the main database.
- Which of the following is a valid use case for hibernating EC2 instances?
 - To save the contents of instance memory to an EBS root volume.
 - To resume the instances with the same private IP address.
 - To reduce the boot time of the instances.
 - To avoid paying for the instances while they are not in use.
- Which of the following is a requirement for using server-side encryption with customer-provided keys (SSE-C)?
 - The encryption key must be provided in the PUT and GET requests.
 - The encryption key must be stored in AWS KMS.
 - The encryption key must be rotated every 90 days.
 - The encryption key must be encrypted with a public key.
- Which EC2 instance type is best suited for a web server application requiring high CPU performance?
 - t2.micro
 - m5.xlarge
 - r3.large
 - i3.metal
- Multiple Response: Which of the following are storage classes offered by Amazon S3? (Choose two)
 - Standard
 - Glacier Deep Archive
 - Multi-AZ
 - Instance Store





6. Which of the following AWS services can be used to encrypt data at rest in Amazon S3 buckets?
- A. Amazon IAM
 - B. Amazon KMS
 - C. Amazon CloudFront
 - D. Amazon CloudTrail
7. How can an instance be copied to another region?
- A. By creating an AMI and copying it to another region.
 - B. By using the AWS Data Pipeline service.
 - C. By manually launching a new instance in the target region.
 - D. By exporting the instance data to an S3 bucket and importing it in the target region.
8. Your company has moved a legacy application from the on-premise data center to the cloud. The legacy application requires a static IP address that is coded into the application, preventing you from deploying the application with high availability and fault tolerance using the Elastic Load Balancer (ELB). What solution would you recommend?
- A. Use an Application Load Balancer (ALB) instead of ELB.
 - B. Use an Elastic IP address for the instance.
 - C. Use Route 53 DNS failover.
 - D. Use an Auto Scaling group with a fixed number of instances.
9. Which AWS service provides a fully managed message queuing service for decoupling application components?
- A. Amazon S3
 - B. Amazon SQS
 - C. Amazon RDS
 - D. Amazon EC2
10. Which of the following AWS services are used to route traffic within a VPC? (Choose two)
- A. Amazon Route 53
 - B. Amazon EC2 Internet Gateway
 - C. AWS Transit Gateway
 - D. Amazon VPC NAT Gateway
11. Multiple Choice: Which of the following is a fully managed, relational database service offered by AWS?
- A. Amazon DynamoDB
 - B. Amazon RDS
 - C. Amazon Redshift
 - D. Amazon Aurora





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12. SPA stands for ____.

- A. Standard Page Application
- B. Single Page Application
- C. Smart Protocol Authentication
- D. Scalable Performance Architecture

13. Amongst which of the following is a back-end framework in Python?

- A. Django
- B. Flask
- C. Both A and B
- D. None of the above

14. Amongst which of the following type of database is used in Full stack development

- A. Relational
- B. JSON
- C. XML
- D. GraphQL

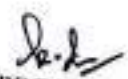
15. Amongst which of the following protocol is used to exchange the data between client and Server?

- A. HTTP
- B. TCP/IP
- C. SMTP
- D. FTP

ANSWERS :

1- B&D 2- A&C 3- A 4- A&B 5- A 6- B 7- B 8- D 9- A 10- C 11- D 12- B 13- C
14- A 15- A




PROGRAM CO-ORDINATOR
K. RAMANATHAN


HoD/CSE

Head of the Department
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ADD- ON COURSE ON "AWS SOLUTIONS ARCHITECT - FOUNDATION LEVEL"

FEEDBACK FORM

Date : 12.12.2022

Name of the Student : AKASH T	Year / Semester: IV
Name of the Program: AWS SOLUTIONS ARCHITECT - FOUNDATION LEVEL	

S. No	CONTENT	EXCELLENT	GOOD	SATISFACTORY	POOR	VERY POOR
1.	Course Content	✓				
2.	Way of exposed new knowledge and practices	✓				
3.	Examples Provided during this course		✓			
4.	Course delivered by Resource Person		✓			
5.	Time Management	✓				
6.	Overall rating of this course	✓				

K. R. S.
PROGRAM COORDINATOR
K. R. S. RATHNAM AP/US



[Signature]
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ADD - ON COURSE ON -AWS SOLUTIONS ARCHITECT - FOUNDATION

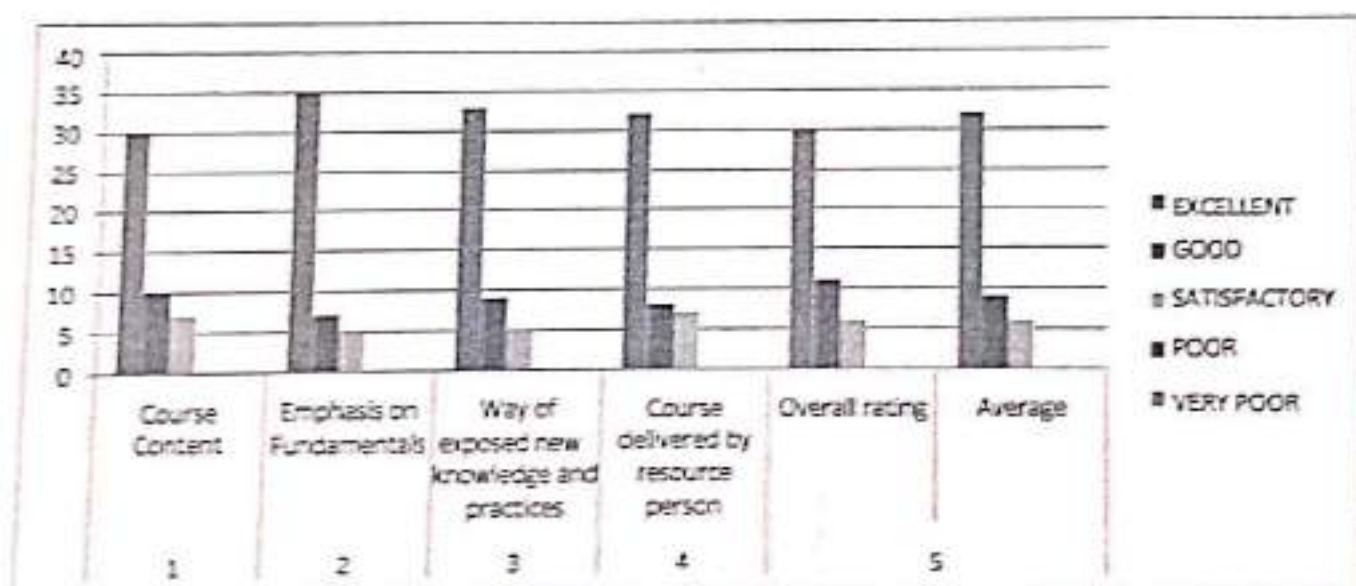
FEEDBACK ANALYSIS

ATTENDED STUDENTS: 47

DATE: 13.12.2022

S. No	CONTENT	EXCELLENT	GOOD	SATISFACTORY	POOR	VERY POOR
1.	Course Content	30	10	7	0	0
2.	Emphasis on Fundamentals	31	8	8	0	0
3.	Way of exposed new knowledge and practices	33	9	5	0	0
4.	Course delivered by resource person	34	7	6	0	0
5.	Overall rating	32	8	7	0	0
	Average	32	9.6	7.2	0	0

Total number of students who gave feedback: 47



PROGRAM COORDINATOR
K. RAJALAKSHMI



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ADD - ON COURSE ON "AWS SOLUTIONS ARCHITECT - FOUNDATION

SUMMARY REPORT

Date: 13.12.2022

The Department of Computer Science and Engineering organized an Add-on Course on "AWS SOLUTIONS ARCHITECT - FOUNDATION LEVEL" from 28.11.2022 to 13.12.2022 (5 Days) in our college premises.

During the inauguration on 28.11.2022 Ms.N. Fahmitha Sirin , III Year CSE student welcomed the gathering.

Dr.J.Sundararajan,Principal felicitated the function with his inspiring words. He mentioned the importance of cloud to students. He also suggested the students to do the projects in cloud AWS. He instructed the students to do more value added courses in cloud and motivate them to get more certifications.

Ms.N. Susmitha of III Year CSE, introduced the Resource Person Mr.R.Saravana Kumar, Project Manager, Iconix Software Solution, Tirunelveli who explained the Scratch concept of cloud and Virtualization to application of Cloud. It is value added training to students worked practically on cloud platform. Students learnt the more advanced concepts of private and public cloud, AWS account Creation, AJAX and usage.

47 Students attended from CSE III- and IV-year classes. Students those who have participated and successfully completed the quiz program on "AWS SOLUTIONS ARCHITECT - FOUNDATION LEVEL" have been awarded with certificates during the valedictory function on 02.12.2022.

Mr. N. Siva Subramanian ,III year CSE delivered the vote of thanks and the function came to an end with National Anthem.




PROGRAM
COORDINATOR

K. SRINIVASAN AP/LE


HoD/CSE


IQAC

Coordinator - IQAC


PRINCIPAL

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Principal

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
ADD- ON COURSE ON "AWS SOLUTIONS ARCHITECT - FOUNDATION LEVEL"
COURSE MATERIAL

Course Link:

1. <https://learn.acloud.guru/course/aws-certified-solutions-architect-associate/dashboard>
2. <https://www.udemy.com/topic/aws-certified-solutions-architect-associate/>
3. <https://aws.amazon.com/certification/certified-solutions-architect-associate/>

Book References

1. AWS Certified Solutions Architect Official Study Guide: Associate Exam (AWS Certified Solutions Architect Official: Associate Exam) by Joe Baron
2. AWS for Solutions Architects: The definitive guide to AWS Solutions Architecture for migrating to, building, scaling, and succeeding in the cloud by Saurabh Shrivastava
3. Learning AWS: Design, Build, and Deploy Responsive Applications using AWS Cloud Components by Adrian Cantrill and Jeff Barr
4. AWS Certified Solutions Architect Associate All-in-One Exam Guide (Exams SAA-C02 and SAA-C03) by Paul Kirkwood



PROGRAM COORDINATOR

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No: 04544-246 500, 246501, 246502

Website: www.nprcolleges.org, www.nprcet.org E-mail: nprgi@nprcolleges.org

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING Certificate of Completion

This certificate is presented to

Mr.KARTHICK K - III Year CSE

*for completing an Add-on Course on “AWS SOLUTIONS ARCHITECT-
FOUNDATION LEVEL” from 28.11.2022 to 02.12.2022 (5 Days).*


HoD/CSE
Dr.K.Ramanan


PRINCIPAL
Dr.J.Sundararajan



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE ON “UI/UX DESIGN FUNDAMENTALS AND BEYOND”

INDEX

COURSE CODE & NAME: **22CSCC02 & UI/UX DESIGNS FUNDAMENTALS AND BEYOND**

ACADEMIC YEAR: 2023 -2024

SEMESTER: EVEN

DURATION: 35 HOURS

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3	Circular to Students	3
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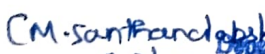



PROGRAM
COORDINATOR



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Head of the Department
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NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401

Coordinator - IQAC
NPR College of Engineering & Technology
Natham, Dindigul (Dt)-624 401


Dr. J. SUNDARARAJAN
B.E., M.Tech., Ph.D.
Principal
NPR College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401

PERMISSION LETTER

From

Dr.K.Ramanan
Head of the Department,
Computer Science and Engineering,
NPR College of Engineering & Technology,
Natham.

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Respected Sir,

Sub: Requisition to conduct Certificate Course for CSE students – Regarding

We have planned to conduct a Certificate Course on **“UI/Ux Designs Fundamentals and Beyond”** to our students from 21.02.2023 to 25.02.2023 (5 Days) in our college premises. We suggest **Dr.B.Ezhilavan, Managing Director, VEI Technologies Pvt.Ltd, Chennai** as the resource person for this Certificate Course. Kindly permit us to conduct the same.

Thanking You,


Yours Truly,



NPRCET/OFF/CSE/VAC/2022-2023/01

06.02.2023

CIRCULAR

This is to inform that Department of Computer Science and Engineering has planned to conduct a Certificate Course on **“UI/UX DESIGN FUNDAMENTALS AND BEYOND”** for the students from 21.02.2023 to 25.02.2023 (5 Days) during the even semester of 2022-2023. Interested students can enroll their name to the program coordinator on or before 13.02.2023. The details of the Certificate Course program are given below:

RESOURCE PERSON	:	Dr.B.Ezhilavan, Managing Director, VEI Technologies Pvt. Ltd, Chennai
VENUE	:	Project Laboratory
DATE & DURATION	:	21.02.2023 to 25.02.2023 (5 Days) & 35 Hours
PROGRAM COORDINATOR	:	Mrs.M.Santhanalakshmi, AP/CSE.

Copy to:-

1. Administrative office for information
2. IQAC
3. All HoDs
4. College Notice Board





NPR

College of Engineering & Technology

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Natham, Dindigul - 624 401. Web: www.nprcet.org



INVITATION

*The Management, Principal, Staff and Students
Cordially invite you for the inauguration of*

**CERTIFICATE COURSE on
"UI/UX DESIGN FUNDAMENTALS AND
BEYOND"**

On 21st February 9.00 a.m.

Venue : Project Laboratory

Chief Guest

Dr.B.Ezhilavan,
*Managing Director,
VEI technologies, Chennai*

Dr.J.Sundararajan
*Principal,
NPR College of Engineering & Technology*

Felicitates the function

Organized By

*Department of Computer Science and Engineering,
NPR College of Engineering & Technology,
NPR Nagar, Natham.*





DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE COURSE ON "UI/UX DESIGN FUNDAMENTALS AND

COURSE CONTENT

Date: 10.02.2023

Day 1 - Chapter 1: UX Design Fundamentals

- Understanding human needs & wants
- Deconstructing problems
- Researching competitors
- Layers & Objects

Day 2 - Chapter 2: Product Discovery & User Research

- Conducting User Interviews
- Deriving insights from user research
- Building User Personas
- Typography and Text Styling

Day 3 - Chapter 3: Problem Framing, Ideation & Validation

- Framing problem statements
- Mind mapping solutions
- Validation techniques
- Colours, Gradients & Styling.

Day 4 - Chapter 4: Interaction Design

- Creating User flows
- Building Information architecture
- Building lo-fi and mid-fi wireframes
- Component Libraries

Day 5 - Chapter 5: Visual Design Fundamentals

- Mood boarding & Design Systems
- Learning Typography fundamentals
- Understanding UI principles
- Colours & Patterns

Criteria to get Certificate:

- Students should register their names for this course.
- Students must have 80% attendance.
- Student should secure 75% marks in the Exam.

Prepared By: Mrs.M.Santhanalakshmi, AP/CSE



**PROGRAM
COORDINATOR**

HoD/CSE

IQAC

PRINCIPAL

M. Santhanalakshmi
AP/CSE
Head of the Department
Department of Computer Science & Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401

Coordinator - IQAC
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE COURSE ON "UI/UX DESIGN FUNDAMENTALS AND BEYOND"

AGENDA

- ❖ **Welcome Address** : **Ms.S.Apsara Jasmine**
II Year CSE
- ❖ **Felicitation Address** : **Dr.J.Sundararajan**
Principal
- ❖ **Introduction of Chief Guest** : **Mr.E.Anbu Lingam**
II Year CSE
- ❖ **Honoring the chief Guest** : **Mr.T.Madan**
II Year CSE
- ❖ **Chief Guest Address** : **Dr.B.Ezhilavan,**
Founder & CEO,
VEI Technologies Pvt. Ltd.,
Chennai
- ❖ **Vote of thanks** : **Ms.J.Pavithra**
II Year CSE
- ❖ **National Anthem**





DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE COURSE ON “UI/UX DESIGN FUNDAMENTALS AND BEYOND”

REGISTERED STUDENT'S NAME LIST

S. No.	Register Number	Name of the Student	Year
1	920821104002	Ajaykumar K	II YEAR
2	920821104003	Anbarasan P	II YEAR
3	920821104004	Anbarasu S	II YEAR
4	920821104005	Anbulingam E	II YEAR
5	920821104006	Apsara Jasmine S	II YEAR
6	920821104007	Arasu Thanga Pandi M	II YEAR
7	920821104008	Arusha Banu A	II YEAR
8	920821104009	Baby Shalini C	II YEAR
9	920821104010	Bellarmine Joshi V	II YEAR
10	920821104011	Bharathi S	II YEAR
11	920821104012	Bhuvaneshwaran S	II YEAR
12	920821104013	Devadharshini R S	II YEAR
13	920821104014	Dhanush M	II YEAR
14	920821104015	Dharani T	II YEAR
15	920821104016	Dharinish K	II YEAR
16	920821104017	Dharshini M	II YEAR
17	920821104018	Durga Gnana Devi S	II YEAR
18	920821104019	Fahmitha Sirin N	II YEAR
19	920821104020	Frossekhan M	II YEAR
20	920821104021	Gantharaja M	II YEAR
21	920821104022	Gokulapriyan R	II YEAR
22	920821104023	Harish T	II YEAR
23	920821104024	Jayasurya S A	II YEAR
24	920821104025	Jothimani P	II YEAR
25	920821104026	Jothi prakash M	II YEAR
26	920821104027	Karthikeyan D K	II YEAR
27	920821104028	Karthikeyan M	II YEAR
28	920821104029	Keerthi Haran R	II YEAR
29	920821104030	Madhesh G	II YEAR
30	920821104031	Madhumitha J	II YEAR
31	920821104032	Mousook Rahman S	II YEAR
32	920821104033	Natchathira M	II YEAR
33	920821104034	Naveen S	II YEAR
34	920821104035	Pavithra J	II YEAR
35	920821104036	Phavaneshwar K	II YEAR
36	920821104037	Pranov M	II YEAR





DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE ON "UI/UX DESIGN FUNDAMENTALS AND BEYOND"

REGISTERED STUDENT'S NAME LIST

S.No.	Register Number	Name of the Student	Year
37	920821104038	Ragul R	II YEAR
38	920821104039	Rathis Kanna R	II YEAR
39	920821104040	Roobala V	II YEAR
40	920821104041	Sahulhameed U	II YEAR
41	920820104038	Shrinidhi G -	II YEAR
42	920820104039	Sivamanivignesh D	II YEAR
43	920820104040	Sowmiya T	II YEAR
44	920820104041	Sripradeep M	II YEAR
45	920820104042	Subbulakshmi T	II YEAR
46	920820104043	Sudharsan G	II YEAR
47	920820104044	Sujit Raghav M M	II YEAR
48	920820104045	Swathi M	II YEAR
49	920820104046	Tharvinraja	II YEAR
50	920820104047	Venkatraman M	II YEAR
51	920820104048	Vijayakumar N	II YEAR
52	920820104049	Vinoth A	II YEAR
53	920820104050	Yuvaneshkumar K	II YEAR
54	920820104301	Dilzath Begam B	II YEAR
55	920820104302	Santhosh P A	II YEAR
56	920820104303	Kishorekumar A	II YEAR
57	920820104701	Dhandeeswaran K	II YEAR
58	920821104056	Susmitha N	II YEAR
59	920821104057	Theshan Banu S	II YEAR
60	920821104059	Yuvashri A	II YEAR
61	920821104301	Bala Anandhan R	II YEAR
62	920821104302	Krishna Kumar T	II YEAR
63	920821104303	Madhan T	II YEAR
64	920821104304	Sirajudeen N	II YEAR
65	920821104701	Jegannash Begam N	II YEAR



M. S. S. S.

PROGRAM COORDINATOR

[M-SantParalakshmi AP/CSE]

[Signature]

HoD/CSE

Head of the Department
Department of Computer Science & Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE COURSE ON “UI/UX DESIGN FUNDAMENTALS AND BEYOND”

COURSE SCHEDULE

Venue: Project Laboratory

Date: 13.02.2023

External Resource Person: Mr. Dr.B.Ezhilavan

Internal Resource Person: Mrs. M.Santhanalakshmi

Day 1 21.02.2023	9.30 a.m. to 10.00 a.m.	Inauguration	
	10. 00 a.m. to 11.10 a.m.	Session 1	Understanding human needs & wants Dr.B.Ezhilavan
	11.10 a.m. to 11.30 a.m.	<i>Tea Break</i>	
	11.30 a.m. to 1.10 p.m.	Session 2	Deconstructing problems Dr.B.Ezhilavan
	1.10 p.m. to 2.00 p.m.	<i>Lunch Break</i>	
	2.00 p.m. to 3.40 p.m.	Session 3	Researching competitors Dr.B.Ezhilavan
	3.40 p.m. to 3.50 p.m.	<i>Tea Break</i>	
	3.50 p.m. to 4.30 p.m.	Session 4	Layers & objects Mrs.M.Santhanalakshmi
Day 2 22.02.2023	9.30 a.m. to 11.10 a.m.	Session 1	Conducting user interviews Dr.B.Ezhilavan,
	11.10 a.m. to 11.30 a.m.	<i>Tea Break</i>	
	11.30 a.m. to 1.10 p.m.	Session 2	Deriving insights from user research Dr.B.Ezhilavan,
	1.10 p.m. to 2.00 p.m.	<i>Lunch Break</i>	
	2.00 p.m. to 3.40 p.m.	Session 3	Building user personas Dr.B.Ezhilavan,
	3.40 p.m. to 3.50 p.m.	<i>Tea Break</i>	
	3.50 p.m. to 4.30 p.m.	Session 4	Typography and Text styling Mrs. M.Santhanalakshmi





DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE COURSE ON “UI/UX DESIGN FUNDAMENTALS AND BEYOND”

COURSE SCHEDULE

Day 3 23.02.2023	9.30 a.m. to 11.10 a.m.	Session 1	Framing problem statements Mr. Dr.B.Ezhilavan
	11.10a.m. to 11.30 a.m.		<i>Tea Break</i>
	11.30a.m. to 1.10 p.m.	Session 2	Mindmapping solutions Mrs. M.Santhanalakshmi
	1.10p.m. to 2.00p.m.		<i>Lunch Break</i>
	2.00p.m. to 3.40p.m.	Session 3	Validation techniques Mr. Dr.B.Ezhilavan
	3.40p.m. to 3.50p.m.		<i>Tea Break</i>
	3.50p.m. to 4.30p.m.	Session 4	Colours, Gradients & styling Dr.B.Ezhilavan
Day 4 24.02.2023	9.30 a.m. to 11.10 a.m.	Session 1	Creating User Flows Dr.B.Ezhilavan
	11.10a.m. to 11.30a.m.		<i>Tea Break</i>
	11.30a.m. to 1.10p.m.	Session 2	Building information Architecture Dr.B.Ezhilavan
	1.10p.m. to 2.00p.m.		<i>Lunch Break</i>
	2.00p.m. to 3.40p.m.	Session 3	Building lo-fi and mid-fi wireframes Mrs. M.Santhanalakshmi
	3.40p.m. to 3.50p.m.		<i>Tea Break</i>
	3.50p.m. to 4.30 p.m.	Session 4	Component libraries Mr. Dr.B.Ezhilavan
Day 5 25.02.2023	9.30 a.m. to 11.10 a.m.	Session 1	Moodboarding & design system Dr.B.Ezhilavan
	11.10a.m. to 11.30a.m.		<i>Tea Break</i>
	11.30a.m. to 1.10 p.m.	Session 2	Learning Typography fundamentals Dr.B.Ezhilavan
	1.10p.m. to 2.00p.m.		<i>Lunch Break</i>
	2.00p.m. to 3.40p.m.	Session 3	Understanding UI principles Mr. Dr.B.Ezhilavan
	3.40p.m. to 3.50p.m.		<i>Tea Break</i>
	3.50p.m. to 4.30p.m.	Session 4	Colors & patterns Mrs. M.Santhanalakshmi


**PROGRAM
COORDINATOR**


HoD/CSE




IQAC

PRINCIPAL

M. Santhanalakshmi
 AP/CSE

Head of the Department
 Department of Computer Science & Engineering
 NPR College of Engineering & Technology
 Natham, Dindigul (DT) - 624 401

Coordinator - IQAC

Dr. J. SUNDARARAJAN

B.E., M.Tech., Ph.D.

Principal

NPR College of Engineering & Technology

Natham, Dindigul (DT) - 624 401



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE ON “UI/UX DESIGN FUNDAMENTALS AND BEYOND”
ATTENDANCE OF STUDENTS

S. No.	Register Number	Student Name	Year	21.02.23		22.02.23		23.02.23		24.02.23		25.02.23	
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1.	920821104002	Ajaykumar K	II	/	/	a	a	/	/	/	/	/	/
2.	920821104003	Anbarasan P	II	/	/	/	/	/	/	/	/	/	/
3.	920821104004	Anbarasu S	II	/	/	/	/	/	/	/	/	/	/
4.	920821104005	Anbulingam E	II	a	a	/	/	/	/	/	/	/	/
5.	920821104006	Apsara Jasmine S	II	/	/	/	/	/	/	/	/	/	/
6.	920821104007	Arasu Thanga Pandi M	II	/	/	a	a	/	/	/	/	/	/
7.	920821104008	Arusha Banu A	II	/	/	/	/	/	/	/	/	/	/
8.	920821104009	Baby Shalini C	II	/	/	/	/	/	/	/	/	/	/
9.	920821104010	Bellarmine Joshi V	II	/	/	/	/	/	/	/	/	/	/
10.	920821104011	Bharathi S	II	/	/	/	/	/	/	/	/	/	/
11.	920821104012	Bhuvaneshwaran S	II	/	/	/	/	/	/	/	/	/	/
12.	920821104013	Devadharshini R S	II	/	/	/	/	/	/	/	/	/	/
13.	920821104014	Dhanush M	II	/	/	a	a	/	/	/	/	/	/
14.	920821104015	Dharani T	II	/	/	/	/	/	/	/	/	/	/
15.	920821104016	Dharinish K	II	/	/	/	/	/	/	/	/	/	/
16.	920821104017	Dharshini M	II	/	/	/	/	/	/	/	/	/	/
17.	920821104018	Durga Gnana Devi S	II	/	/	/	/	/	/	/	/	/	/
18.	920821104019	Fahmitha Sirin N	II	/	/	/	/	/	/	/	/	/	/
19.	920821104020	Frossekhan M	II	/	/	/	/	/	/	/	/	/	/
20.	920821104021	Gantharaja M	II	/	/	/	/	a	a	a	a	/	/
21.	920821104022	Gokulapriyan R	II	/	/	/	/	/	/	/	/	/	/
22.	920821104023	Harish T	II	a	a	/	/	/	/	a	a	/	/
23.	920821104024	Jayasurya S A	II	/	/	/	/	/	/	a	a	/	/
24.	920821104025	Jothimani P	II	a	a	/	/	/	/	/	/	/	/
25.	920821104026	Jothiprakash M	II	/	/	/	/	/	/	/	/	/	/
26.	920821104027	Karthikeyan D K	II	/	/	/	/	/	/	/	/	/	/
27.	920821104028	Karthikeyan M	II	/	/	/	/	/	/	/	/	/	/
28.	920821104029	Keerthi Haran R	II	/	/	/	/	/	/	/	/	/	/



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE COURSE ON "UI/UX DESIGN FUNDAMENTALS AND BEYOND"

ATTENDANCE OF STUDENTS

S. No.	Register Number	Student Name	Year	21.02.23		22.02.23		23.02.23		24.02.23		25.02.23	
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
29.	920821104031	Madhumitha J	II	/	/	/	/	a	a	/	/	/	/
30.	920821104032	Mousook Rahman S	II	a	a	a	a	/	/	/	/	/	/
31.	920821104033	Natchathira M	II	/	/	/	/	a	a	/	/	/	/
32.	920821104034	Naveen S	II	/	/	/	/	/	/	/	/	/	/
33.	920821104035	Pavithra J	II	/	/	/	/	/	/	/	/	/	/
34.	920821104036	Phavaneshwar K	II	/	/	a	a	a	a	/	/	/	/
35.	920821104037	Pranov M	II	/	/	/	/	/	/	a	a	/	/
36.	920820104038	Shrinidhi G	II	a	a	/	/	/	/	/	/	/	/
37.	920820104039	Sivamanivignesh D	II	/	/	/	/	/	/	/	/	/	/
38.	920820104040	Sowmiya T	II	/	/	/	/	/	/	/	/	/	/
39.	920820104041	Sripradeep M	II	/	/	/	/	/	/	/	/	/	/
40.	920820104042	Subbulakshmi T	II	/	/	/	/	/	/	/	/	/	/
41.	920820104043	Sudharsan G	II	/	/	/	/	/	/	/	/	/	/
42.	920820104044	Sujit RaghavM M	II	/	/	/	/	/	/	/	/	/	/
43.	920820104045	Swathi M	II	/	/	/	/	/	/	/	/	/	/
44.	920820104046	Tharvinraja	II	/	/	/	/	/	/	/	/	/	/
45.	920820104047	Venkatraman M	II	/	/	/	/	/	/	/	/	/	/
46.	920820104048	Vijayakumar N	II	/	/	/	/	/	/	/	/	/	/
47.	920820104049	Vinoth A	II	/	/	/	/	/	/	/	/	/	/
48.	920820104050	Yuvaneshkumar K	II	/	/	/	/	/	/	/	/	/	/
49.	920820104301	Dilzath Begam B	II	/	/	/	/	/	/	/	/	/	/
50.	920820104302	SanthoshP A	II	/	/	/	/	/	/	/	/	/	/
51.	920820104303	Kishorekumar A	II	/	/	/	/	/	/	/	/	/	/
52.	920820104701	Dhandeeswaran K	II	/	/	/	/	/	/	/	/	/	/
53.	920821104056	Susmitha N	II	/	/	/	/	/	/	/	/	/	/
54.	920821104057	Theshan Banu S	II	/	/	/	/	/	/	/	/	/	/
55.	920821104059	Yuvashri A	II	/	/	/	/	/	/	/	/	/	/
56.	920821104301	Bala Anandhan R	II	/	/	/	/	/	/	/	/	/	/





DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE COURSE ON "UI/UX DESIGN FUNDAMENTALS AND BEYOND"

ATTENDANCE OF STUDENTS

S. No.	Register Number	Student Name	Year	21.02.23		22.02.23		23.02.23		24.02.23		25.02.23	
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
58.	920821104302	Krishna Kumar T	II	/	/	/	/	/	/	/	/	/	/
59.	920821104303	Madhan T	II	/	/	a	a	/	/	/	/	/	/
60.	920821104304	Sirajudeen N	II	/	/	/	/	/	/	/	/	/	/
61.	920821104701	Jegannash Begam N	II	/	/	/	/	/	/	/	/	/	/
PRESENT				56	56	55	55	57	57	57	57	61	61
ABSENT				05	05	06	06	04	04	04	04	NIL	NIL
PROGRAM COORDINATOR													


PROGRAM COORDINATOR
M. Santharalakshmi
APICSE



HoD/CSE
Dr. K. S. Sundararajan
Head of the Department
Department of Computer Science & Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.


PRINCIPAL
Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE COURSE ON "UI/UX DESIGN FUNDAMENTALS AND BEYOND"

SAMPLE QUESTION PAPER WITH ANSWER KEY

1. What does "UX" stand for in web design?

- A. Universal Experience
- B. User Experience
- C. User Expertise
- D. Universal Expertise

2. What does "UI" stand for in web design?

- A. User Interaction
- B. User Interface
- C. Universal Interface
- D. User Impact

3. What is the primary goal of "information architecture" in web design?

- A. To create visually pleasing layouts.
- B. To organize and structure content for easy access and navigation.
- C. To design engaging animations and transitions.
- D. To optimize website performance.

4. Which design principle emphasizes the consistency of design elements and user interactions across a website?

- A. Proximity
- B. Hierarchy
- C. Consistency
- D. Emphasis

5. In web design, what does "user flow" refer to?

- A. The movement of users through a website and the actions they take.
- B. The aesthetics and visual appeal of a website.
- C. The design of buttons and navigation bars.
- D. The loading time of web pages.

6. What is the primary purpose of "usability testing" in web design?

- A. To make a website visually appealing.
- B. To identify and resolve usability issues by observing user interactions.
- C. To optimize website performance.
- D. To create engaging animations and transitions.





7. Which term refers to the process of designing web interfaces that are easy for users to understand and navigate?

- A. Wireframing
- B. Prototyping
- C. User Interface (UI) Design
- D. Usability

8. What is the purpose of "wireframing" in web design?

- A. To create fully functional web pages.
- B. To design engaging animations and transitions.
- C. To outline the layout and structure of web pages.
- D. To optimize website performance.

9. In web design, what does "responsive design" refer to?

- A. A design that adapts to different user preferences.
- B. A design that focuses on visuals and aesthetics.
- C. A design that only works on specific devices.
- D. A design that adapts to different screen sizes and devices.

10. What is the primary goal of "user personas" in web design?

- A. To create visually appealing graphics.
- B. To identify the needs, goals, and behaviors of target users.
- C. To optimize website performance.
- D. To design engaging animations and transitions.

ANSWERS :

1-B 2-B 3-B 4-C 5-A 6-B 7-C 8-C 9-D 10-B


PROGRAM CO-ORDINATOR

*M. Santhana
Lakshmi AP/ase*




HoD/CSE

Head of the Department
Department of Computer Science & Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE COURSE ON “UI/UX DESINGN FUNDAMENTALS AND BEYOND”

FEEDBACK FORM

Date : 27.02.2023

Name of the Student : <u>Sirajudeen . N</u>	Year / Semester: <u>II</u>
Name of the Program: UI/UX DESINGN FUNDAMENTALS AND BEYOND	

S. No	CONTENT	EXCELLENT	GOOD	SATISFACTORY	POOR	VERY POOR
1.	Course Content	✓				
2.	Way of exposed new knowledge and practices		✓			
3.	Examples Provided during this course	✓				
4.	Course delivered by Resource Person			✓		
5.	Time Management	✓				
6.	Overall rating of this course		✓			




 Signature of the student



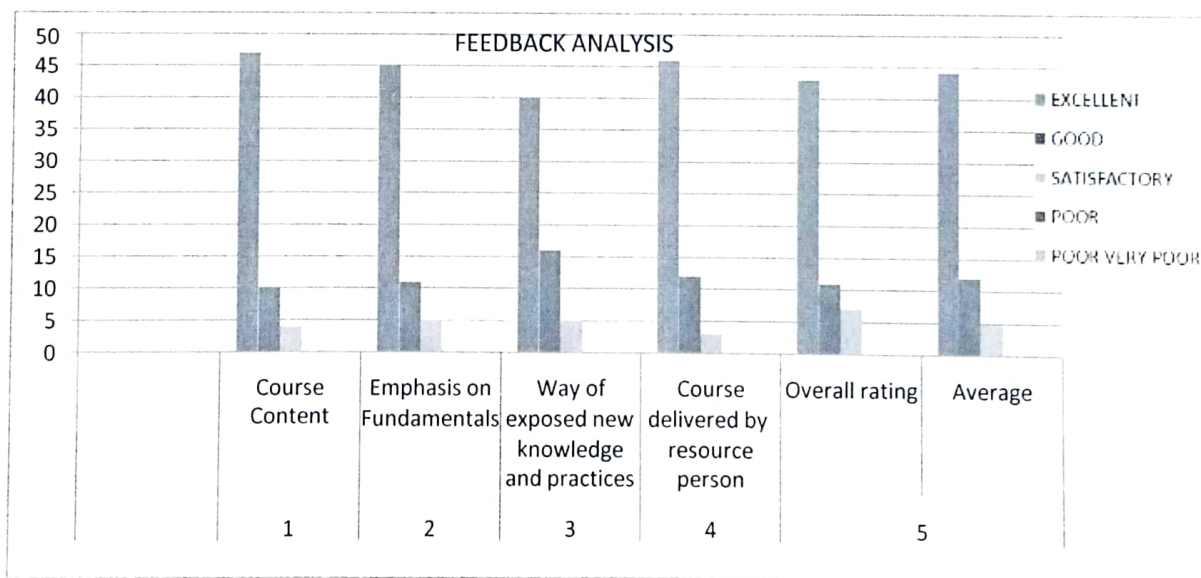
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE ON “UI/UX DESIGN FUNDAMENTALS AND BEYOND”
STUDENT FEEDBACK ANALYSIS REPORT

ATTENDED STUDENTS: 61

DATE: 01.03.2023

S. No	CONTENT	EXCELLENT	GOOD	SATISFACTORY	POOR	VERYPOOR
1.	Course Content	47	10	4	0	0
2.	Emphasis on Fundamentals	45	11	5	0	0
3.	Way of exposed new knowledge and practices	40	16	5	0	0
4.	Course delivered by resource person	46	12	3	0	0
5.	Overall rating	43	11	7	0	0
	Average	44.2	12	4.8	0	0

Total number of students who gave feedback: 61



H. S. Sani
PROGRAM COORDINATOR



[Signature]
HoD/CSE

[Signature]
PRINCIPAL

C.M. Santhanalakshmi
AP/CSE

Head of the Department
Department of Computer Science & Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.

Dr. JSUNDARARAJAN,
B.E., M.Tech., Ph.D.
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE ON "UI/UX DESIGN FUNDAMENTALS AND BEYOND"
SUMMARY REPORT

DATE: 02.03.2023

The Department of Computer Science and Engineering organized a Certificate Course on **"UI/UX DESIGN FUNDAMENTALS AND BEYOND"** from 21.02.2023 to 25.02.2023 (5 Days) in our college premises.

During the inauguration session on 21.02.2023 Ms.S.Apsara Jasmine, II Year CSE student welcomed the gathering.

Dr.J.Sundararajan, Principal felicitated the function with his inspiring words. He mentioned the importance of UX designs to students. He also suggested the students to do the projects in UI/UX. He instructed the students to do more value added courses in UI/UX Design Specialization and motivate them to get more certifications.

Mr.E.Anbu Lingam of II Year CSE, introduced the Resource Person Dr.B.Ezhilavan, Founder and CEO, VEI Technologies, Chennai who explained the fundamentals of UI/UX and web designing. It is value added training to students on designing Application Development. Students learnt the more advanced concepts of building User Personas, Problem Framing and validation, building lo-fi and mid-fi Wireframes.

61 Students attended from CSE II year class. Students those who have participated and successfully completed the quiz program on **"UI/UX DESIGN FUNDAMENTALS AND BEYOND"** have been awarded with certificates.

During the Valedictory held on 21.02.2023 Ms .J. Pavithra . II year CSE delivered the vote of thank




**PROGRAM
COORDINATOR**


HoD/CSE


IQAC


PRINCIPAL


Head of the Department
Department of Computer Science & Engineering
NPR College of Engineering & Technology,
Natham, Dindigul (DT) - 624 401.

Coordinator - IQAC
NPR College of Engineering & Technology
Natham, Dindigul (DT)-624 401

Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.
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NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE COURSE ON “UI/UX DESIGN FUNDAMENTALS AND BEYOND”

COURSE MATERIAL

Course Link:

1. <https://www.coursera.org/specializations/ui-ux-design>
2. <https://www.mygreatlearning.com/academy/learn-for-free/courses/ui-ux>
3. <https://www.udemy.com/course/complete-web-designer-mobile-designer-zero-to-mastery/>

Book References

1. Introduction to Design Thinking for UX Beginners by Uijun Park
2. Laws of UX: Design Principles for Persuasive and Ethical Products by Jon Yablonski
3. Lean UX: Designing Great Products with Agile Teams by Jeff Gothelf and Josh Seiden
4. UI is Communication by Everett N. McKay



M. S. Banalabakshi

PROGRAM COORDINATOR

M. S. Banalabakshi
AP/CSE

[Signature]

HoD/CSE

Head of the Department
Department of Computer Science & Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.

[Signature]

PRINCIPAL

Dr. J. SUNDARARAJAN,
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Principal
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NPR COLLEGE OF ENGINEERING & TECHNOLOGY



NPR Nagar, Natham, Dindigul – 624401, Tamil Nadu, India.
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai.
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Phone No: 04544-246 500, 246501, 246502

Website: www.nprcolleges.org, www.nprcet.org E-mail: nprgi@nprcolleges.org


DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING Certificate of Completion

This certificate is presented to

Ms. SWATHI M - II Year CSE

*for completing the Certificate Course on “**UI/UX DESIGN FUNDAMENTALS
AND BEYOND**” from 23.01.2023 to 27.01.2023 (5 Days).*


HoD/CSE
Dr.K.Ramanan


PRINCIPAL
Dr.J.Sundararajan



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ADD ON COURSE ON "LEARNING BIG DATA ANALYSIS THROUGH WEKA"

INDEX

COURSE CODE & NAME: 22AOCC02 & LEARNING BIG DATA ANALYSIS THROUGH WEKA

ACADEMIC YEAR: 2022 - 2023

SEMESTER: EVEN

DURATION: 35 HOURS

S.NO.	PARTICULARS	PAGENO.
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3	Circular to Students	3
4	Invitation	4
5	Agenda	5
6	Course Content	6
7	Course Schedule	7
8	Registered Student's Name List	9
9	Attendance of Students	11
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12	Feedback Analysis	18
13	Summary Report	19
14	Course Material/Manual	20
15	Certificates of the program	21



V. Smt
PROGRAM
COORDINATOR

HoD/CSE

IQAC

PRINCIPAL

V. SUJITHA
AP/CSE

Dr. H. Ramarathnam

Coordinator - IQAC

Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal

Head of the Department
Department of Computer Science & Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.

NPR College of Engineering & Technology
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NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.



PERMISSION LETTER

From

Dr.K.Ramanan,
Head of the Department,
Computer Science and Engineering,
NPR College of Engineering & Technology,
Natham.

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Respected Sir,

Sub: Requisition to conduct an Add-on Course for CSE students – Regarding

We have planned to conduct an Add-on Course on “Learning Big Data Analysis Through Weka” to our students from 04.04.2023 to 08.04.2023 (5 Days) in our college premises . We suggest Dr.Karthiya Banu M.C.A., M.Phil., Ph.D., Founder & CEO, Softech Solutions, Chennai as a resource person for this Add-on Course. Kindly permit us to conduct the same.

Thanking You,


Yours Truly,





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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE ON "LEARNING BIG DATA ANALYSIS THROUGH WEKA"
RESOURCE PERSON'S PROFILE

Name : Dr.Karthiya Banu

Designation : Founder & CEO

Company Name : Softech Solutions, Chennai



About Resource Person : Dr. Karthiya Banu, is Founder & CEO of Inspire Softech Solutions, Chennai. Dr. Karthiya Banu completed her B. Sc Physics in Madurai Kamaraj University and MCA Computer Application in Bharathidasan University, Trichy. She completed her M.Phil Computer Science in Bharathidasan University, Trichy. She pursued her doctorate in Data Mining from Sathyabama University, Chennai. More than 17 years of teaching experience in the field of computer science and along with 14 years of experience in the field of communication, soft skills and technical training and currently heading Training and development team. She is the managing trustee for Inspiring Minds Foundation doing training for underprivileged people. She has received various awards in diverse areas of his profession. Best paper Awards for research work, Best Mentor Award, Best Performer Award and Best Teacher Award from various bodies.





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NPRCET/OFF/CSE/VAC/2022-2023/01

13.03.2023

CIRCULAR

This is to inform that Department of Computer Science and Engineering has planned to conduct an Add-on Course on **"LEARNING BIG DATA ANALYSIS THROUGH WEKA"** for the students from 04.04.2023 to 08.04.2023 (5 Days) during the Even Semester of 2022- 2023. Interested students can enroll their name to the program coordinator on or before 20.03.2023. The details of the Add-on Course are given below:

RESOURCE PERSON	:	Dr.Karthiya Banu , Founder & CEO, Softech Solutions, Chennai
VENUE	:	Programming Laboratory II
DATE & DURATION	:	04.04.2023 to 08.04.2023 (5 Days) & 35 Hours
PROGRAM COORDINATOR	:	Mrs.V.Sujitha, AP/CSE.

Copy to:-

1. Administrative office for information
2. IQAC
3. All HoDs
4. College Notice Board





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INVITATION



The Management, Principal, Staff and Students

Cordially invite you for the

Add-on Course on

"LEARNING BIG DATA ANALYSIS THROUGH WEKA"

On 4th APRIL 2023 at 09.00 a.m.

Venue: Programming Laboratory II

Chief Guest

Dr.Karthiya Banu

Founder & CEO,
Iconix Software Solution,
Tirunelveli.

Dr.J.Sundararajan

Principal,
NPR College of Engineering & Technology
Felicitates the function



Organized By

Department of Computer Science and Engineering,

NPR College of Engineering & Technology,

NPR Nagar, Natham.





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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE ON "LEARNING BIG DATA ANALYSIS THROUGH WEKA"

AGENDA

- ❖ Prayer Song
- ❖ Welcome Address : Mr.S.Anbarasu
II Year- CSE.
- ❖ Felicitation Address : Dr.J. Sundararajan
Principal
- ❖ Introduction to Chief Guest : Mr. T.Harish,
II Year- CSE.
- ❖ Chief Guest Address : Mr.R.Saravana Kumar,
Founder & CEO,
Iconix Software Solution,
Tirunelveli.
- ❖ Vote of thanks : Ms. S. Nafeela Nasrin
III Year CSE.
- ❖ National Anthem





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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ADD- ON COURSE ON "LEARNING BIG DATA ANALYSIS THROUGH WEKA"

COURSE CONTENT

Date: 1.4.2023

Day 1 - Chapter 1: History of WEKA

- Types of Digital Data
- Introduction to Big Data
- History of WEKA
- Analysing Data with WEKA

Day 2 - Chapter 2: Big data tools

- Introduction to Big data tools
- Hadoop
- Map Reduce
- Real-World MapReduce Examples

Day 3 - Chapter 3 : Hadoop Implementation and Deployment

- Hadoop Architecture,
- Hadoop Ecosystem
- Hadoop Deployment
- Hadoop Implementation,

Day 4 - Chapter 4: Big Data Techniques

- Large-scale graph processing techniques
- Big data stream techniques
- Big data stream algorithms
- Large-scale probabilistic data analysis

Day 5 - Chapter 5: Machine learning

- Supervised Learning
- Unsupervised Learning
- Recommendation system
- Big Data Analysis through R

Criteria to get Certificate:

- Students should register their names for this course.
- Students must have 85% attendance.
- Student should secure 75% marks in the Exam.

Prepared By: Mrs.V.Sujitha,
AP/CSE

Approved By,



V.S.M.T
PROGRAM
COORDINATOR
V.SUJITHA
AP/CSE

Dr. K. Ramanathan
Head of the Department

Department of Computer Science & Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.

IQAC

Coordinator - IQAC

NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401

PRINCIPAL

Dr. J. SUNDARARAJAN
B.E., M.Tech., Ph.D.
Principal

N.P.R. College of Engineering & Technol
Natham, Dindigul (DT) - 624 401.



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE ON "LEARNING BIG DATA ANALYSIS THROUGH WEKA"

AGENDA

- ❖ Prayer Song
- ❖ Welcome Address : Mr.S.Anbarasu
II Year- CSE, NPRCET
- ❖ Felicitation Address : Dr.J. Sundararajan
Principal
- ❖ Introduction to Chief Guest : Mr. T.Harish,
II Year- CSE, NPRCET
- ❖ Chief Guest Address : Mr.R.Saravana Kumar,
Founder & CEO,
Iconix Software Solution,
Tirunelveli.
- ❖ Vote of thanks : Ms. S. Nafeela Nasrin
III Year CSE.
- ❖ National Anthem

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ADD- ON COURSE ON "LEARNING BIG DATA ANALYSIS THROUGH WEKA"

REGISTERED STUDENT'S NAME LIST

S.No.	Register Number	Name of the Student	Year
1.	920820104001	Abinaya A	III YEAR
2.	920820104003	Deepika V	III YEAR
3.	920820104004	Dharshanapriya K	III YEAR
4.	920820104006	Geethanjali S	III YEAR
5.	920820104007	Hari Vignesh K	III YEAR
6.	920820104009	Joshuva Baskaran M	III YEAR
7.	920820104010	Kabiles K	III YEAR
8.	920820104012	Karthik K	III YEAR
9.	920820104013	Karthikeyan M	III YEAR
10.	920820104014	Kaviarasan C	III YEAR
11.	920820104015	Keerthi S	III YEAR
12.	920820104016	Kowsalya M	III YEAR
13.	920820104017	Lakshmi pathy K	III YEAR
14.	920820104018	Leo T	III YEAR
15.	920820104019	Mathivanan V	III YEAR
16.	920820104020	Muthulakshmi M	III YEAR
17.	920820104021	Nafeela Nasrin S	III YEAR
18.	920820104022	Naveen K	III YEAR
19.	920820104023	Nivetha K	III YEAR
20.	920820104024	Palani Kumar V	III YEAR
21.	920820104025	Ponnalaga N	III YEAR
22.	920820104026	Pradeep Raj R S	III YEAR
23.	920820104027	Praveen N	III YEAR
24.	920819104001	Abdul Jalil S	IV YEAR
25.	920819104002	Afhran Nisha A	IV YEAR
26.	920819104003	Ajaykumar M	IV YEAR
27.	920819104004	Akash T	IV YEAR
28.	920819104005	Anandakumar A	IV YEAR
29.	920819104006	Bavithra C	IV YEAR
30.	920819104007	Bramma S	IV YEAR
31.	920819104008	Deva Dharshini N	IV YEAR
32.	920819104009	Divya S	IV YEAR
33.	920819104011	Guhan P	IV YEAR
34.	920819104012	Guna Seakar J	IV YEAR



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
ADD- ON COURSE ON "LEARNING BIG DATA ANALYSIS
THROUGH WEKA"

35.	920819104013	Hari Deevagan M	IV YEAR
36.	920819104014	Hifaya Thaqfeen M	IV YEAR
37.	920819104015	Indhumathi V	IV YEAR
38.	920819104016	Janani R	IV YEAR
39.	920819104018	Mangala Dharsini R	IV YEAR
40.	920819104019	Manoj Kumar T	IV YEAR
41.	920819104020	Mohamed Ribak B	IV YEAR
42.	920819104021	Monica R	IV YEAR
43.	920819104022	Muthu Kumar P	IV YEAR
44.	920819104023	Sharumathi P	IV YEAR
45.	920819104024	Sivapriya R	IV YEAR
46.	920819104025	Soundharya V	IV YEAR
47.	920819104026	Srivaths Karthic G	IV YEAR





DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ADD- ON COURSE ON "LEARNING BIG DATA ANALYSIS THROUGH WEKA"

COURSE SCHEDULE

Venue: Programming Laboratory II

Date: 4.4.2023

External Resource Person: Dr.Karthiya Banu

Internal Resource Person: Mrs.V.Sujitha

Day 1 25.07.2022	9.30 a.m. to 10.00 a.m.	Inauguration	
	10.00 a.m. to 11.10 a.m.	Session 1	Types of Digital Data Dr.Karthiya Banu
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Introduction to Big Data Dr.Karthiya Banu
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	History of WEKA Dr.Karthiya Banu
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	Analysing Data with WEKA Mrs.V.Sujitha
Day 2 26.07.2022	9.30 a.m. to 11.10 a.m.	Session 1	Introduction to Big data tools Dr.Karthiya Banu
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Hadoop Dr.Karthiya Banu
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	Map Reduce Dr.Karthiya Banu
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	Real-World MapReduce Examples Mrs.V.Sujitha
Day 3 27.07.2022	9.30 a.m. to 11.10 a.m.	Session 1	Hadoop Architecture Dr.Karthiya Banu
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Hadoop Ecosystem Mrs.V.Sujitha
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	Hadoop Deployment Dr.Karthiya Banu
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	Hadoop Implementation Dr.Karthiya Banu





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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ADD-ON COURSE ON "LEARNING BIG DATA ANALYSIS THROUGH WEKA"

COURSE SCHEDULE

Day 4 28.07.2022	9.30 a.m. to 11.10 a.m.	Session 1	Large-scale graph processing techniques Dr.Karthiya Banu
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Big data stream techniques Dr.Karthiya Banu
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	Big data stream algorithms Mrs.V.Sujitha
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	Large-scale probabilistic data analysis Dr.Karthiya Banu
Day 5 29.07.2022	9.30 a.m. to 11.10 a.m.	Session 1	Supervised Learning Dr.Karthiya Banu
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Recommendation system Dr.Karthiya Banu
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	Unsupervised Learning Dr.Karthiya Banu
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	Big Data Analysis through R Mrs.V.Sujitha



V. Sujitha
PROGRAM
COORDINATOR
V. SUJITHA

AP/CSE

Dr. K. Ramarathnam
HoD/CSE

Dr. K. Ramarathnam

Head of the Department

NPR College of Engineering & Technology
Department of Computer Science & Engineering
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Dr. J. Sundararajan
IQAC

Coordinator - IQAC

PRINCIPAL

Dr. J. SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE ON "LEARNING BIG DATA ANALYSIS THROUGH WEKA"

STUDENT'S ATTENDANCE

S. No.	Register Number	Name of the Student	Year	04.04.2023		05.04.2023		06.04.2023		07.04.2023		08.04.2023	
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1.	920820104001	Abinaya A	III	/	/	/	/	/	/	/	/	/	/
2.	920820104003	Deepika V	III	/	/	/	/	/	/	/	/	/	/
3.	920820104004	Dharshanapriya K	III	/	/	/	/	/	/	/	/	/	/
4.	920820104006	Geethanjali S	III	/	/	/	/	/	/	/	/	/	/
5.	920820104007	Hari Vignesh K	III	/	/	/	/	/	/	/	/	/	/
6.	920820104009	Joshuva Baskaran M	III	/	/	a	a	/	/	/	/	/	/
7.	920820104010	Kabilesh K	III	/	/	a	a	/	/	/	/	/	/
8.	920820104012	Karthik K	III	/	/	/	/	/	/	/	/	/	/
9.	920820104013	Karthikeyan M	III	/	/	/	/	a	a	/	/	/	/
10.	920820104014	Kaviarasan C	III	/	/	/	/	/	/	/	/	/	/
11.	920820104015	Keerthi S	III	/	/	a	a	a	a	/	/	/	/
12.	920820104016	Kowsalya M	III	/	/	/	/	/	/	/	/	/	/
13.	920820104017	Lakshmipathy K	III	/	/	/	/	/	/	/	/	/	/
14.	920820104018	Leo T	III	/	/	a	a	a	a	/	/	/	/
15.	920820104019	Mathivanan V	III	/	/	/	/	/	/	/	/	/	/
16.	920820104020	Muthulakshmi M	III	/	/	/	/	/	/	/	/	/	/
17.	920820104021	Nafeela Nasrin S	III	/	/	/	/	/	/	/	/	/	/
18.	920820104022	Naveen K	III	/	/	/	/	/	/	/	/	/	/
19.	920820104023	Nivetha K	III	/	/	/	/	/	/	/	/	/	/
20.	920820104024	Palani Kumar V	III	/	/	/	/	/	/	/	/	/	/
21.	920820104025	Ponnalagu N	III	/	/	/	/	/	/	/	/	/	/
22.	920820104026	Pradeep Raj R S	III	/	/	/	/	/	/	/	/	/	/
23.	920820104027	Praveen N	III	/	/	/	/	/	/	/	/	/	/
24.	920819104001	Abdul Jalil S	IV	/	/	/	/	/	/	/	/	/	/
25.	920819104002	Afhran Nisha A	IV	/	/	/	/	/	/	/	/	/	/
26.	920819104003	Ajaykumar M	IV	/	/	/	/	/	/	/	/	/	/



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE ON "LEARNING BIG DATA ANALYSIS THROUGH WEKA"

STUDENT'S ATTENDANCE

S. No.	Register Number	Name of the Student	Year	04.04.2023		05.04.2023		06.04.2023		07.04.2023		08.04.2023	
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
27.	920819104004	Akash T	IV	/	/	/	/	/	/	/	/	/	/
28.	920819104005	Anandakumar A	IV	/	/	/	/	/	/	/	/	/	/
29.	920819104006	Bavithra C	IV	/	/	/	/	a	a	/	/	/	/
30.	920819104007	Bramma S	IV	/	/	/	/	a	a	/	/	/	/
31.	920819104008	Deva Dharshini N	IV	/	/	/	/	a	a	/	/	/	/
32.	920819104009	Divya S	IV	/	/	/	/	/	/	/	/	/	/
33.	920819104011	Guhun P	IV	/	/	/	/	a	a	/	/	/	/
34.	920819104012	Guna Seakar J	IV	/	/	/	/	/	/	/	/	/	/
35.	920819104013	Hari Deevagan M	IV	/	/	/	/	a	a	/	/	/	/
36.	920819104014	Hifaya Thaqfeen M	IV	/	/	/	/	/	/	/	/	/	/
37.	920819104015	Indhumathi V	IV	/	/	/	/	/	/	/	/	/	/
38.	920819104016	Janani R	IV	/	/	/	/	/	/	/	/	/	/
39.	920819104018	Mangala Dharsini R	IV	/	/	a	a	a	a	/	/	/	/
40.	920819104019	Manoj Kumar T	IV	/	/	/	/	/	/	/	/	/	/
41.	920819104020	Mohamed Ribak B	IV	/	/	/	/	/	/	/	/	/	/
42.	920819104021	Monica R	IV	/	/	/	/	/	/	/	/	/	/
43.	920819104022	Muthu Kumar P	IV	/	/	/	/	/	/	/	/	/	/
44.	920819104037	Sharumathi P	IV	/	/	/	/	/	/	/	/	/	/
45.	920819104038	Sivapriya R	IV	/	/	a	a	/	/	/	/	/	/
46.	920819104040	Soundharya V	IV	/	/	a	a	/	/	/	/	/	/
47.	920819104042	Srivaths Karthic G	IV	/	/	/	/	/	/	/	/	/	/
PRESENT													
ABSENT				47	47	40	40	38	38	47	47	47	47
PROGRAM COORDINATOR				NIL	NIL	07	07	09	09	NIL	NIL	NIL	NIL
				dt	dt	dt	dt	dt	dt	dt	dt	dt	dt

PROGRAM COORDINATOR

V. SUGITHA
AP/CSE

Head of the Department

Department of Computer Science & Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.



PRINCIPAL

Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
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Natham, Dindigul (DT) - 624 401.



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE COURSE ON "LEARNING BIG DATA ANALYSIS THROUGH WEKA"

SAMPLE QUESTION PAPER WITH ANSWER KEY

1. Which of the following is true about Weka?
 - a. Weka is a data visualization tool.
 - b. Weka is a programming language.
 - c. Weka is a collection of machine learning algorithms.
 - d. Weka is used only for unsupervised learning.
2. Which file format is commonly used to import data into Weka?
 - a. PDF
 - b. CSV
 - c. MP4
 - d. PNG
3. Which of the following is NOT a type of data preprocessing available in Weka?
 - a. Attribute selection
 - b. Data cleaning
 - c. Data normalization
 - d. Data visualization
4. Which algorithm is used for classification in Weka?
 - a. Naive Bayes
 - b. K-means
 - c. Random Forest
 - d. PCA
5. Which of the following is NOT a clustering algorithm in Weka?
 - a. K-means
 - b. DBSCAN
 - c. EM
 - d. Linear Regression
6. Which of the following is NOT a type of evaluation metric in Weka?
 - a. Accuracy
 - b. Precision
 - c. Recall
 - d. Distance
7. Which of the following is a feature selection technique in Weka?
 - a. Principal Component Analysis (PCA)
 - b. Recursive Feature Elimination (RFE)
 - c. K-means clustering
 - d. K-nearest neighbours (KNN).
8. Which of the following is a disadvantage of the K-nearest neighbours (KNN) algorithm in Weka?
 - a. It is computationally expensive
 - b. It requires large amounts of training data
 - c. It is sensitive to irrelevant features
 - d. It cannot handle categorical data





9. Which of the following is an ensemble learning algorithm in Weka?
- Linear Regression
 - Naive Bayes
 - Random Forest
 - K-means
10. Which of the following is NOT a type of neural network available in Weka?
- Multilayer Perceptron (MLP)
 - Radial Basis Function (RBF)
 - Convolutional Neural Network (CNN)
 - Decision Tree

ANSWERS :

1-C 2-B 3-D 4-A 5-D 6-D 7-B 8-A 9-C 10-D



V.S. Viji
PROGRAM CO-ORDINATOR

V.S. VJIHA
AP/CSE

[Signature]
HoD/CSE

Dr. V. R. S. Ramesh
Head of the Department
Department of Computer Science & Engineering
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
ADD- ON COURSE ON "LEARNING BIG DATA ANALYSIS THROUGH WEKA"
STUDENTS FEEDBACK FORM

Date:

Name of the Student : Muthulakshmi M	Year / Semester: III
Name of the Program: LEARNING BIG DATA ANALYSIS THROUGH WEKA	

S. No	CONTENT	EXCELLENT	GOOD	SATISFACTORY	POOR	VERY POOR
1.	Course Content	✓				
2.	Way of exposed new knowledge and practices		✓			
3.	Examples Provided during this course	✓				
4.	Course delivered by Resource Person		✓			
5.	Time Management	✓				
6.	Overall rating of this course	✓				

Muthulakshmi M
Signature of the Student





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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ADD- ON COURSE ON "LEARNING BIG DATA ANALYSIS THROUGH WEKA"

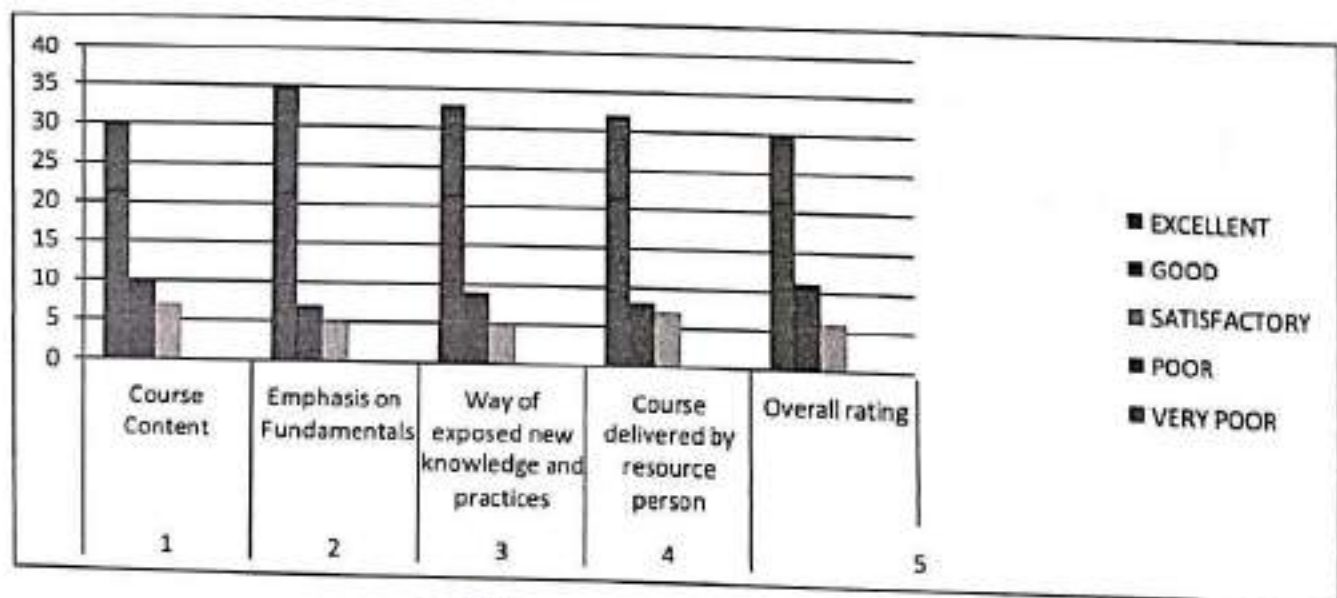
STUDENT FEEDBACK ANALYSIS REPORT

ATTENDED STUDENTS: 47

DATE: 17.08.2022

S. No	CONTENT	EXCELLENT	GOOD	SATISFACTORY	POOR	VERY POOR
1.	Course Content	30	10	7	0	0
2.	Emphasis on Fundamentals	35	7	5	0	0
3.	Way of exposed new knowledge and practices	33	9	5	0	0
4.	Course delivered by resource person	32	8	7	0	0
5.	Overall rating	30	11	6	0	0
	Average	53.2	9.6	7.2	0	0

Total number of students who gave feedback: 47



PROGRAM COORDINATOR

V. SUJITHA
AP/CSE



HoD/CSE

Dr. K. Ramaran

Head of the Department

Department of Computer Science & Engineering
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IQAC

Coordinator - IQAC

PRINCIPAL

Dr. J. SUNDARARAJAN

B.E., M.Tech., Ph.D.

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Natham, Dindigul (Dt) - 624 401.



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE ON "LEARNING BIG DATA ANALYSIS THROUGH WEKA"

SUMMARY REPORT

DATE: 17.08.2022

The Department of Computer Science and Engineering organized an Add-on- Course on "LEARNING BIG DATA ANALYSIS THROUGH WEKA" from 17.01.2022 to 21.01.2022 (5 Days) in our college premises.

Mr.S.Anbarasu , II Year CSE student welcomed the gathering.

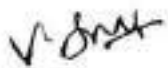
Dr.J.Sundararajan , principal felicitated the function with his inspiring words. He mentioned the importance of Big Data Analysis. He also suggested the students to do projects in WEKA.

Mr.T.Harish, of II Year CSE, introduced the Resource Person Dr.Karthiya Banu, to the gathering. The Resource Person Dr.Karthiya Banu, Founder & CEO , Softech Solutions, Chennai described the importance and uses of Bid data Analysis in software development. He explained the concepts object-oriented programming from the scratch followed by Analysing Data with WEKA, Hadoop Architecture, Big data stream algorithms, Supervised Learning and UnSupervised Learning.

48 Students attended from CSE III- and IV-year classes. Students those who have participated and successfully completed the quiz program on "LEARNING BIG DATA ANALYSIS THROUGH WEKA" has been awarded with certificates.

Ms. S. Nafeela Nasrin from III year CSE delivered the vote of thanks.




PROGRAM
COORDINATOR
V. SUJITHA
AP/CSE


HoD/CSE
Dr. K. Ramaran

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Natham, Dindigul (DT) - 624 401



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE COURSE ON "LEARNING BIG DATA ANALYSIS THROUGH WEKA"
COURSE MATERIAL

Course Link:

1. <https://www.cs.waikato.ac.nz/ml/weka/courses.html>
2. <https://www.coursera.org/>
3. <https://www.udemy.com/>

Book References

1. S.P. Mishra, Satchidananda Dehuri, et al. (Eds.), Cloud Computing for Optimization: Foundations, Applications, and Challenges, Springer, 2018.
2. P. Acharjya, Satchidananda Dehuri, et al. (Eds.), Computational Intelligence for Big Data Analysis: Frontier Advances and Applications, Springer, 2016



V. S. Jitha
PROGRAM COORDINATOR
V. S. JITHA
AP/CSE


HoD/CSE

Dr. K. Ramachandran

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Website: www.nprcolleges.org, www.nprcet.org E-mail: nprqi@nprcolleges.org

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING


Certificate of Completion

This certificate is presented to

Ms. JANANI R- IV Year CSE

for completing the Add-on Course on “**LEARNING BIG DATA ANALYSIS
THROUGH WEKA**” from 04.04.2023 to 08.04.2023 (5 Days).


HOD/CSE
Dr. K. Ramanathan


PRINCIPAL
Dr. J. Sundararajan



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ADD ON COURSE ON PCB DESIGN USING PSPICE

INDEX

COURSE & COURSE NAME: 22ECA001-PCB DESIGN USING PSPICE

ACADEMIC YEAR: 2022-2023

SEMESTERS: ODD

DURATION: 35 HOURS

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PROGRAM COORDINATOR

HoD/ECE

IQAC

PRINCIPAL

Head of the Department

Coordinator - IQAC

J. SUNDARARAJAN,

Department of Electronics & Communication Engineering

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Natham, Dindigul (Dt)-624 401

Principal

NPR College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.



PERMISSION LETTER

DATE: 13.07.2022

From

Mr J.G.Saburish,
Assistant Professor,
Dept.of ECE,
NPR College of Engineering & Technology,
Natham.

To

The Principal,
NPR College of Engineering & Technology,
NPR Nagar,
Natham.



Respected Sir,

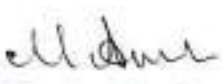
Sub: Request for permission to conduct Add on for ECE students – Reg

We have planned to conduct Add on Course “PCB DESIGN USING PSPICE” to our students from 02.08.2022 to 05.08.2022 & 08.08.2022 (5 Days) in our department. We have suggested Mr.S.Mervin Prasanth, Electronics Engineer, CPV Technologies Pvt Ltd, Chennai as an External Resource Person for this Add on course. Kindly permit us to conduct the same.

Thanking you.

Yours faithfully,


J.G.Saburish


Head of the Department
Department of Electronics & Communication Engineering,
NPR College of Engineering & Technology
Natham, Dindigul (DI) 624 401.


J. G. SABURISH,
B.E., M.Tech, Ph.D.
Professor,
NPR College of Engineering & Technology
Natham, Dindigul - 624 401



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22ECA001-ADD ON COURSE ON PCB DESIGN USING PSPICE

RESOURCE PERSON PROFILE

Name	:	Mr.S Mervin Prasanth
Designation	:	Electronics Engineer
Company Name	:	CPV Technologies Pvt. Ltd., Chennai.
About Resource Person	:	15+ years of professional experience in the area of Electronics. Experience in PCB system Design, Testing and Implementation support.

PROGRAM COORDINATOR



HoD/ECE

Head of the Department
Department of Electronics & Communication Engineering
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NPRCET/OFF/ECE/VAC/2022-2023

DATE: 18.07.2022

CIRCULAR

This is to inform that Department of Electronics and Communication Engineering has planned to conduct a Add on course on "PCB DESIGN USING PSPICE" for the students during the end of this odd semester 2022-2023. Interested students can enroll their name on or before 08.08.2022

The details of the training program are given below.

COURSE NAME	:	PCB DESIGN USING PSPICE
RESOURCE PERSON	:	Mr.S.Mervin Prasanth, Electronics Engineer, CPV Technologies Pvt Ltd, Chennai.
VENUE	:	NPRCET Seminar Hall
DATE & DURATION	:	02.08.2022 to 05.08.2022 & 08.08.2022 and 35 Hr
PROGRAM COORDINATOR	:	Mr.J.G.Sabarish, NPRCET.

Copy to:

1. All the HoDs
2. IQAC
3. All the Class Rooms
4. Notice Board
5. File
6. Program Coordinator.

PRINCIPAL
Dr. J.SUNDARARAJAN,
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Principal
NPR College of Engineering & Technology
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The Management, Principal, Staff and Students

Cordially invite you for the inauguration of

"Add on Course on PCB DESIGN USING PSPICE"

On 02nd Aug 2022

Chief Guest

Mr.S.Mervin Prasanth

CPV Technologies Pvt Ltd, Chennai

Dr.J.Sundararajan

Principal,

NPR College of Engineering & Technology

Felicitate the function

Organized by

Department of Electronics and Communication Engineering,

NPR College of Engineering & Technology,

NPR Nagar, Natham.





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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

22ECA001-ADD ON COURSE ON PCB DESIGN USING PSPICE

COURSE CONTENT

CHAPTER 1: INTRODUCTION TO CIRCUIT DESIGNING

- Fundamental of circuit design & Creating New Components
- Introduction to Analog Circuit Design & Introduction to Digital Circuit Design
- Placing Symbols and Ports & Labeling components
- Circuit optimization

CHAPTER 2: INTRODUCTION TO PCB DESIGN

- Creating the Blank PCB
- Defining a sheet template
- Printed Circuit Technology
- PCB Printing & Etching process

CHAPTER 3: PROTEUS PCB SCHEMATIC

- Defining the Board Shape & Placement Boundary
- Creating a board outline & placement / routing boundary
- Basic concepts of PCB Designing
- Schematic capture

CHAPTER 4: PROTEUS PCB EDITOR

- Creating and editing parts & Preparing to create a net list
- Exporting and importing schematic data
- PCB Material, & Board Layers, Colors and Grids.
- Defining PWR/GND layers.

CHAPTER 5: DESIGN TRANSFER TO THE PCB AND DESIGN RULE CHECK

- Design synchronization with schematic tool.
- Design transfer using a Net list.
- Design rules concepts.
- Design Rule Checking

CRITERIA TO GET CERTIFICATE:

- Students should register their names for this course
- Students must have 85% attendance.
- Student should secure 50% marks in the Exam.

Prepared By: Mr. S. Sudhakar, AP-ECE

Approved By:

HoD/ECE

IQAC

Head of the Department

Department of Electronics & Communication Engineering
NPR College of Engineering & Technology
Nalluru, Dindigul (DT)-624 401

Coordinator - IQAC
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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ADD ON COURSE ON PCB DESIGN USING PSPICE

REGISTERED STUDENTS

S.NO.	REGISTER NUMBER	STUDENT NAME	YEAR
1.	920819106003	AjithKumar.K	IV-ECE
2.	920819106004	Amizhthaa.B	IV-ECE
3.	920819106006	AravinthRaj.K	IV-ECE
4.	920819106007	AsmaRoshan.T	IV-ECE
5.	920819106008	Balaji.M	IV-ECE
6.	920819106009	Balaji.M	IV-ECE
7.	920819106010	BlessyJebamani.G	IV-ECE
8.	920819106011	Christiya.I	IV-ECE
9.	920819106012	Devi Sri .S	IV-ECE
10.	920819106014	DhathVetha.S	IV-ECE
11.	920819106015	Dhinesh.M	IV-ECE
12.	920819106016	Divesh.V	IV-ECE
13.	920819106017	DivyaDharshini.S	IV-ECE
14.	920819106019	Harishwar.S	IV-ECE
15.	920819106020	Josephrumsbilit.R	IV-ECE
16.	920819106021	Jyothika.B	IV-ECE
17.	920819106022	Kamalesh.K	IV-ECE
18.	920819106023	Kanishka.S	IV-ECE
19.	920819106024	Keerthi.M	IV-ECE
20.	920819106025	Kirthick.N	IV-ECE
21.	920819106026	Kishorekrishnaa.J	IV-ECE
22.	920819106028	Madhumitha.P	IV-ECE
23.	920819106029	Manojkumar.A	IV-ECE
24.	920819106030	ManojKumar.S	IV-ECE
25.	920819106031	MohamedAsifM	IV-ECE
26.	920819106032	Mohamedbrahim.J	IV-ECE
27.	920819106033	Mohan.S	IV-ECE
28.	920819106034	MohanBabu.B	IV-ECE
29.	920819106035	Muruganathan.M	IV-ECE
30.	920819106036	MuthuMoorthy.M	IV-ECE
31.	920819106037	MuthuRanjani.V	IV-ECE
32.	920819106038	Mythili.M	IV-ECE
33.	920819106039	NagaVishwa.G	IV-ECE
34.	920819106040	Nalinashree.N	IV-ECE
35.	920819106041	NandhaKumar.G	IV-ECE
36.	920819106042	Pavithra.N	IV-ECE
37.	920819106043	Porkodi.S	IV-ECE
38.	920819106044	PowsikaDevi.K	IV-ECE
39.	920819106045	Prabhu.C	IV-ECE





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40	920819106046	Prasanna.D	IV-ECE
41	920819106048	Ramvignesh.R.P	IV-ECE
42	920819106049	RenugaDevi.N	IV-ECE
43	920819106050	Rifaya.S	IV-ECE
44	920819106051	RishwanaBurveen.S	IV-ECE
45	920819106052	SanoNisha.N	IV-ECE
46	920819106053	Saran.GV	IV-ECE
47	920819106054	SasmitaParveen.K	IV-ECE
48	920819106055	ShamHiruthik.R	IV-ECE
49	920819106057	ShamilaDevi.G	IV-ECE
50	920819106058	ShinyReshma.J	IV-ECE
51	920819106059	Singarabrintha.N	IV-ECE
52	920819106060	Sneha.P	IV-ECE
53	920819106061	Soundharya.S	IV-ECE
54	920819106062	Sumugapriya.M	IV-ECE
55	920819106063	Thambi.Durai.P.K	IV-ECE
56	920819106064	Tharshitha.S	IV-ECE
57	920819106065	Tharunkumar.M	IV-ECE
58	920819106066	UmaNanthini.N	IV-ECE
59	920819106067	Venkatesh.P	IV-ECE
60	920819106068	Vikram.S	IV-ECE
61	920819106069	Vishali.K	IV-ECE
62	920819106070	Yashica.S	IV-ECE
63	920819106302	Shabiranj.J	IV-ECE
64	920820106001	Aarthy.M	III-ECE
65	920820106002	AjayGowtham.S	III-ECE
66	920820106003	Ajitha.S	III-ECE
67	920820106004	Akash.S	III-ECE
68	920820106005	Aravinthan.S	III-ECE
69	920820106006	Archana.P	III-ECE
70	920820106007	Ariharan.K	III-ECE
71	920820106008	Balasakthi.S	III-ECE
72	920820106010	Dhaanini.MJ	III-ECE
73	920820106011	Hareesh.V	III-ECE
74	920820106012	Harini.C	III-ECE
75	920820106014	Hemeshwar.S	III-ECE
76	920820106015	Jawahar.R	III-ECE
77	920820106016	Jeeva.S	III-ECE
78	920820106017	Jeffery.Albert.J	III-ECE
79	920820106018	Lokesh.Kanna.G	III-ECE
80	920820106019	Mahavarshini.S	III-ECE
81	920820106020	Maheswari.R	III-ECE
82	920820106021	Malavika.A	III-ECE
83	920820106022	Maniyammaiyar.N	III-ECE
84	920820106023	Manoj.S	III-ECE
85	920820106024	MeeraJafri	III-ECE





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86	920820106026	Munceswari L	III-ECE
87	920820106027	Nandhini A	III-ECE
88	920820106028	Nivethitha V	III-ECE
89	920820106029	Pravcenkumar P	III-ECE
90	920820106032	SabeerAhamed T	III-ECE
91	920820106033	SaiSunkaraNarayanan S	III-ECE
92	920820106034	Sandhya D	III-ECE
93	920820106035	Sanjay Kumar S	III-ECE
94	920820106036	Santhini R	III-ECE
95	920820106037	SelvaKumar M	III-ECE
96	920820106038	Sivaprasad K	III-ECE
97	920820106039	Sivaranjani S	III-ECE
98	920820106041	SoundaryaLakshmi D	III-ECE
99	920820106042	Supraja Suryawanshi	III-ECE
100	920820106043	Suresh A	III-ECE
101	920820106044	Tharani V	III-ECE
102	920820106045	Udaiyappan N	III-ECE
103	920820106046	Vasanthakumar M	III-ECE
104	920820106301	Aswathanaman A	III-ECE
105	920821106001	Aakash R	II-ECE
106	920821106002	Aashigabegam N	II-ECE
107	920821106003	Abdul Rahman A	II-ECE
108	920821106004	Abirami S	II-ECE
109	920821106005	Abhishek S	II-ECE
110	920821106006	Alagupandi P	II-ECE
111	920821106007	AmruthaShopiga C	II-ECE
112	920821106008	AshokKumar S	II-ECE
113	920821106009	Babitha J	II-ECE
114	920821106010	BalaSubhanu B	II-ECE
115	920821106011	Balurathinam B.T	II-ECE
116	920821106012	Bhuvaneshwaran B	II-ECE
117	920821106013	Bhuvaneshwari P	II-ECE
118	920821106014	Chinraman V	II-ECE
119	920821106015	Dhananjeyan M	II-ECE
120	920821106016	Dharani R	II-ECE
121	920821106017	Dharshini B	II-ECE
122	920821106018	Divyadharshini G	II-ECE
123	920821106019	Durga S	II-ECE
124	920821106022	HareeshKumar K	II-ECE
125	920821106023	Hariharan R	II-ECE
126	920821106024	HarishBalaji E	II-ECE
127	920821106025	HarshiniPriya R	II-ECE
128	920821106026	Hemanth Bala M	II-ECE
129	920821106027	Imrana Y	II-ECE
130	920821106028	Janani V	II-ECE
131	920821106029	Jayasurya	II-ECE





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132	920821106030	Jeevabharathi.M	II-ECE
133	920821106033	Kaleeshwaran.M	II-ECE
134	920821106035	Karthick.B	II-ECE
135	920821106037	Lakshmanan.K	II-ECE
136	920821106038	Manikandan.G	II-ECE
137	920821106039	Manikandan.N	II-ECE
138	920821106040	ManojKumar.S	II-ECE
139	920821106041	MelvinMeevaan.J	II-ECE
140	920821106042	MohamedBaruk.S	II-ECE
141	920821106043	MohamedImthiyas.K	II-ECE
142	920821106044	MohammedHissam.R	II-ECE
143	920821106045	MoheshNandhu.B	II-ECE
144	920821106046	MukeshVarma.M	II-ECE
145	920821106047	Nachammai.C	II-ECE
146	920821106048	Nadhira Banu.N	II-ECE
147	920821106049	Nadhiya.M	II-ECE
148	920821106076	Sivabalan.S	II-ECE
149	920821106077	Soundharya.R	II-ECE
150	920821106078	Sri Hari Sundhar.S	II-ECE
151	920821106079	Subamozhi.R	II-ECE
152	920821106081	Sudhishree.J	II-ECE


PROGRAM COORDINATOR


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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ADD ON COURSE ON PCB DESIGN USING PSPICE

COURSE SCHEDULE

Date: 02.08.2022

EXTERNAL RESOURCE PERSON:

1 Mr.S.Mervin Prasanth

INTERNAL RESOURCE PERSONS:

1.Mr.J.G.Sabarish,AP-ECE

2.Mrs.C.Kannika Parameswarai-ECE

Day 1 02.08.2022	9.30 a.m. to 10.00 a.m.	Inauguration	
	10.00 a.m. to 11.10 a.m.	Session 1	Fundamental of circuit design & Creating New Components Mr.S.Mervin Prasanth
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Introduction to Analog Circuit Design & Introduction to Digital Circuit Design Mr.J.G.Sabarish
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	Placing Symbols and Ports & Labeling components Mrs.C. Kannika parameshwari
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	Circuit optimization Mr.S.Mervin Prasanth

Day 2 03.08.2022	9.30 a.m. to 11.10 a.m.	Session 1	Creating the Blank PCB Mr.S.Mervin Prasanth
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Defining a sheet template Mr.J.G.Sabarish
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	Printed Circuit Technology Mr.J.G.Sabarish
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	PCB Printing & Etching process Mrs.C.Kannika parameshwari





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Day 3 04.08.2022	9.30 a.m. to 11.10 a.m.	Session 1	Defining the Board Shape & Placement Boundary Mr.S.Mervin Prasanth
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Creating a board outline & placement / routing boundary Mr.S.Mervin Prasanth
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	Basic concepts of PCB Designing Mrs.C.Kannika parameshwari
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	Schematic capture Mrs.C.Kannika parameshwari
Day 4 05.08.2022	9.30 a.m. to 11.10 a.m.	Session 1	Creating and editing parts & Preparing to create a net list Mr.J.G.Sabarish
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Exporting and importing schematic data Mr.S.Mervin Prasanth
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	PCB Material. & Board Layers, Colors and Grids Mr.S.Mervin Prasanth
	3.40 p.m. to 3.50 p.m.	Tea Break	
Day 5 08.08.2022	3.50 p.m. to 4.30 p.m.	Session 4	Defining PWR/GND layers. Mrs.C.Kannika parameshwari
	9.30 a.m. to 11.10 a.m.	Session 1	Design synchronization with schematic tool. Mr.S.Mervin Prasanth
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Design transfer using a Net list. Mr.J.G.Sabarish
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	Design rules concepts. Mrs.C.Kannika parameshwari
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	Design Rule Checking Mr.S.Mervin Prasanth
4.30 p.m. to 5.00 p.m.		Valedictory	



PROGRAM COORDINATOR

HoD/ECE

IQAC

PRINCIPAL

Head of the Department

Coordinator - IQAC

Dr. J. SUNDARARAJAN,

B.E., M.Tech., Ph.D.

Department of Electronics & Communication Engineering
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Principal

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ADD ON COURSE ON PCB DESIGN USING PSPICE

REGISTERED STUDENTS NAME LIST

Sl. No.	Roll No.	Student Name	Year	02.08.2022		03.08.2022		04.08.2022		05.08.2022		06.08.2022	
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1	22ECA001001	AjithKumar.K	IV-ECE	/	/	/	/	/	/	/	/	/	/
2	22ECA001002	Amizhthaa.B	IV-ECE	/	/	/	/	/	/	/	/	/	/
3	22ECA001003	AravinthRaj.K	IV-ECE	/	/	/	/	/	/	/	/	/	/
4	22ECA001004	AsmaRoshan.T	IV-ECE	/	/	/	/	/	/	/	/	/	/
5	22ECA001005	Balaji.M	IV-ECE	/	/	/	/	/	/	/	/	/	/
6	22ECA001006	Balaji.M	IV-ECE	/	/	/	/	/	/	/	/	/	/
7	22ECA001007	BlessyJebamani.G	IV-ECE	/	/	/	/	/	/	/	/	/	/
8	22ECA001008	Christiya.I	IV-ECE	/	/	/	/	/	/	/	/	/	/
9	22ECA001009	Devi Sri .S	IV-ECE	/	/	/	/	/	/	/	/	/	/
10	22ECA001010	DhathVetha.S	IV-ECE	/	/	/	/	/	/	/	/	/	/
11	22ECA001011	Dhinesh.M	IV-ECE	/	/	/	/	/	/	/	/	/	/
12	22ECA001012	Divesh.V	IV-ECE	/	/	/	/	/	/	/	/	/	/
13	22ECA001013	DivyaDharshini.S	IV-ECE	/	/	/	/	/	/	/	/	/	/
14	22ECA001014	Harishwar.S	IV-ECE	/	/	/	/	/	/	/	/	/	/
15	22ECA001015	JosephRumbil R	IV-ECE	/	/	/	/	/	/	/	/	/	/
16	22ECA001016	Jyothika.B	IV-ECE	/	/	/	/	/	/	/	/	/	/
17	22ECA001017	Kamalesh.K	IV-ECE	/	/	/	/	/	/	/	/	/	/
18	22ECA001018	Karunias J.S	IV-ECE	/	/	/	/	/	/	/	/	/	/
19	22ECA001019	Keerthi.M	IV-ECE	/	/	/	/	/	/	/	/	/	/
20	22ECA001020	Kirthick.N	IV-ECE	/	/	/	/	/	/	/	/	/	/
21	22ECA001021	Kishorekrishnaa.J	IV-ECE	/	/	/	/	/	/	/	/	/	/
22	22ECA001022	Madhumitha.P	IV-ECE	/	/	/	/	/	/	/	/	/	/
23	22ECA001023	Manojkumar.A	IV-ECE	/	/	/	/	/	/	/	/	/	/
24	22ECA001024	ManojKumar.S	IV-ECE	/	/	/	/	/	/	/	/	/	/
25	22ECA001025	MohamedAsifM	IV-ECE	/	/	/	/	/	/	/	/	/	/
26	22ECA001026	Mohamedibrahim.J	IV-ECE	/	/	/	/	/	/	/	/	/	/
27	22ECA001027	Mohan.S	IV-ECE	/	/	/	/	/	/	/	/	/	/
28	22ECA001028	MohanBabu.B	IV-ECE	/	/	/	/	/	/	/	/	/	/
29	22ECA001029	Maruganathan.M	IV-ECE	/	/	/	/	/	/	/	/	/	/
30	22ECA001030	MuthuMoorthy.M	IV-ECE	/	/	/	/	/	/	/	/	/	/
31	22ECA001031	MuthuRanjani.V	IV-ECE	/	/	/	/	/	/	/	/	/	/
32	22ECA001032	Mythili.M	IV-ECE	/	/	/	/	/	/	/	/	/	/
33	22ECA001033	NagaVishwa.G	IV-ECE	/	/	/	/	/	/	/	/	/	/
34	22ECA001034	Nalinashree.N	IV-ECE	/	/	/	/	/	/	/	/	/	/
35	22ECA001035	NandhaKumar.G	IV-ECE	/	/	/	/	/	/	/	/	/	/
36	22ECA001036	Pavithra.N	IV-ECE	/	/	/	/	/	/	/	/	/	/
37	22ECA001037	Porkodi.S	IV-ECE	/	/	/	/	/	/	/	/	/	/
38	22ECA001038	PowsikaDevi.K	IV-ECE	/	/	/	/	/	/	/	/	/	/
39	22ECA001039	Prabhu.C	IV-ECE	/	/	/	/	/	/	/	/	/	/
40	22ECA001040	Prasanna.D	IV-ECE	/	/	/	/	/	/	/	/	/	/
41	22ECA001041	Ramvignhesh.R.P	IV-ECE	/	/	/	/	/	/	/	/	/	/
42	22ECA001042	RenugaDevi.N	IV-ECE	/	/	/	/	/	/	/	/	/	/
43	22ECA001043	Rifaya.S	IV-ECE	/	/	/	/	/	/	/	/	/	/
44	22ECA001044	RishwanaBurveen.S	IV-ECE	/	/	/	/	/	/	/	/	/	/



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ADD ON COURSE ON PCB DESIGN USING PSPICE

20ECA001-PCB DESIGN USING PSPICE- QUIZ SAMPLE QUESTION PAPER & ANSWER

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

 - a. SO
 - b. SOP
 - c. SOT
 - d. SON

- 2). Which type of solder ability testing is carried out for the generation of solder sample due to immersion of wire or sheet metal specimen in a bath of molten solder?

 - a. Solder Bath Testing
 - b. Meniscus Rise Testing
 - c. Solder Iron Testing
 - d. None of the above

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

 - a. Iron Soldering
 - b. Furnace Soldering
 - c. Torch Soldering
 - d. Electrical Soldering

- 4). Which among the below mentioned approaches belongs to the category of In-circuit Testing?

 - a. Impedance testing
 - b. Component Testing
 - c. Apply Signal and check output
 - d. All of the above

- 5). 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

- 6). 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





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- 7) Which phenomenon is not reduced by the circuit paths of lowest impedances especially provided by power and return planes for shielding purposes?
- Radiation
 - Convection
 - Noise
 - Crosstalk
- 8) Which among the below specified assertions is not a grounding consideration associated with ADC as well as DAC?
- Analog side to analog ground
 - Digital side to digital ground
 - Use of separate power supply and connection of their ground leads to single point reference
 - Reduction of inductive loop area between power and return traces
- 9) Which among the below stated devices/equipment's are preferred for elimination of ground and supply line noise especially in TTL/CMOS / ECL PCB designing?
- Coupling capacitor
 - Decoupling capacitor
 - Snubber circuits
 - All of the above
- 10) Which among the below mentioned assertions is not a way of cross-talk reduction while designing digital PCBs?
- Decrease in the distance between conductors
 - Shielding of clock lines with guard strips
 - Reduction in the loop area of circuits
 - Avoid running of parallel traces for longer distances especially for asynchronous signals



ANSWERS: 1) d 2) b 3) d 4) d 5) a 6) c 7) b 8) d 9) b 10) a


PROGRAM COORDINATOR


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ADD ON COURSE ON PCB DESIGN USING PSPICE

STUDENT FEEDBACK

Name of the Student: <u>J. J. Sudhishnan.</u>	Year & Dept.: <u>II - ECE</u>
Name of the Resource Person: <u>T. A. S. Mervin Rajarath.</u>	

S. No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1.	Course Content.	✓				
2.	Course delivered by the Resource Person		✓			
3.	Practical knowledge gained during the training	✓				
4.	Facilitation provided during practice	✓				
5.	Time Management		✓			
6.	Overall rating of this course		✓			

Signature of the Student





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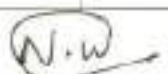
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ADD ON COURSE ON PCB DESIGN USING PSPICE

STUDENT FEEDBACK

Name of the Student: N. Udaiyappan	Year & Dept.: III - ECE
Name of the Resource Person: Mr. S. Mervin Prasanth	

S. No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1.	Course Content.	✓				
2.	Course delivered by the Resource Person		✓			
3.	Practical knowledge gained during the training.	✓				
4.	Facilitation provided during practice	✓				
5.	Time Management		✓			
6.	Overall rating of this course		✓			


Signature of the Student





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ADD ON COURSE ON PCB DESIGN USING PSPICE

STUDENT FEEDBACK

Name of the Student: <u>Ajith Kumar . K</u>	Year & Dept.: <u>IV - ECE</u>
Name of the Resource Person: <u>Mr. S. Marvin Prasanth.</u>	

S. No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1.	Course Content.	✓				
2.	Course delivered by the Resource Person	✓				
3.	Practical knowledge gained during the training.		✓			
4.	Facilitation provided during practice		✓			
5.	Time Management	✓				
6.	Overall rating of this course	✓				

Ajith Kumar
Signature of the Student





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FEEDBACK ANALYSIS REPORT

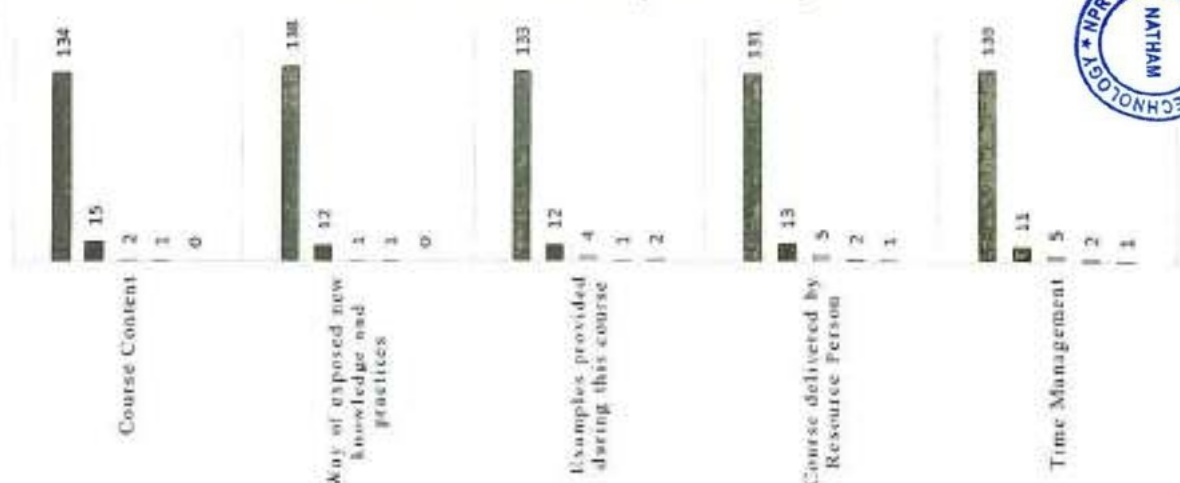
TOTAL STRENGTH: 152

DATE: 08.08.2022

S.No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1.	Course Content	134	15	2	1	0
2.	Way of exposed new knowledge and practices	138	12	1	1	0
3.	Examples provided during this course	133	12	4	1	2
4.	Course delivered by Resource Person	131	13	5	2	1
5.	Time Management	133	11	5	2	1
Average %		133.8	12.6	3.4	1.4	0.8

FEEDBACK ANALYSIS

■ Excellent ■ Good ■ Satisfactory ■ Poor ■ Very Poor



[Signature]
Head of the Department

Department of Electronics & Communication Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401

[Signature]
Coordinator - IQAC

NPR College of Engineering & Technology
Natham, Dindigul (DT)-624 401

[Signature]
Dr. J.SUNDARARAJAN,

B.E., M.Tech., Ph.D.

Principal

NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ADD ON COURSE ON PCB DESIGN USING PSPICE

SUMMARY REPORT

The Department of Electronics and Communication Engineering organized Add on Course program "PCB DESIGN USING PSPICE" from 02.08.2022 to 05.08.2022 & 08.08.2022 (5 Days) at NPRCET Seminar Hall.

Mr.M.Selvakumar,III-ECE delivered the welcome address during the inauguration function.

Dr.J.Sundararajan, Principal of our college inaugurated the program and delivered the inaugural address.



Resource Person Mr.S.Mervin Prasanth shared their knowledge with our students. This program also taught the fundamentals and principles of components on PCB are the semiconductor devices that together allow you to perform specific design actions (filtering, amplification etc) Components are either through-hole technology (THT) components or surface mount devices (SMD). THT parts are generally larger in size and were ubiquitous in design until the late 1980's when SMD parts became more widely used. THT have longer pins that are basically inserted into drilled holes and soldered one-by-one onto the PCB. SMD parts are (generally) much smaller in size and allow you to solder much smaller leads to the surface of a PCB. By having the SMD parts soldered to the surface of a PCB, engineers can attach parts to either surface (top or bottom) of a PCB, rather than having to solder through-hole parts.

152 Students attended from ECE II, III and IV years. Students who participated and successfully completed the Quiz program has awarded with certificates.

Ms. J. Babitha., II ECE delivered vote of thanks.


PROGRAM COORDINATOR


Head of Department


IQAC


PRINCIPAL

Dr. J. SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

Head of the Department
Department of Electronics & Communication Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401

Coordinator - IQAC

NPR College of Engineering & Technology

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ADD ON COURSE ON PCB DESIGN USING PSPICE

COURSE MATERIAL

MATERIAL LINK:

CHAPTER-1:<https://www.circuitstoday.com/pcb-manufacturing-process>

CHAPTER-2:<https://resources.pcb.cadence.com/blog/2019>

CHAPTER-3:<http://xlab.amrita.edu/?sub=3&brch=106&sim=241&cn=1>

CHAPTER-4:<https://www.pcbart.com/article/content/PCB-manufacturing-process.html>

CHAPTER-5:<https://www.tronicszone.com/blog/steps-pcb-design-manufacturing/>

FURTHER STUDY:

1. "Make Your Own PCBs with EAGLE: From Schematic Designs to Finished Boards (Electronics)" by Simon Monk
2. "PCB Design: Printed Circuit Board" by Michael Dsouza and Dsouza Michael
3. "OSCAD: An Open Source EDA Tool for Circuit Design, Simulation, Analysis and PCB Design" by Sateyegesh
4. "PCB Design Using AutoCAD (EDN Series for Design Engineers)" by Chris Schroeder
5. "Complete PCB Design Using OrCAD: Capture and PCB Editor" by Kraig Mitzner
6. "PCB Design in EAGLE – Part 1: Learn about EAGLE's user interface, adding parts, schematics, and more!" by Andy Artes
7. "Designing Circuit Boards with EAGLE: Make High-Quality PCBs at Low Cost" by Matthew Scarpino


PROGRAM COORDINATOR


HoD/ECE
Head of the Department
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PRINCIPAL
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NPR COLLEGE OF ENGINEERING & TECHNOLOGY

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Certificate of Completion

This certificate is presented to

for the successful completion of Add on course on

“PCB DESIGN USING PSPICE”

Conducted from 02.08.2022 to 05.08.2022 and 08.08.2022(5 Days).


HOD/EC

Dr. J.SUNDARARAJAM,
B.E., M.Tech., Ph.D.,
Principal

H.P.R. College of Engineering & Technology
Natham, Dindigul - 624 401.

PRINCIPAL



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON EMBEDDED C WITH RTOS AND IOT

INDEX

COURSE CODE & NAME: 22ECCC02-EMBEDDED C WITH RTOS AND IOT

ACADEMIC YEAR: 2022-2023

SEMESTER: ODD

DURATION: 34 HOURS

S.NO.	PARTICULARS	PAGE. NO.
1	PERMISSION LETTER	4
2	RESOURCE PERSON PROFILE	2
3	CIRCULAR TO STUDENTS	3
4	INVITATION	4
5	COURSE CONTENT	5
6	REGISTERED STUDENTS NAME LIST	6
7	COURSE SCHEDULE	10
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9	QUIZ QUESTION PAPER WITH ANSWER KEY	16
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PROGRAM COORDINATOR

Head of the Department
Department of Electronics & Communication Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401

HoD/ECE

IQAC

Coordinator - IQAC
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401

PRINCIPAL

Dr. JSUNDARARAJAN,
B.E., M.Tech., Ph.D.
Principal
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401



From

Dr.S.M.Vijayarsjan,
Associate Professor,
Dept. Of ECE,
NPR College of Engineering & Technology,
Natham.

To

The Principal,
NPR College of Engineering & Technology,
Natham.



Respected Sir,

Sub: Request for permission to conduct certificate program for ECE students – Reg

We have planned to conduct certificate program on "EMBEDDED C WITH RTOS AND IOT" to our students from 14.11.2022 to 18.11.2022(5 Days) in our college premises. We proposed Mr.M.Vignesh Kumar, Senior Engineer, Flextronics Technologies India Pvt Ltd, as a resource person for this Certificate course program. Kindly permit us to conduct the same.

Thanking you.

Yours faithfully,

Date: 01.11.22

Place: Natham

Head of the Department
Department of Electronics & Communication Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401

Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.
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Natham, Dindigul (DT) - 624 401.



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
CERTIFICATE COURSE ON EMBEDDED C WITH RTOS AND IOT
RESOURCE PERSON PROFILE

Name	:	Mr.M. Vignesh Kumar
Designation	:	Senior Engineer
Company Name	:	Flextronics Technologies India Pvt Ltd, Chennai.
About Resource Person	:	10+ years of professional experience in the area of Telecom nodes integration and Embedded programming. Experience in system Design HLD, LLD, Acceptance Testing, Implementation support.


PROGRAM COORDINATOR


HoD/ECE

Head of the Department
Department of Electronics & Communication Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DI) 624 401





NPRCET/OFF/ECE/VAC/2022-2023

DATE: 10.11.2022

CIRCULAR

This is to inform that Department of Electronics and Communication Engineering has planned to conduct a Certificate Course on "EMBEDDED C WITH RTOS AND IOT" for the students during the end of this ~~old~~ semester 2016-2017. Interested students can enroll their name on or before 18.11.2022

The details of the training program are given below.

COURSE NAME	: EMBEDDED C WITH RTOS AND IOT
RESOURCE PERSONS	: Mr.M. VIGNESH KUMAR
VENUE	: NPRCET Seminar Hall
DATE & DURATION	: 20.03.17 to 24.03.17& 34 Hours
PROGRAM COORDINATOR	Dr.S.M. Vijayarajan, NPRCET.

Copy to:

1. All the HoDs
2. All the Class Rooms
3. Notice Board
4. File
5. Program Coordinator

PRINCIPAL
Dr. J.SUNDARARAJAN,
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*The Management, Principal, Staff and Students
Cordially invite you for the inauguration of
"Certificate Course on Embedded C with RTOS and IOT"*

On 14th Nov, 2022

Venue: NPRCET Auditorium at 9.30 a.m.

Chief Guest

Mr.M.VIGNESH KUMAR

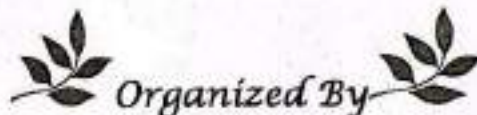
Flextronics Technologies India Pvt Ltd, Chennai.

Dr.J.Sundararajan

Principal,

NPR College of Engineering & Technology

Felicitates the function



Department of Electronics and Communication Engineering,

NPR College of Engineering & Technology,

NPR Nagar, Natham.





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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON EMBEDDED C WITH RTOS AND IOT

22ECCC02-EMBEDDED C WITH RTOS AND IOT

COURSE CONTENT

CHAPTER 1: EMBEDDED C PROGRAMMING

- Fundamentals of C and Data types and Constants
- Simple & Formatted I/O and Memory Usage
- Operators & Expressions
- Flow Control and Loops

CHAPTER 2: FUNCTIONS AND ARRAYS

- Returning values from Functions and Recursive Functions
- Call Back Functions and Implications on Stack
- Multi-Dimensional Arrays and Arrays of Characters and Strings
- Arrays and Pointers and Passing arrays to functions

CHAPTER 3: STRUCTURES & UNIONS

- Declaration, initialization
- Accessing like objects
- Nested Structures
- Array of Structures and Passing structures through functions

CHAPTER 4: POINTERS

- Pointer Assignment & Pointer Arithmetic
- Multiple indirections & Advanced pointer types
- Generic and Null Pointer & Function Pointers
- Pointers to Arrays and Strings

CHAPTER 5: IOT AND RTOS

- Sensors & Actuators
- Hardware Platforms
- Wireless Communication Protocols
- Network communication Protocols

CRITERIA TO GET CERTIFICATE:

- Students should register their names for this course
- Students must have 85% attendance.
- Student should secure 50% marks in the Exam.

Prepared By: Mr. K. Jayaprakasam

Approved By,

HoD/ECE

Head of the Department
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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON EMBEDDED C WITH RTOS AND IOT

REGISTERED STUDENTS NAME LIST

NO.	REGISTER NUMBER	STUDENT NAME	YEAR
1	920819106002	AfrinShifanaA	IV-ECE
2	920819106003	AjithKumarK	IV-ECE
3	920819106004	AmizhthnaB	IV-ECE
4	920819106006	AravindhRajK	IV-ECE
5	920819106007	AsmaRoshanT	IV-ECE
6	920819106008	BalajiM (2001)	IV-ECE
7	920819106009	BalajiM(2002)	IV-ECE
8	920819106010	BlessyJebamaniG	IV-ECE
9	920819106011	Christiyal	IV-ECE
10	920819106012	Devi Sri S	IV-ECE
11	920819106014	DhathVethaS	IV-ECE
12	920819106015	DhineshM	IV-ECE
13	920819106016	DiveshV	IV-ECE
14	920819106017	DivyaDharshiniS	IV-ECE
15	920819106019	Harishwar S	IV-ECE
16	920819106020	JosephrumsbiltR	IV-ECE
17	920819106021	JyothikaB	IV-ECE
18	920819106022	KamaleshK	IV-ECE
19	920819106023	KarunaaJ S	IV-ECE
20	920819106024	KeerthiM	IV-ECE
21	920819106025	KirthickN	IV-ECE
22	920819106026	KishorekrishnaaJ	IV-ECE
23	920819106028	MadhumithaP	IV-ECE
24	920819106029	ManojkumarA	IV-ECE
25	920819106030	ManojKumar S	IV-ECE
26	920819106031	MohamedAsifM	IV-ECE
27	920819106032	MohamedibrahimJ	IV-ECE
28	920819106033	MohanS	IV-ECE
29	920819106034	MohanBabuB	IV-ECE
30	920819106035	MuruganathanM	IV-ECE
31	920819106036	MuthuMoorthyM	IV-ECE
32	920819106037	MuthuRanjaniV	IV-ECE
33	920819106038	MythiliM	IV-ECE
34	920819106039	NagaVishwaG	IV-ECE
35	920819106040	NalinashreeN	IV-ECE
36	920819106041	NandhaKumarG	IV-ECE
37	920819106042	PavithraN	IV-ECE
38	920819106043	PorkodiS	IV-ECE
39	920819106044	PowsikaDeviK	IV-ECE
40	920819106045	Prabhu C	IV-ECE
41	920819106046	PrasannaD	IV-ECE





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42	920819106048	RamvignheshRP	IV-ECE
43	920819106049	RenugaDevi N	IV-ECE
44	920819106050	RifayaS	IV-ECE
45	920819106051	RishwanaBurveenS	IV-ECE
46	920819106052	SanoNishaN	IV-ECE
47	920819106053	Saran GV	IV-ECE
48	920819106054	SasmithaParveenK	IV-ECE
49	920819106055	ShamHiruthikR	IV-ECE
50	920819106057	SharnilaDeviG	IV-ECE
51	920819106058	ShinyReshmaJ	IV-ECE
52	920819106059	SingarabrinthaN	IV-ECE
53	920819106060	SnehaP	IV-ECE
54	920819106061	SoundharyaS	IV-ECE
55	920819106062	SumugapriyaM	IV-ECE
56	920819106063	Thambi DuraiPK	IV-ECE
57	920819106064	TharshidhaS	IV-ECE
58	920819106065	TharunkumarM	IV-ECE
59	920819106066	UmaNanthini N	IV-ECE
60	920819106067	VenkateshP	IV-ECE
61	920819106068	VikramS	IV-ECE
62	920819106069	VishaliK	IV-ECE
63	920819106070	YashicaS	IV-ECE
64	920819106302	ShabiratajJ	IV-ECE
65	920820106001	AarthyM	III-ECE
66	920820106002	AjayGowthamS	III-ECE
67	920820106003	AjithaS	III-ECE
68	920820106004	AkashS	III-ECE
69	920820106005	AravinthanS	III-ECE
70	920820106006	ArchanaP	III-ECE
71	920820106007	AriharanK	III-ECE
72	920820106008	Balasakthi S	III-ECE
73	920820106010	DhaariniMJ	III-ECE
74	920820106011	HareeshV	III-ECE
75	920820106012	Harini C	III-ECE
76	920820106014	HemeshwarS	III-ECE
77	920820106015	JawaharR	III-ECE
78	920820106016	JeevaS	III-ECE
79	920820106017	JefferyAlbertJ	III-ECE
80	920820106018	Lokesh Kapna G	III-ECE
81	920820106019	MahavarshiniS	III-ECE
82	920820106020	MaheswariR	III-ECE
83	920820106021	MalavikaA	III-ECE
84	920820106022	ManiyammaiyarN	III-ECE
85	920820106023	Manoj S	III-ECE
86	920820106024	MeeraJafrinA	III-ECE
87	920820106025	MohammedThoufiqAgarish R	III-ECE





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88	920820106026	Muneeswaril	III-ECE
89	920820106027	NandhiniA	III-ECE
90	920820106028	NivethithaV	III-ECE
91	920820106029	PraveenkumarP	III-ECE
92	920820106032	SabeerAhamedT	III-ECE
93	920820106033	SaiSankaraNarayananS	III-ECE
94	920820106034	SandhiyaD	III-ECE
95	920820106035	SanjayKumar S	III-ECE
96	920820106036	SanthiniR	III-ECE
97	920820106037	SelvaKumar M	III-ECE
98	920820106038	SivaprasadK	III-ECE
99	920820106039	SivaranjaniS	III-ECE
100	920820106041	SoundaryaLakshmiD	III-ECE
101	920820106042	SuprajaSuryawanshi	III-ECE
102	920820106043	SureshA	III-ECE
103	920820106044	TharaniV	III-ECE
104	920820106045	Udaiyappan N	III-ECE
105	920820106046	VasanthakumarM	III-ECE
106	920820106301	AswathamanaA	III-ECE
107	920821106001	AakashR	II-ECE
108	920821106002	AashigabegamN	II-ECE
109	920821106003	Abdul RahmanA	II-ECE
110	920821106004	AbiramiS	II-ECE
111	920821106005	AbhishekS	II-ECE
112	920821106006	AlagupandiP	II-ECE
113	920821106007	AmruthaShopiga C	II-ECE
114	920821106008	AshokKumar S	II-ECE
115	920821106009	BabithaJ	II-ECE
116	920821106010	BalaSubhanuB	II-ECE
117	920821106011	BalurathinamBT	II-ECE
118	920821106012	BhuvaneshwaranB	II-ECE
119	920821106013	BhuvaneshwariP	II-ECE
120	920821106014	ChinramanV	II-ECE
121	920821106015	DhananjeyanM	II-ECE
122	920821106016	DharaniR	II-ECE
123	920821106017	DharshiniB	II-ECE
124	920821106018	DivyadharshiniG	II-ECE
125	920821106019	DurgaS	II-ECE
126	920821106020	GanesanM	II-ECE
127	920821106021	GopinathS	II-ECE
128	920821106022	HareshKumar K	II-ECE
129	920821106023	Hariharan R	II-ECE
130	920821106024	HarishBalajiE	II-ECE
131	920821106025	HarshiniPriya R	II-ECE
132	920821106026	Hemanth BalaM	II-ECE
133	920821106027	ImranaY	II-ECE





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134	920821106028	Janani M	II-ECE
135	920821106029	Jayasurya S	II-ECE
136	920821106030	Jeevabharathi M	II-ECE
137	920821106031	Jeyasurya S	II-ECE
138	920821106032	Joseph Samivel M	II-ECE
139	920821106033	Kaleeshwaran M	II-ECE
140	920821106034	Kansashereen J	II-ECE
141	920821106035	Karthick D	II-ECE
142	920821106036	Lakshmanadhasan S	II-ECE
143	920821106037	Lakshmanan K	II-ECE
144	920821106038	Manikandan G	II-ECE
145	920821106039	Manikandan N	II-ECE
146	920821106040	Manoj Kumar S	II-ECE
147	920821106041	Melvin Mecvaan J	II-ECE
148	920821106042	Mohamed Baruk S	II-ECE
149	920821106043	Mohamed Imthiyas K	II-ECE
150	920821106044	Mohammed Hissam R	II-ECE
151	920821106045	Mohesh Nandhu B	II-ECE
152	920821106046	Mukesh Varma M	II-ECE
153	920821106047	Nachammai C	II-ECE
154	920821106048	Nadhira Banu N	II-ECE
155	920821106049	Nadhiya M	II-ECE



Summary	
Class	No. of Students Registered
IV ECE	64
III ECE	42
II ECE	49
TOTAL	155

PROGRAM COORDINATOR

HoD/ECE

Head of the Department

Department of Electronics & Communication Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DI) - 624 401



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON EMBEDDED C WITH RTOS AND IOT

COURSE SCHEDULE

Venue: NPRCET Seminar Hall

Date: 18.11.2022

EXTERNAL RESOURCE PERSONS:

1.Mr.M.VigneshKumar

INTERNAL RESOURCE PERSONS:

1.Mr.J.G.Sabarish

2.Mr.S.Sudhakar

Day 1 14.11.2022	9.30 a.m.to 10.00 a.m.	Inauguration	
	10. 00 a.m.to 11.10 a.m.	Session 1	Fundamentals of C and Data types and Constants Mr.M.Vigneshkumar
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 a.m.	Session 2	Simple & Formatted I/O and Memory Usage Mr.S.Sudhakar
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00p.m. to3.40 p.m.	Session 3	Operators & Expressions Mr.J.G.Sabarish
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	Flow Control and Loops Mr.M.Vigneshkumar
Day 2 15.11.2022	9.30 a.m.to 11.10 a.m.	Session 1	Returning values from Functions and Recursive Functions. Mr.M.Vigneshkumar
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Call Back Functions and Implications on Stack. Mr.J.G.Sabarish
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to3.40 p.m.	Session 3	Multi Dimensional Arrays and Arrays of Characters and Strings. Mr.S.Sudhakar
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	Arrays and Pointers and Passing arrays to functions Mr.J.G.Sabarish





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Day 3 16.11.2022	9.30 a.m. to 11.10 a.m.	Session 1	Declaration, initialization Mr.M.Vigneshkumar
	11.10 a.m. to 11.30 a.m.		Tea Break
	11.30 a.m. to 1.10 p.m.	Session 2	Accessing like objects Mr.M.Vigneshkumar
	1.10 p.m. to 2.00 p.m.		Lunch Break
	2.00 p.m. to 3.40 p.m.	Session 3	Nested Structures Mr.S.Sudhakar
	3.40 p.m. to 3.50 p.m.		Tea Break
	3.50 p.m. to 4.30 p.m.	Session 4	Array of Structures and Passing structures through functions Mr.J.G.Sabarish

Day 4 17.11.2022	9.30 a.m. to 11.10 a.m.	Session 1	Pointer Assignment & Pointer Arithmetic Mr.J.G.Sabarish
	11.10 a.m. to 11.30 a.m.		Tea Break
	11.30 a.m. to 1.10 p.m.	Session 2	Multiple indirections & Advanced pointer types Mr.M.Vigneshkumar
	1.10 p.m. to 2.00 p.m.		Lunch Break
	2.00 p.m. to 3.40 p.m.	Session 3	Generic and Null Pointer & Function Pointers Mr.M.Vigneshkumar
	3.40 p.m. to 3.50 p.m.		Tea Break
	3.50 p.m. to 4.30 p.m.	Session 4	Pointers to Arrays and Strings Mr.S.Sudhakar



Day 5 18.11.2022	9.30 a.m. to 11.10 a.m.	Session 1	Sensors & Actuators Mr.M.Vigneshkumar
	11.10 a.m. to 11.30 a.m.		Tea Break
	11.30 a.m. to 1.10 p.m.	Session 2	Hardware Platforms Mr.J.G.Sabarish
	1.10 p.m. to 2.00 p.m.		Lunch Break
	2.00 p.m. to 3.40 p.m.	Session 3	Wireless Communication Protocols Mr.S.Sudhakar
	3.40 p.m. to 3.50 p.m.		Tea Break
	3.50 p.m. to 4.30 p.m.	Session 4	Network communication Protocols Mr.M.Vigneshkumar
	4.30 p.m. to 5.00 p.m.	Valedictory	

PROGRAM COORDINATOR

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Head of the Department

Department of Electronics & Communication Engineering
NPR College of Engineering & Technology
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PRINCIPAL

Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON EMBEDDED C WITH RTOS AND IOT

STUDENT ATTENDANCE

SL. No.	Roll No.	Student Name	Year	14.11.22		15.11.22		16.11.22		17.11.22		18.11.22	
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1	22ECCC03001	AfrinShifanaA	IV-ECE	/	/	/	/	/	/	/	/	/	/
2	22ECCC03002	AjithKumarK	IV-ECE	/	/	/	/	/	/	/	/	/	/
3	22ECCC03003	AmizhthaaB	IV-ECE	/	/	/	/	/	/	/	/	/	/
4	22ECCC03004	AravinthRajK	IV-ECE	/	/	/	/	/	/	/	/	/	/
5	22ECCC03005	AsmaRoshanT	IV-ECE	/	/	/	/	/	/	/	/	/	/
6	22ECCC03006	BalajiM (2001)	IV-ECE	/	/	/	/	/	/	/	/	/	/
7	22ECCC03007	BalajiM(2002)	IV-ECE	/	/	/	/	/	/	/	/	/	/
8	22ECCC03008	BlessyJebamaniG	IV-ECE	/	/	/	/	/	/	/	/	/	/
9	22ECCC03009	Christiyal	IV-ECE	/	/	/	/	/	/	/	/	/	/
10	22ECCC03010	Devi Sri S	IV-ECE	/	/	/	/	/	/	/	/	/	/
11	22ECCC03011	DhathVethaS	IV-ECE	/	/	/	/	/	/	/	/	/	/
12	22ECCC03012	DhineshM	IV-ECE	/	/	/	/	/	/	/	/	/	/
13	22ECCC03013	DiveshV	IV-ECE	/	/	/	/	/	/	/	/	/	/
14	22ECCC03014	DivyaDharshiniS	IV-ECE	/	/	/	/	/	/	/	/	/	/
15	22ECCC03015	Harishwar S	IV-ECE	/	/	/	/	/	/	/	/	/	/
16	22ECCC03016	JosephrumsbilitR	IV-ECE	/	/	/	/	/	/	/	/	/	/
17	22ECCC03017	JyothikaB	IV-ECE	/	/	/	/	/	/	/	/	/	/
18	22ECCC03018	KamaleshK	IV-ECE	/	/	/	/	/	/	/	/	/	/
19	22ECCC03019	KaruninaJ S	IV-ECE	/	/	/	/	/	/	/	/	/	/
20	22ECCC03020	KeerthiM	IV-ECE	/	/	/	/	/	/	/	/	/	/
21	22ECCC03021	KirthickN	IV-ECE	/	/	/	/	/	/	/	/	/	/
22	22ECCC03022	KishorekrishnaaJ	IV-ECE	/	/	/	/	/	/	/	/	/	/
23	22ECCC03023	MadhumithaP	IV-ECE	/	/	/	/	/	/	/	/	/	/
24	22ECCC03024	ManojkumarA	IV-ECE	/	/	/	/	/	/	/	/	/	/
25	22ECCC03025	ManojKumar S	IV-ECE	/	/	/	/	/	/	/	/	/	/
26	22ECCC03026	MohamedAsifM	IV-ECE	/	/	/	/	/	/	/	/	/	/
27	22ECCC03027	MohamedibrahimJ	IV-ECE	/	/	/	/	/	/	/	/	/	/
28	22ECCC03028	MohanS	IV-ECE	/	/	/	/	/	/	/	/	/	/
29	22ECCC03029	MohanBabuB	IV-ECE	/	/	/	/	/	/	/	/	/	/
30	22ECCC03030	MuruganathanM	IV-ECE	/	/	/	/	/	/	/	/	/	/
31	22ECCC03031	MuthuMoorthyM	IV-ECE	/	/	/	/	/	/	/	/	/	/
32	22ECCC03032	MuthuRanjaniV	IV-ECE	/	/	/	/	/	/	/	/	/	/
33	22ECCC03033	MythiliM	IV-ECE	/	/	/	/	/	/	/	/	/	/
34	22ECCC03034	NagaVishwaG	IV-ECE	/	/	/	/	/	/	/	/	/	/
35	22ECCC03035	NalinashreeN	IV-ECE	/	/	/	/	/	/	/	/	/	/
36	22ECCC03036	NandhaKumarG	IV-ECE	/	/	/	/	/	/	/	/	/	/
37	22ECCC03037	PavithraN	IV-ECE	/	/	/	/	/	/	/	/	/	/
38	22ECCC03038	PorkodiS	IV-ECE	/	/	/	/	/	/	/	/	/	/
39	22ECCC03039	PowsikaDeviK	IV-ECE	/	/	/	/	/	/	/	/	/	/
40	22ECCC03040	Prabhu C	IV-ECE	a	a	/	/	/	/	/	/	/	/
41	22ECCC03041	PrasannaD	IV-ECE	/	/	/	/	/	/	/	/	/	/
42	22ECCC03042	RamvignheshRP	IV-ECE	/	/	/	/	/	/	/	/	/	/
43	22ECCC03043	RenugaDevi N	IV-ECE	/	/	/	/	/	/	/	/	/	/
44	22ECCC03044	RifayaS	IV-ECE	/	/	/	/	/	/	/	/	/	/
45	22ECCC03045	RishwanaBurveenS	IV-ECE	/	/	/	/	/	/	/	/	/	/
46	22ECCC03046	SanoNishaN	IV-ECE	/	/	/	/	/	/	/	/	/	/





47	22ECCC03047	Saran GV	IV-ECE	/	/	/	/	/	/	/	/	/	/	/
48	22ECCC03048	SasmithaParveenK	IV-ECE	/	/	/	/	/	/	/	/	/	/	/
49	22ECCC03049	ShamHiruthikR	IV-ECE	/	/	/	/	/	/	/	/	/	/	/
50	22ECCC03050	SharmilaDeviG	IV-ECE	/	/	/	/	/	/	/	/	/	/	/
51	22ECCC03051	ShinyReshmaJ	IV-ECE	/	/	/	/	/	/	/	/	/	/	/
52	22ECCC03052	SingarabrinndhaN	IV-ECE	/	/	/	/	/	/	/	/	/	/	/
53	22ECCC03053	SnehaP	IV-ECE	/	/	/	/	/	/	/	/	/	/	/
54	22ECCC03054	SoundharyaS	IV-ECE	/	/	/	/	/	/	/	/	/	/	/
55	22ECCC03055	SumugapriyaM	IV-ECE	/	/	/	/	/	/	/	/	/	/	/
56	22ECCC03056	Thambi DuraiPK	IV-ECE	/	/	/	/	/	/	/	/	/	/	/
57	22ECCC03057	TharshithaS	IV-ECE	/	/	/	/	/	/	/	/	/	/	/
58	22ECCC03058	TharunkumarM	IV-ECE	/	/	/	/	/	/	/	/	/	/	/
59	22ECCC03059	UmaNanthini N	IV-ECE	/	/	/	/	/	/	/	/	/	/	/
60	22ECCC03060	VenkateshP	IV-ECE	/	/	/	/	/	/	/	/	/	/	/
61	22ECCC03061	VikramS	IV-ECE	/	/	/	/	/	/	/	/	/	/	/
62	22ECCC03062	VishaliK	IV-ECE	/	/	/	/	/	/	/	/	/	/	/
63	22ECCC03063	YashicaS	IV-ECE	/	/	/	/	/	/	/	/	/	/	/
64	22ECCC03064	ShabiratajJ	IV-ECE	/	/	/	/	/	/	/	/	/	/	/
65	22ECCC03065	Aarthym	III-ECE	/	/	/	/	/	/	/	/	/	/	/
66	22ECCC03066	AjayGowthamS	III-ECE	/	/	/	/	/	/	/	/	/	/	/
67	22ECCC03067	AjithaS	III-ECE	/	/	/	/	/	/	/	/	/	/	/
68	22ECCC03068	AkashS	III-ECE	/	/	/	/	/	/	/	/	/	/	/
69	22ECCC03069	AravinthanS	III-ECE	/	/	/	/	/	/	/	/	/	/	/
70	22ECCC03070	ArchanaP	III-ECE	/	/	/	/	/	/	/	/	/	/	/
71	22ECCC03071	AriharanK	III-ECE	/	/	/	/	/	/	/	/	/	/	/
72	22ECCC03072	Balasakthi S	III-ECE	/	/	/	/	/	/	/	/	/	/	/
73	22ECCC03073	DhaariniMJ	III-ECE	/	/	/	/	/	/	/	/	/	/	/
74	22ECCC03074	HareeshV	III-ECE	/	/	/	/	/	/	/	/	/	/	/
75	22ECCC03075	Harini C	III-ECE	/	/	/	/	/	/	/	/	/	/	/
76	22ECCC03076	HemeshwarS	III-ECE	/	/	/	/	/	/	/	/	/	/	/
77	22ECCC03077	JawaharR	III-ECE	/	/	/	/	/	/	/	/	/	/	/
78	22ECCC03078	JeevaS	III-ECE	/	/	/	/	/	/	/	/	/	/	/
79	22ECCC03079	JefferyAlbertJ	III-ECE	/	/	/	/	/	/	/	/	/	/	/
80	22ECCC03080	Lokesh Kanna G	III-ECE	/	/	/	/	/	/	/	/	/	/	/
81	22ECCC03081	MahavarshiniS	III-ECE	/	/	/	/	/	/	/	/	/	/	/
82	22ECCC03082	MaheswariR	III-ECE	/	/	/	/	/	/	/	/	/	/	/
83	22ECCC03083	MalavikaA	III-ECE	/	/	/	/	/	/	/	/	/	/	/
84	22ECCC03084	ManiyammaiyarN	III-ECE	/	/	/	/	/	/	/	/	/	/	/
85	22ECCC03085	Manoj S	III-ECE	/	/	/	/	/	/	/	/	/	/	/
86	22ECCC03086	MeeraJafrinaA	III-ECE	/	/	/	/	/	/	/	/	/	/	/
87	22ECCC03087	MohammedThoufiqAgarish R	III-ECE	/	/	/	/	/	/	/	/	/	/	/
88	22ECCC03088	MunceswarilL	III-ECE	/	/	/	/	/	/	/	/	/	/	/
89	22ECCC03089	NandhiniA	III-ECE	/	/	/	/	/	/	/	/	/	/	/
90	22ECCC03090	NivethithaV	III-ECE	/	/	/	/	/	/	/	/	/	/	/
91	22ECCC03091	PraveenkumarP	III-ECE	/	/	/	/	/	/	/	/	/	/	/
92	22ECCC03092	SabeerAhamedT	III-ECE	/	/	/	/	/	/	/	/	/	/	/
93	22ECCC03093	SaiSankaraNarayananS	III-ECE	/	/	/	/	/	/	/	/	/	/	/
94	22ECCC03094	SandhiyaD	III-ECE	/	/	/	/	/	/	/	/	/	/	/
95	22ECCC03095	SanjayKumar S	III-ECE	/	/	/	/	/	/	/	/	/	/	/
96	22ECCC03096	SanthiniR	III-ECE	/	/	/	/	/	/	/	/	/	/	/
97	22ECCC03097	SelvaKumar M	III-ECE	/	/	/	/	/	/	/	/	/	/	/
98	22ECCC03098	SivaprasadK	III-ECE	/	/	/	/	a	a	/	/	/	/	/
99	22ECCC03099	SivaranjaniS	III-ECE	/	/	/	/	/	/	/	/	/	/	/
100	22ECCC03100	SoundaryaLakshmiD	III-ECE	/	/	/	/	/	/	/	/	/	/	/





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155	22ECCC03155	NadhiyaM	II-ECE	/	/	/	/	/	/	/	/	/	/	/	/
PRESENT				152	152	154	154	154	154	155	155	154	154	154	154
ABSENT				3	3	1	1	1	1	1	1	1	1	1	1
PROGRAM COORDINATORSIGNATURE				A	N	A	A	K	P	R	A	R	A	J	A

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON EMBEDDED C WITH RTOS AND IOT

QUIZ QUESTION PAPER & ANSWER

1. Which of the factors affect the performance of learner system does not include?

- a) Representation scheme used
- b) Training scenario
- c) Type of feedback
- d) Good data structures

Answer: d

2. Different learning methods does not include?

- a) Memorization
- b) Analogy
- c) Deduction
- d) Introduction

Answer: d

3. In language understanding, the levels of knowledge that does not include?

- a) Phonological
- b) Syntactic
- c) Empirical
- d) Logical

Answer: c

4. A model of language consists of the categories which does not include?

- a) Language units
- b) Role structure of units
- c) System constraints
- d) Structural units

Answer: d

5. The action 'STACK(A, B)' of a robot arm specify to _____

- a) Place block B on Block A
- b) Place blocks A, B on the table in that order
- c) Place blocks B, A on the table in that order
- d) Place block A on block B

Answer: d

6. ML is a field of AI consisting of learning algorithms that?

- A. Improve their performance
- B. At executing some task
- C. Over time with experience
- D. All of the above

Ans : D





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7. A model of language consists of the categories which does not include _____.

- A. System Unit
- B. structural units.
- C. data units
- D. empirical units

Ans : B

8. Different learning methods does not include?

- A. Introduction
- B. Analogy
- C. Deduction
- D. Memorization

Ans : A

9. Which two components are a part of an embedded system?

- A. MPU and MOS
- B. CPU and DOS
- C. CPU and OS
- D. MPU and RTOS

Ans: C

10. What is Machine learning?

- a) The autonomous acquisition of knowledge through the use of computer programs
- b) The autonomous acquisition of knowledge through the use of manual programs
- c) The selective acquisition of knowledge through the use of computer programs
- d) The selective acquisition of knowledge through the use of manual programs

Answer: A

PROGRAM COORDINATOR



HoD/ECE

Head of the Department
Department of Electronics & Communication Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DI) - 624 401



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON BUILDING BLOCKS OF JAVA

STUDENT FEEDBACK

DATE:

Name of the Student: <u>M. Kanchi</u>	Year & Dept.: <u>IV ECE</u>
Name of the Resource Person: <u>Mr. M. Nignesh Kumar</u>	

S. No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1.	Course Content.	✓				
2.	Course delivered by the Resource Person		✓			
3.	Practical knowledge gained during the training.		✓			
4.	Facilitation provided during practice			✓		
5.	Time Management		✓			
6.	Overall rating of this course			✓		

Signature of the Student





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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON EMBEDDED C WITH RTOS AND IOT

STUDENT FEEDBACK

Name of the Student: <u>P. Archana</u>	Year & Dept.: <u>III A ECE</u>
Name of the Resource Person: <u>Mr. M. Vignesh Kumar</u>	

S. No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1.	Course Content.	✓				
2.	Course delivered by the Resource Person	✓				
3.	Practical knowledge gained during the training.		✓			
4.	Facilitation provided during practice		✓			
5.	Time Management			✓		
6.	Overall rating of this course		✓			

Archana P

Signature of the Student





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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON EMBEDDED C WITH RTOS AND IOT

STUDENT FEEDBACK

Name of the Student: <u>D. Sandhya</u>	Year & Dept.: <u>VI & ECE</u>
Name of the Resource Person: <u>Mr. M. Vignesh Kumar</u>	

S. No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1.	Course Content.	✓				
2.	Course delivered by the Resource Person		✓			
3.	Practical knowledge gained during the training.		✓			
4.	Facilitation provided during practice	✓				
5.	Time Management		✓			
6.	Overall rating of this course		✓			

Sandhya D

Signature of the Student





DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON EMBEDDED C WITH RTOS AND IOT

STUDENT FEEDBACK SUMMARY REPORT

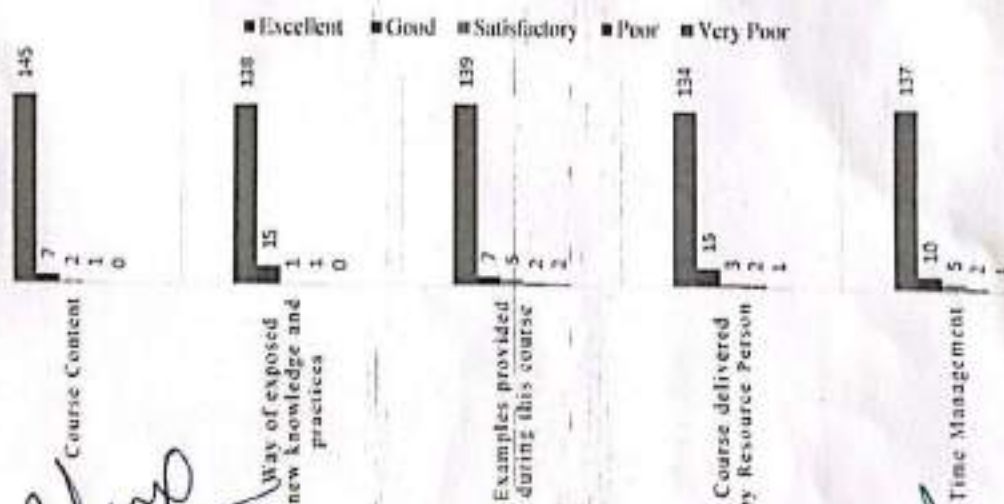
TOTAL STRENGTH: 155

DATES: 18.11.2022

S.No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1.	Course Content	145	7	2	1	0
2.	Way of exposed new knowledge and practices	138	15	1	1	0
3.	Examples provided during this course	139	7	5	2	2
4.	Course delivered by Resource Person	134	15	3	2	1
5.	Time Management	137	10	5	2	1
Average %		138.6	10.8	3.2		0.8



FEEDBACK ANALYSIS



PROGRAM COORDINATOR

HOD/ECE

PRINCIPAL

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON EMBEDDED C WITH RTOS AND IOT

SUMMARY REPORT

The Department of Electronics and Communication Engineering organized Certificate program "EMBEDDED C WITH RTOS AND IOT" from 14.11.22 to 18.11.22 (5 Days) at NPRCET Seminar Hall. Ms.D.Sandhiya, III ECE delivered the welcome address during the inauguration function

Dr.J.Sundararajan, Principal of our college inaugurated the program and delivered the inaugural address.

Resources Person Mr.M.Vignesh Kumar shared their knowledge with our students. This five days course gives over view about IOT and provides overview of an exciting growing field of IOT.

This program also taught the fundamentals and principles of embedded is an open-source electronics platform based on easy-to-use hardware and software. Embedded boards are able to read inputs - light on a sensor, a finger on a button, or a Twitter message - and turn it into an output - activating a motor, turning on an LED, publishing something online. The students learnt various existing and emerging technologies of embedded.

155 Students attended from ECE II, III and IV years. Students who participated and successfully completed the Quiz program has awarded with certificates.

Ms.S.Abirami, III ECE delivered the vote of thanks address.

PROGRAM COORDINATOR

HoD/ECE

IQAC

PRINCIPAL

Head of the Department
Department of Electronics & Communication Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) 624 401

Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul - 624 401





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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON EMBEDDED C WITH RTOS AND IOT

COURSE MATERIAL

MATERIAL LINK:

CHAPTER1:[https://blog.coursesity.com/best-embedded C-tutorials/](https://blog.coursesity.com/best-embedded-C-tutorials/)

CHAPTER2:<https://core-electronics.com.au/tutorials/embedded-workshop-for-beginners.html>

CHAPTER3:<https://www.classcentral.com/tag/embedded>

CHAPTER4:<https://hackr.io/tutorials/learn-embedded>

CHAPTER5:<https://www.coursera.org/learn/embedded>


FURTHER STUDY:

1. *Programming Embedded C: Getting Started with Sketches (Tab) 2nd Edition, Kindle Edition by simon monk*
2. *Exploring IOT 1st Edition by Jeremy Blum*
3. *Getting Started with IOT: The Open Source Electronics Prototyping Platform (Make) 3rd Edition by Massimo Banzi*
4. *Embeddded Workshop: A Hands-On Introduction with 65 Projects 1st Edition by John Boxall*
5. *Beginning C for IOT, Second Edition: Learn C Programming for the Embedded 2nd ed. Edition by Jack Purdum*


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NPR COLLEGE OF ENGINEERING & TECHNOLOGY



NPR Nagar, Natham, Dindigul – 624401, Tamil Nadu, India.

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

Accredited by NAAC with 'A' GRADE [Recognized under 2 (f)] Phone

No: 04544-246 500, 246501, 246502

Website: www.nprcolleges.org, www.nprcet.orgE-mail: nprgi@nprcolleges.org



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Certificate of Completion

This certificate is presented to

Mr. N. Vaidyanathan, III - ECE

for the successful completion of certificate course on

“Embedded C with RTOS and IOT”

Conducted from 14.11.2022 to 18.11.2022(5 Days).

M. Anand

HoD/ECE

Principal
PRINCIPAL

NPR COLLEGE OF ENGINEERING & TECHNOLOGY



NPR Nagar, Natham, Dindigul – 624401, Tamil Nadu, India.

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Certificate of Completion

This certificate is presented to

Ms. B. Dhanashini, II - ECE

for the successful completion of certificate course on

“Embedded C with RTOS and IOT”

Conducted from 14.11.2022 to 18.11.2022(5 Days).


HoD/ECE


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No: 04544-246 500, 246501, 246502

Website: www.nprcolleges.org, www.nprcet.orgE-mail: nprgi@nprcolleges.org



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Certificate of Completion

This certificate is presented to

Ms. N. Nadhira Banu, II ECE

for the successful completion of certificate course on

“Embedded C with RTOS and IOT”

Conducted from 14.11.2022 to 18.11.2022(5 Days).

ell Anu
HoD/ECE

[Signature]
PRINCIPAL



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON BUILDING BLOCKS OF JAVA

INDEX

COURSE CODE & NAME: 22ECCC03-BUILDING BLOCKS OF JAVA

ACADEMIC YEAR: 2022-2023

SEMESTER: EVEN

DURATION: 35 HOURS

S.NO.	PARTICULARS	PAGE NO.
1	PERMISSION LETTER	1
2	RESOURCE PERSON PROFILE	2
3	CIRCULAR TO STUDENTS	3
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5	COURSE CONTENT	5
6	REGISTERED STUDENTS NAME LIST	6
7	COURSE SCHEDULE	10
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13	COURSE MATERIAL/MANUAL	24
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PROGRAM COORDINATOR

HoD/ECE

IQAC

PRINCIPAL

Head of the Department
 Department of Electronics & Communication Engineering
 NPR College of Engineering & Technology
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Coordinator - IQAC
 NPR College of Engineering & Technology
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Dr. J. SUNDARARAJAM,
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 Principal
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From

Mr.S.Sudhakar,
Assistant Professor,
Department of Electronics and Communication Engineering,
NPR College of Engineering and Technology,
Natham.

To

The Principal,
NPR College of Engineering and Technology,
Natham.

Respected Sir,

Sub: Request for permission to conduct certificate course for ECE students – Regarding.

We have planned to conduct certificate course on "BUILDING BLOCKS OF JAVA" to our students from 01.02.2023 to 04.02.2023 and 06.02.2023 (5 Days) in our college. We are proposed Mr.K.Satheesh Kumar, Senior Software Engineer as a resource person for this Certificate course. Kindly permit us to conduct the same.

Thanking you.

Date: 23.01.2023

Place: Natham



Yours faithfully,

Head of the Department
Department of Electronics & Communication Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DI) - 624 401

Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON BUILDING BLOCKS OF JAVA

RESOURCE PERSON PROFILE

Name	:	Mr.K.Satheesh Kumar
Designation	:	Senior Software Engineer
Company Name	:	Info Software Solutions, Chennai.
About Resource Person	:	Info Software Solutions, Chennai- Senior Software Engineer from June 2015 to Present Skill Set: JAVA, J2EE and .NET Technologies Develop Engineer to automate the development process using Jenkins Deloitte India LLP, Chennai-Consultant JAN 2020 - AUG 2020 Redeem Systems Pvt Ltd, Bangalore - Lead Developer DEC 2017 - JAN 2020 KLN College of Information Technology, Madurai - Industry Consultant JULY 2011 - NOV 2017. Actively Participated Consultancy Project Implementation in Embedded Systems.


PROGRAM COORDINATOR


HoD/ECE
Head of the Department
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NPRCET/OFF/ECE/VAC/2022-2023

DATE: 25.01.2023

CIRCULAR

This is to inform that Department of Electronics and Communication Engineering is planned to conduct a Certificate course on "BUILDING BLOCKS OF JAVA" for the students during the end of this even semester 2022-2023. Interested students can enroll their name on or before 01.02.2023

The details of the training program are given below.

COURSE NAME	: BUILDING BLOCKS OF JAVA
RESOURCE PERSONS	: Mr.K.SATHEESH KUMAR
VENUE	: NPRCET Seminar Hall
DATE & DURATION	: 01.02.2023,02.02.2023,03.02.2023,04.02.2023 and 06.02.2023&35 Hours
PROGRAM COORDINATOR	: Mr.S.SUDHAKAR, AP/ECE, NPRCET.

Copy to:

1. All the HoDs
2. All the Class Rooms
3. Notice Board
4. File
5. Program Coordinator


PRINCIPAL
Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.
Principal
NPR College of Engineering & Technology
Natham, Dindigul (TN) - 624 401.





*The Management, Principal, Staff and Students
Cordially invite you for the inauguration of
"Certificate Course on Building Blocks of Java"*

On 1st February, 2023

Venue: NPRCET Auditorium at 9.30 a.m.

Chief Guest

Mr.K.SATHEESH KUMAR

Info Software Solutions, Chennai.

Dr.J.Sundararajan,

Principal,

NPR College of Engineering & Technology

Felicitates the function

Organized by

Department of Electronics and Communication Engineering,

NPR College of Engineering & Technology,

NPR Nagar, Natham.





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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON BUILDING BLOCKS OF JAVA

22ECCC03- BUILDING BLOCKS OF JAVA

COURSE CONTENT

CHAPTER 1: INTRODUCTION TO JAVA PROGRAMMING

The Java Virtual Machine-Arrays-Conditional and looping constructs.
Variables and data types.

CHAPTER 2 OBJECT-ORIENTED PROGRAMMING WITH JAVA CLASSES AND OBJECTS

Fields and Methods-Constructors-Nested classes-Garbage collection & overloading methods.

CHAPTER 3: INHERITANCE

Overriding methods-Interfaces-Making methods and classes final-Polymorphism & Abstract classes and methods.

CHAPTER 4: THE OBJECT CLASS

Multiple hypotheses- Bagging-Boosting-Decorate.

CHAPTER 5: DATABASE CONNECTIVITY WITH JDBC

Java Security-Synchronization-Sockets-Working with URLs.

CRITERIA TO GET CERTIFICATE:

- Students should register their names for this course
- Students must have 85% attendance.
- Student should secure 50% marks in the Exam.



Prepared By: Mrs.C.Kalpana

Approved By,

HoD/ECE

IQAC

Coordinator - IQAC

Head of the Department
Department of Electronics & Communication Engineering
NPR College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401

NPR College of Engineering & Technology
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PRINCIPAL

Dr. J. SUNDARARAJAN,

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Principal

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON BUILDING BLOCKS OF JAVA

REGISTERED STUDENTS NAME LIST

S.NO.	REGISTER NUMBER	STUDENT NAME	YEAR
1	920819106002	AfrinShifanaA	IV-ECE
2	920819106003	AjithKumarK	IV-ECE
3	920819106004	AmizhithaaB	IV-ECE
4	920819106006	AravinthRajK	IV-ECE
5	920819106007	AsmaRoshanT	IV-ECE
6	920819106008	BalajiM (2001)	IV-ECE
7	920819106009	BalajiM(2002)	IV-ECE
8	920819106010	BlessyJebamaniG	IV-ECE
9	920819106011	Christiyal	IV-ECE
10	920819106012	Devi Sri S	IV-ECE
11	920819106014	DhathVethaS	IV-ECE
12	920819106015	DhineshM	IV-ECE
13	920819106016	DiveshV	IV-ECE
14	920819106017	DivyaDharshiniS	IV-ECE
15	920819106019	Harishwar S	IV-ECE
16	920819106020	JosephrumsbilitR	IV-ECE
17	920819106021	JyothikaB	IV-ECE
18	920819106022	KamaleshK	IV-ECE
19	920819106023	KaruniaaJ S	IV-ECE
20	920819106024	KeerthiM	IV-ECE
21	920819106025	KirthickN	IV-ECE
22	920819106026	KishorekrishnaaJ	IV-ECE
23	920819106028	MadhumithaP	IV-ECE
24	920819106029	ManojkumarA	IV-ECE
25	920819106030	ManojKumar S	IV-ECE
26	920819106031	MohamedAsifM	IV-ECE
27	920819106032	MohamedibrahimJ	IV-ECE
28	920819106033	MohanS	IV-ECE
29	920819106034	MohanBabuB	IV-ECE
30	920819106035	MuruganathanM	IV-ECE
31	920819106036	MuthuMoorthyM	IV-ECE
32	920819106037	MuthuRanjaniV	IV-ECE
33	920819106038	MythiliM	IV-ECE
34	920819106039	NagaVishwaG	IV-ECE
35	920819106040	NalinashreeN	IV-ECE
36	920819106041	NandhaKumarG	IV-ECE
37	920819106042	PavithraN	IV-ECE
38	920819106043	PorkodiS	IV-ECE
39	920819106044	PowsikaDeviK	IV-ECE
40	920819106045	Prabhu C	IV-ECE
41	920819106046	PrasannaD	IV-ECE
42	920819106048	RamvignheshRP	IV-ECE





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43	920819106049	RenugaDevi N	IV-ECE
44	920819106050	RifayaS	IV-ECE
45	920819106051	RishwanaBurveenS	IV-ECE
46	920819106052	SanoNishaN	IV-ECE
47	920819106053	Saran GV	IV-ECE
48	920819106054	SasmithaParveenK	IV-ECE
49	920819106055	ShamI HiruthikR	IV-ECE
50	920819106057	SharmilaDeviG	IV-ECE
51	920819106058	ShinyReshnaJ	IV-ECE
52	920819106059	SingarabrinidhaN	IV-ECE
53	920819106060	SnehaP	IV-ECE
54	920819106061	SoundharyaS	IV-ECE
55	920819106062	SumugapriyaM	IV-ECE
56	920819106063	Thambi DuraiPK	IV-ECE
57	920819106064	TharshithaS	IV-ECE
58	920819106065	TharunkumarM	IV-ECE
59	920819106066	UmaNaathini N	IV-ECE
60	920819106067	VenkateshP	IV-ECE
61	920819106068	VikramS	IV-ECE
62	920819106069	VishaliK	IV-ECE
63	920819106070	YashicaS	IV-ECE
64	920819106302	ShabiratajJ	IV-ECE
65	920820106001	AarthyM	III-ECE
66	920820106002	AjayGowthamS	III-ECE
67	920820106003	AjithaS	III-ECE
68	920820106004	AkashS	III-ECE
69	920820106005	AravinthanS	III-ECE
70	920820106006	ArchanaP	III-ECE
71	920820106007	AriharanK	III-ECE
72	920820106008	Balasakthi S	III-ECE
73	920820106010	DhaariniMJ	III-ECE
74	920820106011	HareeshV	III-ECE
75	920820106012	Harini C	III-ECE
76	920820106014	HemeshwarS	III-ECE
77	920820106015	JawaharR	III-ECE
78	920820106016	JeevaS	III-ECE
79	920820106017	JefferyAlbertJ	III-ECE
80	920820106018	Lokesh Kanna G	III-ECE
81	920820106019	MahavarshiniS	III-ECE
82	920820106020	MaheswariR	III-ECE
83	920820106021	MalavikaA	III-ECE
84	920820106022	ManiyammaiyarN	III-ECE
85	920820106023	Manoj S	III-ECE
86	920820106024	MeeraJafriaA	III-ECE
87	920820106025	MohammedThoufiqAgarish R	III-ECE
88	920820106026	MuneeswariL	III-ECE
89	920820106027	NandhiniA	III-ECE
90	920820106028	NivethithaV	III-ECE





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91	920820106029	PraveenkumarP	III-ECE
92	920820106032	SabeerAhamedT	III-ECE
93	920820106033	SaiSankaraNarayananS	III-ECE
94	920820106034	SandhiyaD	III-ECE
95	920820106035	SanjayKumar S	III-ECE
96	920820106036	SanthiniR	III-ECE
97	920820106037	SelvaKumar M	III-ECE
98	920820106038	SivaprasadK	III-ECE
99	920820106039	SivaranjaniS	III-ECE
100	920820106041	SoundaryaLakshmiD	III-ECE
101	920820106042	SuprajaSuryawanshi	III-ECE
102	920820106043	SureshA	III-ECE
103	920820106044	TharaniV	III-ECE
104	920820106045	Udaiyappan N	III-ECE
105	920820106046	VasanthakumarM	III-ECE
106	920820106301	AswathamanA	III-ECE
107	920821106001	AakashR	II-ECE
108	920821106002	AashigabegamN	II-ECE
109	920821106003	Abdul RahmanA	II-ECE
110	920821106004	AbiramiS	II-ECE
111	920821106005	AbhishekS	II-ECE
112	920821106006	AlagupandiP	II-ECE
113	920821106007	AmruthaShopiga C	II-ECE
114	920821106008	AshokKumar S	II-ECE
115	920821106009	BabithaJ	II-ECE
116	920821106010	BalaSubhanuB	II-ECE
117	920821106011	BalurathinamBT	II-ECE
118	920821106012	BhuvaneshwaranB	II-ECE
119	920821106013	BhuvaneshwariP	II-ECE
120	920821106014	ChinramanV	II-ECE
121	920821106015	DhananjeyanM	II-ECE
122	920821106016	DharaniR	II-ECE
123	920821106017	DharshiniB	II-ECE
124	920821106018	DivyadharshiniG	II-ECE
125	920821106019	DurgaS	II-ECE
126	920821106020	GanesanM	II-ECE
127	920821106021	GopinathS	II-ECE
128	920821106022	HareeshKumar K	II-ECE
129	920821106023	Hariharan R	II-ECE
130	920821106024	HarishBalajiE	II-ECE
131	920821106025	HarshiniPriya R	II-ECE
132	920821106026	Hemanth BalaM	II-ECE
133	920821106027	ImranaY	II-ECE
134	920821106028	Janani M	II-ECE
135	920821106029	JayasuryaS	II-ECE
136	920821106030	JeevabharathiM	II-ECE
137	920821106031	JeyasuryaS	II-ECE
138	920821106032	JosephSamuvelM	II-ECE





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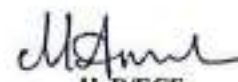


139	920821106033	KaleeswaranM	II-ECE
140	920821106034	KansashereenJ	II-ECE
141	920821106035	KarthickB	II-ECE
142	920821106036	LakshmanadhasanS	II-ECE
143	920821106037	LakshmananK	II-ECE
144	920821106038	ManikandanG	II-ECE
145	920821106039	ManikandanN	II-ECE
146	920821106040	ManojKumar S	II-ECE
147	920821106041	MelvinMeevaanJ	II-ECE
148	920821106042	MohamedBarukS	II-ECE
149	920821106043	MohamedImthiyasK	II-ECE
150	920821106044	MohammedHissamR	II-ECE
151	920821106045	MoheshNandhuB	II-ECE
152	920821106046	MukeshVarmaM	II-ECE
153	920821106047	NachammaiC	II-ECE
154	920821106048	Nadhira BanuN	II-ECE
155	920821106049	NadhiyaM	II-ECE
156	920821106050	NehaA	II-ECE
157	920821106051	NithishkumarK	II-ECE
158	920821106052	NithyasriR	II-ECE
159	920821106053	ParthasarathiK	II-ECE
160	920821106054	PavithraK	II-ECE

Summary	
Class	No. of Students Registered
IV ECE	64
III ECE	42
II ECE	54
TOTAL	160




PROGRAM COORDINATOR


HoD/ECE
Head of the Department
Department of Electronics & Communication Engineering
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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON BUILDING BLOCKS OF JAVA

COURSE SCHEDULE

Venue: NPRCET Seminar Hall

Date: 01.02.2023

EXTERNAL RESOURCE PERSON:

1. Mr.K.Satheesh Kumar

INTERNAL RESOURCE PERSONS:

1.Mrs.C.Kalpana

2.Mrs.J.Prisca Marry

Day 1 01.02.2023	9.30 a.m.to 10.00 a.m.	Inauguration	
	10.00 a.m.to 11.10 a.m.	Session 1	The Java Virtual Machine Mr.K.Satheesh Kumar
	11.10 a.m.to 11.30 a.m.		Tea Break
	11.30 a.m. to 1.10 p.m.	Session 2	Arrays Mrs.C.Kalpana
	1.10 p.m. to 2.00 p.m.		Lunch Break
	2.00 p.m. to 3.40 p.m.	Session 3	Conditional and looping constructs Mrs.J.Prisca Marry
	3.40 p.m. to 3.50 p.m.		Tea Break
	3.50 p.m. to 4.30 p.m.	Session 4	Variables and data types Mr.K.Satheesh Kumar
Day 2 02.02.2023	9.30 a.m.to 11.10 a.m.	Session 1	Fields and Methods Mrs.J.Prisca Marry
	11.10 a.m. to 11.30 a.m.		Tea Break
	11.30 a.m. to 1.10 p.m.	Session 2	Constructors Mr.K.Satheesh Kumar
	1.10 p.m. to 2.00 p.m.		Lunch Break
	2.00 p.m. to 3.40 p.m.	Session 3	Nested classes Mr.K.Satheesh Kumar
	3.40 p.m. to 3.50 p.m.		Tea Break
	3.50 p.m. to 4.30 p.m.	Session 4	Garbage collection & Overloading methods Mrs.J.Prisca Marry





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Day 3 03.02.2023	9.30 a.m.to 11.10 a.m.	Session 1	Overriding methods Mrs.C.Kalpana
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Interfaces Mrs.J.Prisca Marry
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	Making methods and classes final Mr.K.Satheesh Kumar
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	Polymorphism & Abstract classes and methods Mr.K.Satheesh Kumar
Day 4 04.02.2023	9.30 a.m.to 11.10 a.m.	Session 1	Multiple hypotheses Mr.K.Satheesh Kumar
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Bagging Mrs.J.Prisca Marry
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	Boosting Mrs.J.Prisca Marry
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	Decorate Mrs.C.Kalpana
Day 5 06.02.2023	9.30 a.m.to 11.10 a.m.	Session 1	Java Security Mr.K.Satheesh Kumar
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Synchronization Mrs.J.Prisca Marry
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	Sockets Mrs.J.Prisca Marry
	3.40 p.m. to 3.50 p.m.	Tea Break	
	3.50 p.m. to 4.30 p.m.	Session 4	Working with URLs Mr.K.Satheesh Kumar
	4.30 p.m. to 5.00 p.m.	Valedictory	



PROGRAM COORDINATOR

HoD/ECE

IQAC

PRINCIPAL

Head of the Department

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Principal

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON BUILDING BLOCKS OF JAVA

STUDENT ATTENDANCE

Sl. No.	Roll No.	Student Name	Year	01.02.23		02.02.23		03.02.23		04.02.23		06.02.23	
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1	22ECCC03001	AfrinShifanaA	IV-ECE	/	/	/	/	/	/	/	/	/	/
2	22ECCC03002	AjithKumarK	IV-ECE	/	/	/	/	/	/	/	/	/	/
3	22ECCC03003	AmizhthaaB	IV-ECE	/	/	/	/	/	/	/	/	/	/
4	22ECCC03004	AravinthRajK	IV-ECE	/	/	/	/	/	/	/	/	/	/
5	22ECCC03005	AsmaRoshanT	IV-ECE	/	/	/	/	/	/	/	/	/	/
6	22ECCC03006	BalajiM (2001)	IV-ECE	/	/	/	/	/	/	/	/	/	/
7	22ECCC03007	BalajiM(2002)	IV-ECE	/	/	/	/	/	/	/	/	/	/
8	22ECCC03008	BlessyJebananiG	IV-ECE	/	/	/	/	/	/	/	/	/	/
9	22ECCC03009	Christiyal	IV-ECE	/	/	/	/	/	/	/	/	/	/
10	22ECCC03010	Devi Sri S	IV-ECE	/	/	/	/	/	/	/	/	/	/
11	22ECCC03011	DhathVethaS	IV-ECE	/	/	/	/	/	/	/	/	/	/
12	22ECCC03012	DhineshM	IV-ECE	/	/	/	/	/	/	/	/	/	/
13	22ECCC03013	DiveshV	IV-ECE	/	/	/	/	/	/	/	/	/	/
14	22ECCC03014	DivyaDharshiniS	IV-ECE	/	/	/	/	/	/	/	/	/	/
15	22ECCC03015	Harishwar S	IV-ECE	/	/	/	/	/	/	/	/	/	/
16	22ECCC03016	JosephRumsbilitR	IV-ECE	/	/	/	/	/	/	/	/	/	/
17	22ECCC03017	JyothikaB	IV-ECE	/	/	/	/	/	/	/	/	/	/
18	22ECCC03018	KamaleshK	IV-ECE	/	/	/	/	/	/	/	/	/	/
19	22ECCC03019	KarunaaJ S	IV-ECE	/	/	/	/	/	/	/	/	/	/
20	22ECCC03020	KeerthiM	IV-ECE	/	/	/	/	/	/	/	/	/	/
21	22ECCC03021	KirthickN	IV-ECE	/	/	/	/	/	/	/	/	/	/
22	22ECCC03022	KishorekrishnaaJ	IV-ECE	/	/	/	/	/	/	/	/	/	/
23	22ECCC03023	MadhumithaP	IV-ECE	/	/	/	/	/	/	/	/	/	/
24	22ECCC03024	ManojkumarA	IV-ECE	/	/	/	/	/	/	/	/	/	/
25	22ECCC03025	ManojKumar S	IV-ECE	/	/	/	/	/	/	/	/	/	/
26	22ECCC03026	MohamedAsifM	IV-ECE	/	/	/	/	/	/	/	/	/	/
27	22ECCC03027	MohamedibrahimJ	IV-ECE	/	/	/	/	/	/	/	/	/	/
28	22ECCC03028	MohanS	IV-ECE	/	/	/	/	/	/	/	/	/	/
29	22ECCC03029	MohanBabuB	IV-ECE	A	A	/	/	/	/	/	/	/	/
30	22ECCC03030	MuruganathanM	IV-ECE	/	/	/	/	/	/	/	/	/	/
31	22ECCC03031	MuthuMoorthyM	IV-ECE	/	/	/	/	/	/	/	/	/	/
32	22ECCC03032	MuthuRanjaniV	IV-ECE	/	/	/	/	/	/	/	/	/	/
33	22ECCC03033	MythiliM	IV-ECE	/	/	/	/	/	/	/	/	A	A
34	22ECCC03034	NagaVishwaG	IV-ECE	/	/	/	/	/	/	/	/	/	/
35	22ECCC03035	NalinashreeN	IV-ECE	/	/	/	/	/	/	/	/	/	/
36	22ECCC03036	NandhaKumarG	IV-ECE	/	/	/	/	/	/	/	/	/	/
37	22ECCC03037	PavithraN	IV-ECE	/	/	/	/	/	/	/	/	/	/
38	22ECCC03038	PorkodiS	IV-ECE	/	/	/	/	/	/	/	/	/	/
39	22ECCC03039	PowsikaDeviK	IV-ECE	/	/	/	/	/	/	/	/	/	/
40	22ECCC03040	Prabhu C	IV-ECE	/	/	/	/	/	/	/	/	/	/
41	22ECCC03041	PrasannaD	IV-ECE	/	/	/	/	/	/	/	/	/	/
42	22ECCC03042	RamvignheshRP	IV-ECE	/	/	/	/	/	/	/	/	/	/
43	22ECCC03043	RenugaDevi N	IV-ECE	/	/	/	/	/	/	/	/	/	/
44	22ECCC03044	RifayaS	IV-ECE	/	/	/	/	/	/	/	/	/	/
45	22ECCC03045	RishiwanaBarveenS	IV-ECE	/	/	/	/	/	/	/	/	/	/
46	22ECCC03046	SanoNishaN	IV-ECE	/	/	/	/	/	/	/	/	/	/
47	22ECCC03047	Saran GV	IV-ECE	/	/	/	/	/	/	/	/	/	/
48	22ECCC03048	SasmitaParveenK	IV-ECE	/	/	/	/	/	/	/	/	/	/





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PRESENT	158	158	159	159	159	159	160	160	159	159
ABSENT	2	2	1	1	1	1	-	-	01	01
PROGRAM COORDINATOR SIGNATURE	K	K	K	K	K	K	K	K	K	K


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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON BUILDING BLOCKS OF JAVA

22ECCC03- BUILDING BLOCKS OF JAVA -QUIZ QUESTION PAPER & ANSWER

1) Which of the following option leads to the portability and security of Java?

- a. Bytecode is executed by JVM
- b. The applet makes the Java code secure and portable
- c. Use of exception handling
- d. Dynamic binding between objects

Answer: (a)

2) Which of the following is not a Java features?

- a. Dynamic
- b. Architecture Neutral
- c. Use of pointers
- d. Object-oriented

Answer: (c)

3) The \u0021 article referred to as a

- a. Unicode escape sequence
- b. Octal escape
- c. Hexadecimal
- d. Line feed

Answer: (a)

4) _____ is used to find and fix bugs in the Java programs.

- a. JVM
- b. JRE
- c. JDK
- d. JDB

Answer: (d)





5) Which of the following is a valid declaration of a char?

- a. char ch = '\utea';
- b. char ca = 'tea';
- c. char cr = '\u0223;
- d. char cc = '\utea';

Answer: (a)

6) What is the return type of the hashCode() method in the Object class?

- a. Object
- b. int
- c. long
- d. void

Answer: (b)

7) Which of the following is a valid long literal?

- a. ABH8097
- b. L990023
- c. 904423
- d. 0xnf029L

Answer: (d)

8) What does the expression float a = 35 / 0 return?

- a. 0
- b. Not a Number
- c. Infinity
- d. Run time exception

Answer: (c)

9) Evaluate the following Java expression, if x=3, y=5, and z=10: ++z + y - y + z + x++

- a. 24
- b. 23
- c. 20
- d. 25



Answer: (a)



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10) Which of the following tool is used to generate API documentation in HTML format from doc comments in source code?

- a. javap tool
- b. javaw command
- c. Javadoc tool
- d. javah comman

Answer: (c)


PROGRAM COORDINATOR




HoD/ECE

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON BUILDING BLOCKS OF JAVA

STUDENT FEEDBACK

DATE: 06/02/2023

Name of the Student: C. HARINI	Year & Dept.: IV - E ELE
Name of the Resource Person: Mr. K. SATHEESH KUNAR.	

S. No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1.	Course Content.	✓				
2.	Course delivered by the Resource Person		✓			
3.	Practical knowledge gained during the training.	✓				
4.	Facilitation provided during practice	✓				
5.	Time Management	✓				
6.	Overall rating of this course		✓			

C. Harini.

Signature of the Student





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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON BUILDING BLOCKS OF JAVA

STUDENT FEEDBACK

DATE: 06.02.23

Name of the Student: J. MUNEESWART	Year & Dept.: III & ECE
Name of the Resource Person: Mr. K. SATHEESH KUMAR	

S. No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1.	Course Content.	✓				
2.	Course delivered by the Resource Person		✓			
3.	Practical knowledge gained during the training.	✓				
4.	Facilitation provided during practice	✓				
5.	Time Management		✓			
6.	Overall rating of this course		✓			

Signature of the Student





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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON BUILDING BLOCKS OF JAVA

STUDENT FEEDBACK

DATE: 06.02.2023

Name of the Student: A-MIERA JAFRIN	Year & Dept.: III & ECE
Name of the Resource Person: Mr. K. SATHEESH KUMAR	

S. No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1.	Course Content.	✓				
2.	Course delivered by the Resource Person		✓			
3.	Practical knowledge gained during the training.	✓				
4.	Facilitation provided during practice		✓			
5.	Time Management	✓				
6.	Overall rating of this course		✓			

A. Miera Jafarin

Signature of the Student





DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON BUILDING BLOCKS OF JAVA

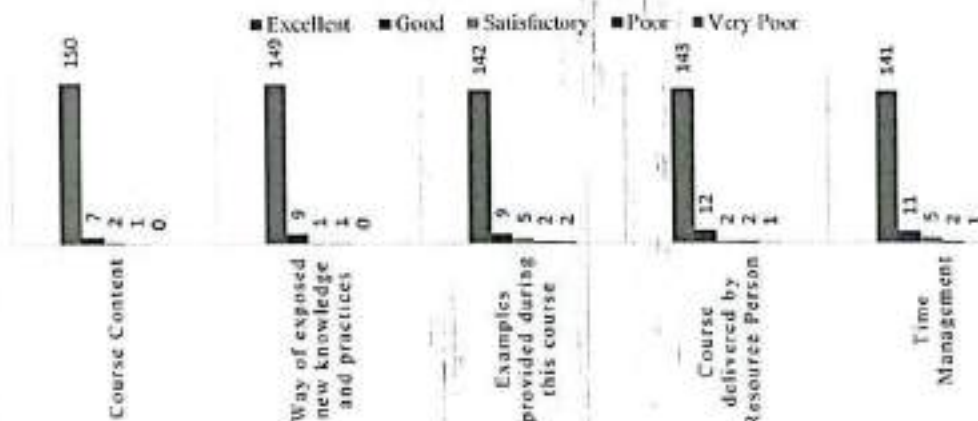
STUDENT FEEDBACK SUMMARY REPORT

TOTAL STRENGTH: 160

DATE: 06.02.2023

S.No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1.	Course Content	150	7	2	1	0
2.	Way of exposed new knowledge and practices	149	9	1	1	0
3.	Examples provided during this course	142	9	5	2	2
4.	Course delivered by Resource Person	143	12	2	2	1
5.	Time Management	141	11	5	2	1
Average %		145	9.6	3	1.6	0.8

FEEDBACK ANALYSIS



[Signature]

Head of the Department

Department of Electronics & Communication Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DI) - 624 401

[Signature]

Coordinator - IQAC
NPR College of Engineering & Technology
Natham, Dindigul (DI) - 624 401

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Dr. J. SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON BUILDING BLOCKS OF JAVA

SUMMARY REPORT

The Department of Electronics and Communication Engineering organized a Certificate course on "BUILDING BLOCKS OF JAVA" from 01.02.2023, 02.02.2023, 03.02.2023, 04.02.2023 and 06.02.2023

(5 Days) at NPRCET Seminar Hall

Ms.P.Sneha, IV ECE delivered the welcome address during the inauguration function.

Dr.J.Sundararajan, Principal of our college inaugurated the program and delivered the inaugural address. Resource Person Mr.K.Satheesh Kumar shared their knowledge with our students.


This five days course gave over view about BUILDING BLOCKS OF JAVA. This program also taught the fundamentals and principles of JAVA and Platform Independent - unlike many other programming languages including C and C++, when Java is compiled, it is not compiled into platform specific machine, rather into platform independent byte code. This byte code is distributed over the web and interpreted by the Virtual Machine (JVM) on whichever platform it is being run on.

160 Students attended from ECE II, III and IV years. Students who participated and successfully completed the Quiz program were awarded with certificates.

Mr.R.Aakash,, II ECE delivered the vote of thanks.


PROGRAM COORDINATOR


HOD/ECE


IQAC


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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON BUILDING BLOCKS OF JAVA

COURSE MATERIAL

MATERIAL LINK:

CHAPTER1:<https://blog.coursesity.com/best-java-tutorials/>

CHAPTER2:<https://core-electronics.com.au/tutorials/arduino-workshop-for-beginners.html>

CHAPTER3:<https://www.classcentral.com/tag/java>

CHAPTER4:<https://hackr.io/tutorials/learn-java>

CHAPTER5:<https://www.coursera.org/learn/java>

FURTHER STUDY:

1. *Programmingjava: Getting Started with Sketches (Tab) 2nd Edition, Kindle Edition by simon monk*
2. *Exploring java 1st Edition by Jeremy Blum*
3. *Getting Started with java: The Open Source Electronics Prototyping Platform (Make) 3rd Edition by Massimo Banzi*
4. *Java Workshop: A Hands-On Introduction with 65 Projects 1st Edition by John Boxall*
5. *Beginning C for java, Second Edition: Learn C Programming for the java 2nd ed. Edition by Jack Purdum*



PROGRAM COORDINATOR



Ho/DECE

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NPR COLLEGE OF ENGINEERING & TECHNOLOGY



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Certificate of Completion

This certificate is presented to

Ms. S. Durga, II ECE

for the successful completion of certificate course on

“Building Blocks of JAVA”

Conducted from 01.02.2023 to 04.02.2023 and 06.02.2023(5 Days).

Uthair

HoD/ECE

[Signature]
PRINCIPAL

NPR COLLEGE OF ENGINEERING & TECHNOLOGY



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Website: www.nprcolleges.org, www.nprcet.org E-mail: nprgi@nprcolleges.org



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Certificate of Completion

This certificate is presented to

Ms. S. Ajitha -----

for the successful completion of certificate course on

“Building Blocks of JAVA”

Conducted from 01.02.2023 to 04.02.2023 and 06.02.2023(5 Days).

U. Anur
HoD/ECE

[Signature]
PRINCIPAL

NPR COLLEGE OF ENGINEERING & TECHNOLOGY



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Certificate of Completion

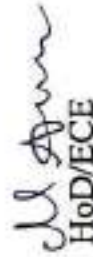
This certificate is presented to

----- Mr. K. Ajith Kumar -----

for the successful completion of certificate course on

“Building Blocks of JAVA”

Conducted from 01.02.2023 to 04.02.2023 and 06.02.2023(5 Days).


HoD/EECE


PRINCIPAL



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON IoT/EMBEDDED SYSTEMS

INDEX

COURSE CODE & NAME: 22ECCC04- IoT/EMBEDDED SYSTEMS

ACADEMIC YEAR: 2022-2023

SEMESTER: EVEN

DURATION: 36 HOURS

Sl. No.	Particulars	Page No.
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5.	COURSE CONTENT	6
6.	REGISTERED STUDENTS NAME LIST	8
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S. Anu
Program
Coordinators

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IQAC

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON IoT/EMBEDDED SYSTEMS

PERMISSION LETTER

FROM,

S. ALLWIN ANAND,
ASSISTANT PROFESSOR,
DEPARTMENT OF ECE,
NPRCET

TO,

THE CHIEF ADMINISTRATIVE OFFICER,
NPRGI

SUB: Request for conducting one week training program
-reg.

RESPECTED SIR,

We, the Department of ECE is planned to conduct one week training program on IoT/Embedded Systems from 27/2/23 to 4/3/23 in our campus. The sessions will be handled by experts from Tenolve Semiconductor Pvt Ltd, Bangalore. So we request you to give permission to conduct this training program.

Thanking You.

DATE: 23/1/23
PLACE: NATHAM

Yours Faithfully,
S. Allwin Anand
23/1/23

Forwarded to Principal
Dr. M. V. Manoj Kumar
23/1/23
HOD-ECE

Forwarded
by
23/1/23
(K. S. Suresh Kumar)
Coordinator - ECE

23/1/23



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON IoT/EMBEDDED SYSTEMS

RESOURCE PERSON PROFILE

Dr.S.Madhavapandian

Design Lead,
Tessolve Semiconductor Pvt. Ltd.
Mobile: +91 - 99444 74026
Email Id: madhavapandian.sankarapandian@tessolve.com.



ACADEMIC CHRONICLE

- Completed Ph.D. in Electrical Engineering from Anna University, Chennai
- Completed Master of Engineering in Embedded System Technologies from Raja College of Engineering & Technology, Madurai
- Completed Bachelor of Engineering in Electronics and Communication Engineering

EXPERISE IN TECHNOLOGIES

- Embedded Systems using
 - 8051
 - PIC Microcontrollers
 - MSP430
 - CC3200
 - ARM Processors
 - Arduino
 - Raspberry PI
- IOT
- Machine Learning
- Artificial Intelligence

WORK EXPERIENCE

More than 12 years

PROFESSIONAL MEMBERSHIP

- Senior Member of *IEEE* (Member No: 80573357) for 12 years.
- Member in *IEEE Young Professional Affinity Group*.
- Life Member in *ISTE* (Member No.84602).
- IAENG (Membership number:172003)

JOURNALS/PAPERS PUBLISHED

- Published more than 10 paper in reputed journals and Conferences





NPRCET/OFF/ECE/2022-2023

DATE: 20.02.2023

CIRCULAR

This is to inform that Department of Electronics and Communication Engineering has planned to conduct a Certificate Course on "IoT/EMBEDDED SYSTEMS" for the students during the end of this even semester 2022-2023. Interested students can enroll their name on or before 24.02.2023.

The details of the training program are given below.

COURSE NAME	Certificate Course on IoT/Embedded Systems
RESOURCE PERSON	Dr. S. Madhavapandian, Ph.D., Design Lead, Tessolve Semiconductor Pvt. Ltd., Bengaluru.
VENUE	Embedded Lab
DATE & DURATION	27.02.2023 to 04.03.2023
PROGRAM COORDINATORS	Mr. S. Allwyn Anand, AP-ECE Mr. J.G. Sabarish, AP-ECE Mrs. G. Renganayahi, AP-ECE

Copy to:

1. Administrative Office for Information
2. IQAC
3. All HoDs
4. Notice Board
5. File


PRINCIPAL
Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.





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*The Management, Principal, Staff and Students
Cordially invite you for the inauguration of the*
“Certificate Course on IoT/EMBEDDED SYSTEMS”

On 27th February, 2023

Venue: Rear Block Seminar Hall at 9.30 a.m.

Resource Person

*Dr. S. Madhavapandian, Ph.D.,
Design Lead,
Tessolve Semiconductor Pvt. Ltd.,
Bengaluru.*

Dr. J. SUNDARAJAN

Principal,
NPR College of Engineering & Technology
Felicitates the function



Organized by

Department of Electronics & Communication Engineering
NPR College of Engineering & Technology
NPR Nagar, Natham.



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON IoT/EMBEDDED SYSTEMS

22ECCC04- IoT/EMBEDDED SYSTEMS

COURSE CONTENT

Chapter 1 :Introduction to Embedded systems and Internet of Things (IoT)

- Embedded System basics, processor architecture, applications.
- Energia IDE Introduction and explore
- C Compiler Installation, Privileges, Compilation process
- Embedded C basics, Project creation and verification of compiler, simulator functionalities.

Chapter 2: Sensors and actuators

- I/O port basics-output, application and exercise
- Serial Monitor - output, application and exercise
- ADC & Comparator basics, requirement, Configurations, Exercise
- Sensor Interface with Task Execution
- I/O port basics, configuration - output, application and exercise

Chapter 3: Input/output (IO) programming

- Configuration - output, application and exercise
- Basics of LCD interface, 4 bit and 8 bit modes of operation, Exercise – 4 bit Mode
- Interrupts, Basics of Timer, Internals and hardware configurations of Timer, Modes, Exercise, ADC & Comparator basics, requirement, Configurations, Exercise

Chapter 4: Communication protocols

- Basics of Serial communication, configuration, Transmission and Reception, Exercise
- Basics of SPI and I2C, configuration, RTC interface, Exercise
- Real Time Task on Embedded systems
- Overview of IoT and its roadmap, Opportunities





Chapter 5: Embedded systems and IoT projects

- Creation of Thing speak page and Exercise on web server with different web pages to control the Hardware.
- Getting connected with Thing speak Cloud platform and sending sensor information.
- Sensor data acquisition using Thing speak server, Real Time Task on IoT Platform and Mini Project

Criteria to Get Certificate:

- Students should register their names for this training program
- Students must have 85% attendance.
- Student should secure 50% marks in the Quiz.



Prepared By: Mr.J.G.Sabarish

Approved By,

HoD-ECE

Head of the Department
Dept of Electronics & Communication Engineering
NPR College of Engineering & Technology
Natham, Dindigul (Dt) - 624401

IQAC

Coordinator - IQAC
NPR College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401

PRINCIPAL

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON IoT/EMBEDDED SYSTEMS

REGISTERED STUDENTS NAME LIST

S.No.	Register No.	Name of the Student	Year& Dept.
1	920820106001	Aarthi M	III-ECE
2	920820106002	Ajay Gowtham S	III-ECE
3	920820106003	Ajitha S	III-ECE
4	920820106004	Akash S	III-ECE
5	920820106005	Aravinthan S	III-ECE
6	920820106006	Archana P	III-ECE
7	920820106007	Ariharan K	III-ECE
8	920820106008	Balasakthi S	III-ECE
9	920820106010	Dhaarini M J	III-ECE
10	920820106011	Hareesh V	III-ECE
11	920820106012	Harini C	III-ECE
12	920820106014	Hemeshwar S	III-ECE
13	920820106015	Jawahar R	III-ECE
14	920820106016	Jeeva S	III-ECE
15	920820106017	Jeffery Albert J	III-ECE
16	920820106018	LokeshKanna G	III-ECE
17	920820106019	Mahavarshini S	III-ECE
18	920820106020	Maheswari R	III-ECE
19	920820106021	Malavika A	III-ECE
20	920820106022	Maniyammaiyar N	III-ECE
21	920820106023	Manoj S	III-ECE
22	920820106024	Meera Jafrin A	III-ECE
23	920820106025	Mohammed Thoufiq Agarish R	III-ECE
24	920820106026	Muneeswari L	III-ECE
25	920820106027	Nandhini A	III-ECE
26	920820106028	Nivethitha V	III-ECE
27	920820106029	Praveenkumar P	III-ECE
28	920820106032	SabeerAhamed T	III-ECE
29	920820106033	SaiSankara Narayanan S	III-ECE
30	920820106034	Sandhiya D	III-ECE
31	920820106035	Sanjay Kumar S	III-ECE
32	920820106036	Santhini R	III-ECE
33	920820106037	Selva Kumar M	III-ECE





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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON IoT/EMBEDDED SYSTEMS

REGISTERED STUDENTS NAME LIST

S. No.	Register No.	Name of the Student	Year& Dept.
34	920820106038	Sivaprasad K	III-ECE
35	920820106039	Sivaranjani S	III-ECE
36	920820106041	Soundarya Lakshmi D	III-ECE
37	920820106042	SuprajaSuryawanshi	III-ECE
38	920820106043	Suresh A	III-ECE
39	920820106044	Tharani V	III-ECE
40	920820106045	Udaiyappan N	III-ECE
41	920820106046	Vasanthakumar M	III-ECE
42	920820106301	Aswathaman A	III-ECE
43	920820106302	Dhurgadevi N S	III-ECE
44	920820106303	Gayathri N	III-ECE
45	920820106304	Parthipan B	III-ECE
46	920820106305	Pasilan R	III-ECE
47	920821106001	AakashR	II-ECE
48	920821106002	AashigabegamN	II-ECE
49	920821106003	Abdul RahmanA	II-ECE
50	920821106004	AbiramiS	II-ECE
51	920821106005	AbhishekS	II-ECE
52	920821106006	AlagupandiP	II-ECE
53	920821106007	AmruthaShopiga C	II-ECE
54	920821106008	AshokKumar S	II-ECE
55	920821106009	BabithaJ	II-ECE
56	920821106010	BalaSubhanuB	II-ECE
57	920821106011	BalurathinamBT	II-ECE
58	920821106012	BhuvaneshwaranB	II-ECE
59	920821106013	BhuvanewariP	II-ECE
60	920821106014	ChinramanV	II-ECE
61	920821106015	DhananjeyanM	II-ECE
62	920821106016	DharaniR	II-ECE
63	920821106017	DharshiniB	II-ECE
64	920821106018	DivyadharshiniG	II-ECE
65	920821106019	DurgaS	II-ECE
66	920821106020	GanesanM	II-ECE
67	920821106021	GopinathS	II-ECE
68	920821106022	HareshKumar K	II-ECE
69	920821106023	Hariharan R	II-ECE
70	920821106024	HarishBalajiE	II-ECE
71	920821106025	HarshiniPriya R	II-ECE
72	920821106026	HemanthBalaM	II-ECE
73	920821106027	ImranaY	II-ECE
74	920821106028	Janani M	II-ECE
75	920821106029	JayasuryaS	II-ECE





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S. No.	Register No.	Name of the Student	Year& Dept.
76	920821106030	JeevabharathiM	II-ECE
77	920821106031	JeyasuryaS	II-ECE
78	920821106032	JosephSamuelM	II-ECE
79	920821106033	KaleeshwaranM	II-ECE
80	920821106034	KansashereenJ	II-ECE
81	920821106035	KarthickB	II-ECE
82	920821106036	LakshmanadhasanS	II-ECE
83	920821106037	LakshmananK	II-ECE
84	920821106038	ManikandanG	II-ECE
85	920821106039	ManikandanN	II-ECE
86	920821106040	ManojKumar S	II-ECE
87	920821106041	MelvinMecvaanJ	II-ECE
88	920821106042	MohamedBarukS	II-ECE
89	920821106043	MohamedImthiyasK	II-ECE
90	920821106044	MohammedHissamR	II-ECE
91	920821106045	MoheshNandhuB	II-ECE
92	920821106046	MukeshVarmaM	II-ECE
93	920821106047	NachammaiC	II-ECE
94	920821106048	NadhiraBanuN	II-ECE
95	920821106049	NadhiyaM	II-ECE
96	920821106050	NehaA	II-ECE
97	920821106051	NithishkumarK	II-ECE
98	920821106052	NithyasriR	II-ECE
99	920821106053	ParthasarathiK	II-ECE
100	920821106054	PavithraK	II-ECE
101	920821106055	PommendranR	II-ECE
102	920821106056	PonrajH	II-ECE
103	920821106057	PothiniM	II-ECE
104	920821106058	PrasannaKumarV	II-ECE
105	920821106059	PrathishaP	II-ECE
106	920821106060	PremkumarG	II-ECE
107	920821106061	PriyadharshiniS	II-ECE
108	920821106062	Pugalenthik	II-ECE
109	920821106063	Ragul M	II-ECE
110	920821106064	RamaprabakaranR	II-ECE
111	920821106065	RamjiM	II-ECE
112	920821106066	RavikumarS	II-ECE
113	920821106067	SabariPrasathP	II-ECE
114	920821106068	SakthiPrasannaM	II-ECE
115	920821106069	SangiliPerumalM	II-ECE
116	920821106070	SaranyaK	II-ECE
117	920821106071	Sarathi R	II-ECE
118	920821106072	SathasivamM	II-ECE
119	920821106073	ShanmuganathanC	II-ECE
120	920821106074	Shanofar BegumS	II-ECE
121	920821106075	SivaBalajiM	II-ECE





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S. No.	Register No.	Name of the Student	Year& Dept.
122	920821106076	SivabalanS	II-ECE
123	920821106077	SoundharyaR	II-ECE
124	920821106078	SrihariSundharS	II-ECE
125	920821106079	SubarnozhiP	II-ECE
126	920821106080	SubashChandraBoseS	II-ECE
127	920821106081	SudhishreeJJ	II-ECE
128	920821106082	SushmithaNP	II-ECE
129	920821106083	SwathiP	II-ECE
130	920821106084	TamilarasiC	II-ECE
131	920821106085	TharunM	II-ECE
132	920821106086	ThirumalaikarthickN	II-ECE
133	920821106087	ThoufikrajaS	II-ECE
134	920821106088	VarshaVS	II-ECE
135	920821106089	VeeraLakshmiM	II-ECE
136	920821106090	VibhuVishwaDeepBK	II-ECE
137	920821106091	VigneshK	II-ECE
138	920821106092	VigneshR	II-ECE
139	920821106093	VigneshwaranT	II-ECE
140	920821106094	VijayashreeR	II-ECE
141	920821106095	VinothKumarK	II-ECE

Summary	
Class	No. of Students Registered
IV ECE	46
III ECE	95
TOTAL	141

S. An
PROGRAM COORDINATOR



H. An
HoD/ECE

Head of the Department
Department of Electronics & Communication Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) 624 401



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
CERTIFICATE COURSE ON IoT/EMBEDDED SYSTEMS
COURSE SCHEDULE

Venue: ECE EmbeddedLab

Duration: 27.02.2023 to 04.03.2023

RESOURCE PERSON:
Dr. S. Madhavapandian, Ph.D.,
Design Lead,
Tessolve Semiconductor Pvt. Ltd.,
Bengaluru.

Day 1 27.02.2023	9.00 a.m.	Registration	
	9.30 a.m. – 10.00 a.m.	Inauguration	
	10.00 a.m. - 10.30 a.m.	Session 1	Embedded System basics, processor architecture, applications.
	10.30 a.m. to 10.55 a.m.	Tea Break	
	10.55 a.m. to 12.25 p.m.	Session 2	Energia IDE Introduction and explore
	12.25 p.m. to 1.05 p.m.	Lunch Break	
	1.05 p.m. to 2.35 p.m.	Session 3	C Compiler Installation, Privileges, Compilation process
	2.35 p.m. to 2.45 p.m.	Tea Break	
Day 2 28.02.2023	2.45 p.m. to 4.15 p.m.	Session 4	Embedded C basics, Project creation and verification of compiler, simulator functionalities.
	10.00 a.m. - 10.30 a.m.	Session 1	I/O port basics-output, application and exercise
	10.30 a.m. to 10.55 a.m.	Tea Break	
	10.55 a.m. to 12.25 p.m.	Session 2	Serial Monitor - output, application and exercise
	12.25 p.m. to 1.05 p.m.	Lunch Break	
	1.05 p.m. to 2.35 p.m.	Session 3	ADC & Comparator basics, requirement, Configurations, Exercise
	2.35 p.m. to 2.45 p.m.	Tea Break	
Day 3 01.03.2023	2.45 p.m. to 4.15 p.m.	Session 4	Sensor Interface with Task Execution
	10.00 a.m. - 10.30 a.m.	Session 1	I/O port basics, configuration - output, application and exercise
	10.30 a.m. to 10.55 a.m.	Tea Break	
	10.55 a.m. to 12.25 p.m.	Session 2	Configuration - output, application and exercise
	12.25 p.m. to 1.05 p.m.	Lunch Break	
	1.05 p.m. to 2.35 p.m.	Session 3	Basics of LCD interface, 4 bit and 8 bit modes of operation, Exercise – 4 bit Mode
	2.35 p.m. to 2.45 p.m.	Tea Break	
	2.45 p.m. to 4.15 p.m.	Session 4	Interrupts, Basics of Timer, Internals and hardware configurations of Timer, Modes, Exercise





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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING CERTIFICATE TRAINING PROGRAM ON IoT/EMBEDDED SYSTEMS

Day 4 02.03.2023	10.00 a.m. - 10.30 a.m.	Session 1	ADC & Comparator basics, requirement, Configurations, Exercise
	10.30 a.m. to 10.55 a.m.		Tea Break
	10.55 a.m. to 12.25 p.m.	Session 2	Basics of Serial communication, configuration, Transmission and Reception, Exercise
	12.25 p.m. to 1.05 p.m.		Lunch Break
	1.05 p.m. to 2.35 p.m.	Session 3	Basics of SPI and I2C, configuration, RTC interface, Exercise
	2.35 p.m. to 2.45 p.m.		Tea Break
	2.45 p.m. to 4.15 p.m.	Session 4	Basics of SPI and I2C, configuration, RTC interface, Exercise
Day 5 03.03.2023	10.00 a.m. - 10.30 a.m.	Session 1	Real Time Task on Embedded systems
	10.30 a.m. to 10.55 a.m.		Tea Break
	10.55 a.m. to 12.25 p.m.	Session 2	Overview of IoT and its roadmap, Opportunities
	12.25 p.m. to 1.05 p.m.		Lunch Break
	1.05 p.m. to 2.35 p.m.	Session 3	Creation of Thingspeak page and Exercise on web server with different web pages to control the Hardware.
	2.35 p.m. to 2.45 p.m.		Tea Break
	2.45 p.m. to 4.15 p.m.	Session 4	Creation of Thingspeak page and Exercise on web server with different web pages to control the Hardware.
Day 6 04.03.2023	10.00 a.m. - 10.30 a.m.	Session 1	Getting connected with Thingspeak Cloud platform and sending sensor information.
	10.30 a.m. to 10.55 a.m.		Tea Break
	10.55 a.m. to 12.25 p.m.	Session 2	Sensor data acquisition using Thingspeak server
	12.25 p.m. to 1.05 p.m.		Lunch Break
	1.05 p.m. to 2.35 p.m.	Session 3	Real Time Task on IoT Platform and Mini Project
	2.35 p.m. to 2.45 p.m.		Tea Break
	2.45 p.m. to 4.15 p.m.	Session 4	Valedictory

S. An
Program
Coordinators

HoD-ECE

IQAC

Principal

Head of the Department
Department of Electronics & Communication Engineering
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Natham, Dindigul (Dt) - 624 401

Coordinator - IQAC
NPR College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401

Dr. J.SUNDARAJAN
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Principal
NPR College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
CERTIFICATE COURSE ON IoT/EMBEDDED SYSTEMS
STUDENTS' ATTENDANCE

S. No.	Roll.No	Name of the Student	27.02.2023		28.02.2023		01.03.2023		02.03.2023		03.03.2023		04.03.2023	
			FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1	22ECCC04001	Aarthi M	/	/	/	/	/	/	/	/	/	/	/	/
2	22ECCC04002	Ajay Gowtham S	/	/	/	/	/	/	/	/	/	/	/	/
3	22ECCC04003	Ajitha S	/	/	/	/	/	/	/	/	/	/	/	/
4	22ECCC04004	Akash S	/	/	/	/	/	/	/	/	/	/	/	/
5	22ECCC04005	Aravinthan S	/	/	/	/	/	/	/	/	/	/	/	/
6	22ECCC04006	Archana P	/	/	/	/	/	/	/	/	/	/	/	/
7	22ECCC04007	Ariharan K	/	/	/	/	/	/	/	/	/	/	/	/
8	22ECCC04008	Balasakthi S	/	/	/	/	/	/	/	/	/	/	/	/
9	22ECCC04009	Dhaarini M J	/	/	/	/	/	/	/	/	/	/	/	/
10	22ECCC04010	Hareesh V	/	/	/	/	/	/	/	/	/	/	/	/
11	22ECCC04011	Harini C	/	/	/	/	/	/	/	/	/	/	/	/
12	22ECCC04012	Hemeshwar S	/	/	/	/	/	/	/	/	/	/	/	/
13	22ECCC04013	Jawahar R	/	/	/	/	/	/	/	/	/	/	/	/
14	22ECCC04014	Jeeva S	/	/	/	/	/	/	/	/	/	/	/	/
15	22ECCC04015	Jeffery Albert J	/	/	/	/	/	/	/	/	/	/	/	/
16	22ECCC04016	LokeshKanna G	/	/	/	/	/	/	/	/	/	/	/	/
17	22ECCC04017	Mahavarshini S	/	/	/	/	/	/	/	/	/	/	/	/
18	22ECCC04018	Maheswari R	/	/	/	/	/	/	/	/	/	/	/	/
19	22ECCC04019	Malavika A	/	/	/	/	/	/	/	/	/	/	/	/
20	22ECCC04020	Maniyammaiyar N	/	/	/	/	/	/	/	/	/	/	/	/
21	22ECCC04021	Manoj S	/	/	/	/	/	/	/	/	/	/	/	/
22	22ECCC04022	Meera Jafin A	/	/	/	/	/	/	/	/	/	/	/	/
23	22ECCC04023	Mohamed Theofiq Aguirah R	/	/	/	/	/	/	/	/	/	/	/	/
24	22ECCC04024	Muneeswari L	/	/	/	/	/	/	/	/	/	/	/	/
25	22ECCC04025	Nandhini A	/	/	/	/	/	/	/	/	/	/	/	/
26	22ECCC04026	Nivethitha V	/	/	/	/	/	/	/	/	/	/	/	/
27	22ECCC04027	Praveenkumar P	/	/	/	/	/	/	/	/	/	/	/	/
28	22ECCC04028	SabeerAhamed T	/	/	/	/	/	/	/	/	/	/	/	/
29	22ECCC04029	SaiSankara Narayanan S	/	/	/	/	/	/	/	/	/	/	/	/
30	22ECCC04030	Sandhiya D	/	/	/	/	/	/	/	/	/	/	/	/
31	22ECCC04031	Sanjay Kumar S	/	/	/	/	/	/	/	/	/	/	/	/
32	22ECCC04032	Santhini R	/	/	/	/	/	/	/	/	/	/	/	/
33	22ECCC04033	Selva Kumar M	/	/	/	/	/	/	/	/	/	/	/	/
34	22ECCC04034	Sivaprasad K	/	/	/	/	/	/	/	/	/	/	/	/
35	22ECCC04035	Sivaranjani S	/	/	/	/	/	/	/	/	/	/	/	/
36	22ECCC04036	Soundarya Lakshmi D	/	/	/	/	/	/	/	/	/	/	/	/
37	22ECCC04037	SuprajaSuryawanshi	/	/	/	/	/	/	/	/	/	/	/	/
38	22ECCC04038	Suresh A	/	/	/	/	/	/	/	/	/	/	/	/
39	22ECCC04039	Tharani V	/	/	/	/	/	/	/	/	/	/	/	/





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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
CERTIFICATE COURSE ON IoT/EMBEDDED SYSTEMS
STUDENT ATTENDANCE

S. No.	Roll.No	Name of the Student	27.02.2023		28.02.2023		01.03.2023		02.03.2023		03.03.2023		04.03.2023	
			FN	AN	FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
40	22ECCC04040	Udaiyappan N	/	/	/	/	/	/	/	/	/	/	/	/
41	22ECCC04041	Vasanthakumar M	/	/	/	/	/	/	/	/	/	/	/	/
42	22ECCC04042	Aswathaman A	/	/	/	/	/	/	/	/	/	/	/	/
43	22ECCC04043	Dhurgadevi N S	/	/	/	/	/	/	/	/	/	/	/	/
44	22ECCC04044	Gayathri N	/	/	/	/	/	/	/	/	/	/	/	/
45	22ECCC04045	Parthipan B	/	/	/	/	/	/	/	/	/	/	/	/
46	22ECCC04046	Pasilan R	/	/	/	/	/	/	/	/	/	/	/	/
47	22ECCC04047	AakashR	/	/	/	/	/	/	/	/	/	/	/	/
48	22ECCC04048	AashigabegamN	/	/	/	/	/	/	/	/	/	/	/	/
49	22ECCC04049	Abdul RahmanA	/	/	/	/	/	/	/	/	/	/	/	/
50	22ECCC04050	AbiramiS	/	/	/	/	/	/	/	/	/	/	/	/
51	22ECCC04051	AbhishekS	/	/	/	/	/	/	/	/	/	/	/	/
52	22ECCC04052	AlagupandiP	/	/	/	/	/	/	/	/	/	/	/	/
53	22ECCC04053	AmruthaShopiga C	/	/	/	/	/	/	/	/	/	/	/	/
54	22ECCC04054	AshokKumar S	/	/	/	/	/	/	/	/	/	/	/	/
55	22ECCC04055	BabithaJ	/	/	/	/	/	/	/	/	/	/	/	/
56	22ECCC04056	BalaSubhanuB	/	/	/	/	/	/	/	/	/	/	/	/
57	22ECCC04057	BalurathinamBT	/	/	/	/	/	/	/	/	/	/	/	/
58	22ECCC04058	BhuvaneshwaranB	/	/	/	/	/	/	/	/	/	/	/	/
59	22ECCC04059	BhuvaneshwariP	/	/	/	/	/	/	/	/	/	/	/	/
60	22ECCC04060	ChinramanV	/	/	/	/	/	/	/	/	/	/	/	/
61	22ECCC04061	DhananjeyanM	/	/	/	/	/	/	/	/	/	/	/	/
62	22ECCC04062	DharaniR	/	/	/	/	/	/	/	/	/	/	/	/
63	22ECCC04063	DharshiniB	/	/	/	/	/	/	/	/	/	/	/	/
64	22ECCC04064	DivyadharshiniG	/	/	/	/	/	/	/	/	/	/	/	/
65	22ECCC04065	DurgaS	/	/	/	/	/	/	/	/	/	/	/	/
66	22ECCC04066	GanesanM	/	/	/	/	/	/	/	/	/	/	/	/
67	22ECCC04067	GopinathS	/	/	/	/	/	/	/	/	/	/	/	/
68	22ECCC04068	HareeshKumar K	/	/	/	/	/	/	/	/	/	/	/	/
69	22ECCC04069	Hariharan R	/	/	/	/	/	/	/	/	/	/	/	/
70	22ECCC04070	HarishBalajiE	/	/	/	/	/	/	/	/	/	/	/	/
71	22ECCC04071	HarshiniPriya R	/	/	/	/	/	/	/	/	/	/	/	/
72	22ECCC04072	HemanthBalaM	/	/	/	/	/	/	/	/	/	/	/	/
73	22ECCC04073	ImranaY	/	/	/	/	/	/	/	/	/	/	/	/
74	22ECCC04074	Janani M	/	/	/	/	/	/	/	/	/	/	/	/
75	22ECCC04075	JayasuryaS	/	/	/	/	/	/	/	/	/	/	/	/
76	22ECCC04076	JeevabharathiM	/	/	/	/	/	/	/	/	/	/	/	/
77	22ECCC04077	JeyasuryaS	/	/	/	/	/	/	/	/	/	/	/	/
78	22ECCC04078	JosephSamuelM	/	/	/	/	/	/	/	/	/	/	/	/
79	22ECCC04079	KaleeshwaranM	/	/	/	/	/	/	/	/	/	/	/	/
80	22ECCC04080	KansashereenJ	/	/	/	/	/	/	/	/	/	/	/	/
81	22ECCC04081	KarthickB	/	/	/	/	/	/	/	/	/	/	/	/





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82	22ECCC04082	LakshmanadhasanS	a	a	/	/	/	/	/	/	/	/	/	/
83	22ECCC04083	LakshmananK	/	/	/	/	/	/	/	/	/	/	/	/
84	22ECCC04084	ManikandanG	/	/	/	/	/	/	/	/	/	/	/	/
85	22ECCC04085	ManikandanN	/	/	/	/	/	/	/	/	/	/	/	/
86	22ECCC04086	ManojKumar S	/	/	/	/	/	/	/	/	/	/	/	/
87	22ECCC04087	MelvinMecvaanJ	/	/	/	/	/	/	/	/	/	/	/	/
88	22ECCC04088	MohamedBarukS	/	/	/	/	/	/	/	/	/	/	/	/
89	22ECCC04089	MohamedInthiyasK	/	/	/	/	/	/	/	/	/	/	/	/
90	22ECCC04090	MohammedHissamR	/	/	/	/	/	/	/	/	/	/	/	/
91	22ECCC04091	MoheshNandhuB	/	/	/	/	/	/	/	/	/	/	/	/
92	22ECCC04092	MukeshVarmaM	/	/	/	/	/	/	/	/	/	/	/	/
93	22ECCC04093	NachammaiC	/	/	/	/	/	/	/	/	/	/	/	/
94	22ECCC04094	NadhiraBanuN	/	/	/	/	/	/	/	/	/	/	/	/
95	22ECCC04095	NadhiyaM	/	/	/	/	/	/	/	/	/	/	/	/
96	22ECCC04096	NehaA	/	/	/	/	/	/	/	/	/	/	/	/
97	22ECCC04097	NithishkumarK	/	/	/	/	/	/	/	/	/	/	/	/
98	22ECCC04098	NithyasriR	/	/	/	/	/	/	/	/	/	/	/	/
99	22ECCC04099	ParthasarathiK	/	/	/	/	/	/	/	/	/	/	/	/
100	22ECCC04100	PavithraK	/	/	/	/	/	/	/	/	/	/	/	/
101	22ECCC04101	PommendranR	/	/	/	/	/	/	/	/	/	/	/	/
102	22ECCC04102	PonrajH	/	/	/	/	/	/	/	/	/	/	/	/
103	22ECCC04103	PothiniM	/	/	/	/	/	/	/	/	/	/	/	/
104	22ECCC04104	PrasannaKumarV	/	/	/	/	/	/	/	/	/	/	/	/
105	22ECCC04105	PrathishaP	/	/	/	/	/	/	/	/	/	/	/	/
106	22ECCC04106	PremkumarG	/	/	/	/	/	/	/	/	/	/	/	/
107	22ECCC04107	PriyadharshiniS	/	/	/	/	/	/	/	/	/	/	/	/
108	22ECCC04108	Pugalenthik	/	/	/	/	/	/	/	/	/	/	/	/
109	22ECCC04109	Ragul M	/	/	/	/	/	/	/	/	/	/	/	/
110	22ECCC04110	RamaprabakaranR	/	/	/	/	/	/	/	/	/	/	/	/
111	22ECCC04111	RamjiM	/	/	/	/	/	/	/	/	/	/	/	/
112	22ECCC04112	RavikumarS	/	/	/	/	/	/	/	/	/	/	/	/
113	22ECCC04113	SabariPrasathP	/	/	/	/	/	/	/	/	/	/	/	/
114	22ECCC04114	SakthiPrasannaM	/	/	/	/	/	/	/	/	/	/	/	/
115	22ECCC04115	SangiliPerumalM	/	/	/	/	/	/	/	/	/	/	/	/
116	22ECCC04116	SaranyaK	/	/	/	/	/	/	/	/	/	/	/	/
117	22ECCC04117	Sarathi R	/	/	/	/	/	/	/	/	/	/	/	/
118	22ECCC04118	SathasivamM	/	/	/	/	/	/	/	/	/	/	/	/
119	22ECCC04119	ShanmuganathanC	/	/	/	/	/	/	/	/	/	/	/	/
120	22ECCC04120	Shanofar BegumS	/	/	/	/	/	/	/	/	/	/	/	/
121	22ECCC04121	SivaBalajiM	/	/	/	/	/	/	/	/	/	/	/	/
122	22ECCC04122	SivabalanS	/	/	/	/	/	/	/	/	/	/	/	/
123	22ECCC04123	SoundharyaR	/	/	/	/	/	/	/	/	/	/	/	/
124	22ECCC04124	SriHariSundharS	/	/	/	/	/	/	/	/	/	/	/	/
125	22ECCC04125	SubamozhiP	/	/	/	/	/	/	/	/	/	/	/	/
126	22ECCC04126	SubashChandraBoseS	/	/	/	/	/	/	/	/	/	/	/	/
127	22ECCC04127	SudhishreeJJ	/	/	/	/	/	/	/	/	/	/	/	/
128	22ECCC04128	SushmithaNP	/	/	/	/	/	/	/	/	/	/	/	/
129	22ECCC04129	SwathiP	/	/	/	/	/	/	/	/	/	/	/	/
130	22ECCC04130	TamilarasiC	/	/	/	/	/	/	/	/	/	/	/	/
131	22ECCC04131	TharunM	/	/	/	/	/	/	/	/	/	/	/	/
132	22ECCC04132	ThirumalaikarthickN	/	/	/	/	/	/	/	/	/	/	/	/





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133	22ECCC04133	ThoufikrajaS	/	/	/	/	/	/	/	/	/	/	/	/	/
134	22ECCC04134	VarshaVS	/	/	/	/	/	/	/	/	/	/	/	/	/
135	22ECCC04135	VeeraLakshmiM	/	/	/	/	/	/	/	/	/	/	/	/	/
136	22ECCC04136	VibhuVishwaDeepBK	/	/	/	/	/	/	/	/	/	/	/	/	/
137	22ECCC04137	VigneshK	/	/	/	/	/	/	/	/	/	/	/	/	/
138	22ECCC04138	VigneshR	/	/	/	/	/	/	/	/	/	/	/	/	/
139	22ECCC04139	VigneshwaranT	/	/	/	/	/	/	/	/	/	/	/	/	/
140	22ECCC04140	VijayashreeR	/	/	/	/	/	/	/	/	/	/	/	/	/
141	22ECCC04141	VinothKumarK	/	/	/	/	/	/	/	/	/	/	/	/	/
PRESENT			139	139	141	141	139	139	138	138	141	141	140	140	
ABSENT			2	2	-	-	2	2	3	3	-	-	-	-	
PROGRAM COORDINATOR SIGNATURE															

HOD/ECE

Head of the Department
Department of Electronics & Communication Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) 624 401

PRINCIPAL
Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.





DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON IoT/EMBEDDED SYSTEMS

QUIZ QUESTION PAPER WITH ANSWER

1. What is printed by the following ANSI C program?

```
#include<stdio.h>
int main(int argc, char *argv[])
{
    int x = 1, z[2] = {10, 11};
    int *p = NULL;
    p = &x;
    *p = 10;
    p = &z[1];
    *(&z[0] + 1) += 3;
    printf("%d, %d, %d\n", x, z[0], z[1]);
    return 0;
}
```

(a) 1, 10, 11

(b) 1, 10, 14

(c) 10, 14, 11

(d) 10, 10, 14

Answer d

2. What is printed by the following ANSI C program?

```
#include<stdio.h>
int main(int argc, char *argv[])
{
    int a[3][3][3] = { {1, 2, 3, 4, 5, 6, 7, 8, 9},
                      {10, 11, 12, 13, 14, 15, 16, 17, 18},
                      {19, 20, 21, 22, 23, 24, 25, 26, 27} };
    int i = 0, j = 0, k = 0;
    for(i = 0; i < 3; i++) {
        for(k = 0; k < 3; k++)
            printf("%d ", a[i][j][k]);
        printf("\n");
    }
    return 0;
}
```

(a) 1 2 3 \n 10 11 12\n 19 20 21

(c) 1 2 3\n 4 5 6 \n 7 8 9

(b) 1 4 7\n 10 13 16\n 19 22 25

(d) 1 2 3\n 13 14 15\n 25 26 27

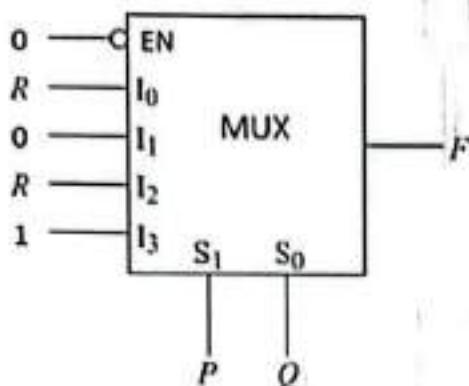
Answer: a



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON IoT/EMBEDDED SYSTEMS

3. The figure below shows the multiplexer where S_1 and S_2 are the select lines, I_0 to I_3 are the input data lines, EN is the enable line and $F(P, Q, R)$ is the output F is



a) $PQ + Q'R$

b) $P + QR'$

c) $PQ'R + P'Q$

d) $Q' + PR$

Answer: a

4. A function (A, B, C) defined by three Boolean variables A, B and C when expressed as sum of products is given by $F = A'B'C' + A'B'C + A'B'C' + A'B'C'$ where, A' , B' , and C' are the complements of the respective variables. The product of sums (POS) form of the function F is

a) $F = (A + B + C) \cdot (A + B' + C) \cdot (A' + B + C)$

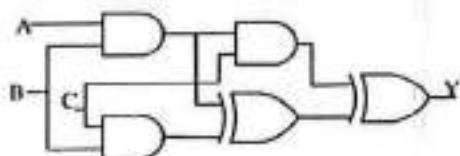
b) $F = (A' + B' + C') \cdot (A' + B + C') \cdot (A + B' + C')$

c) $F = (A + B + C') \cdot (A + B' + C') \cdot (A' + B + C') \cdot (A' + B' + C) \cdot (A' + B' + C')$

d) $F = (A' + B' + C) \cdot (A' + B + C) \cdot (A + B' + C) \cdot (A + B + C') \cdot (A' + B + C)$

Answer: c

5. The output of the combinational circuit given below is



a) $A + B + C$

b) $A(B + C)$

c) $B(C + A)$

d) $C(A + B)$

Answer: c

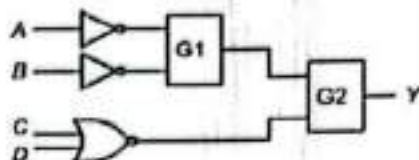


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CERTIFICATE COURSE ON IoT/EMBEDDED SYSTEMS

6. In the figure the $Y = AB + C'D'$, the respectively

output Y is required to be gates G1 and G2 must be



- a) NOR, OR b) OR, NAND c) NAND, OR d) AND, NAND

Answer: a

7. A function of Boolean variables X, Y, Z is expressed in terms of minterms as $F(X, Y, Z) = \sum(1, 2, 5, 6, 7)$.

Which one is the product of sums is equal to the function $F(X, Y, Z)$.

- a. $(X' + Y' + Z')(X' + Y + Z)(X + Y' + Z)$
b. $(X + Y + Z)(X + Y' + Z)(X' + Y + Z)$
c. $(X' + Y' + Z')(X' + Y + Z')(X + Y' + Z)(X + Y + Z')$
d. $(X + Y + Z')(X' + Y + Z)(X' + Y + Z')(X' + Y' + Z)(X' + Y' + Z')$

Answer: b

8. The minimum number of 2-input NAND gates required to implement a 2-input XOR gate is

a) 4 b) 5 c) 6 d) 7

Answer: a

9. The software used to drive microprocessor-based systems is called:

- a) Assembly language b) Firmware
c) Machine language Code d) BASIC interpreter instructions

Answer: a

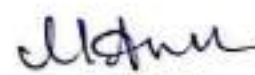
10. What kind of computer program is used to convert mnemonic code to machine code?

- a) debug b) Assembler c) C++ d) Fortran

Answer: b

S. Anur
PROGRAM COORDINATORS




HoD/ECE
Head of the Department
Department of Electronics & Communication Engineering
NPR College of Engineering & Technology
Nathan, Dindigul (Tamil Nadu)



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON IoT/EMBEDDED SYSTEMS

Name of the Student: <u>S. Mahavashini</u>	Year & Dept.: <u>IV ECE</u>
Name of the Resource Person: <u>Dr. S. Madhava Pandiyan</u>	

S. No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1.	Course Content.	✓				
2.	Course delivered by the Resource Person		✓			
3.	Practical knowledge gained during the training.		✓			
4.	Facilitation provided during practice	✓				
5.	Time Management	✓				
6.	Overall rating of this course		✓			

S. mlh

Signature of the Student





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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON IoT/EMBEDDED SYSTEMS

Name of the Student: <i>D. Pandhija</i>	Year & Dept.: <i>IV ECE</i>
Name of the Resource Person: <i>Dr. S. Madhavapandiyar</i>	

S. No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1.	Course Content.	✓				
2.	Course delivered by the Resource Person	✓				
3.	Practical knowledge gained during the training.		✓			
4.	Facilitation provided during practice		✓			
5.	Time Management			✓		
6.	Overall rating of this course		✓			

D. Pandhija

Signature of the Student





DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON IoT/EMBEDDED SYSTEMS

Name of the Student: <i>S. Ajitha</i>	Year & Dept.: <i>1st - ECE</i>
Name of the Resource Person: <i>Dr. S. Madhava Pandiyan</i>	

S. No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1.	Course Content.	✓				
2.	Course delivered by the Resource Person		✓			
3.	Practical knowledge gained during the training.		✓			
4.	Facilitation provided during practice	✓				
5.	Time Management		✓			
6.	Overall rating of this course		✓			

S. Ajitha
Signature of the Student





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CERTIFICATE COURSE ON IoT/EMBEDDED SYSTEMS

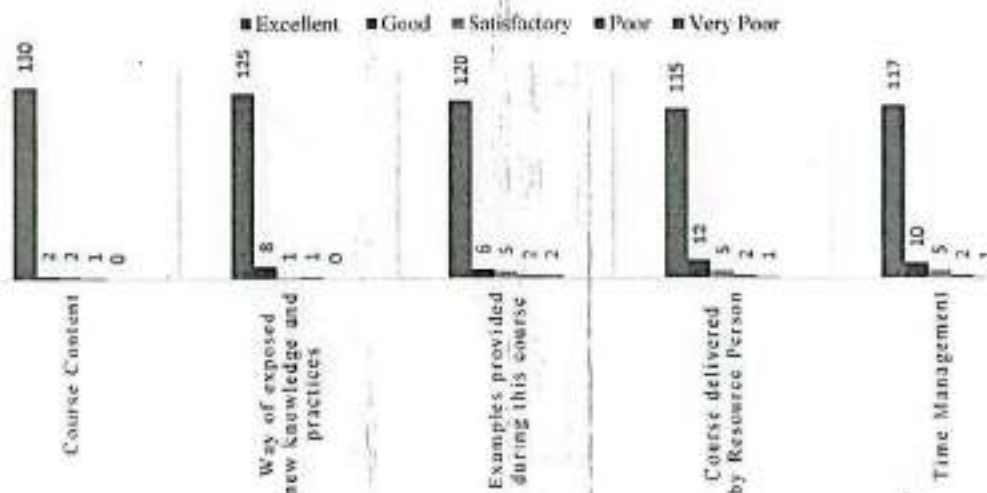
FEEDBACK ANALYSIS

TOTAL STRENGTH: 141

DATE: 06.03.2023

S.No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1.	Course Content	130	2	2	1	0
2.	Way of exposed new knowledge and practices	125	8	1	1	0
3.	Examples provided during this course	120	6	5	2	2
4.	Course delivered by Resource Person	115	12	5	2	1
5.	Time Management	117	10	5	2	1
Average %		121.4	7.6	3.6	1.6	0.8

FEEDBACK ANALYSIS



Head of the Department

Department of Electronics & Communication Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401

Coordinator - IQAC

NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401

Dr. J. SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON IoT/EMBEDDED SYSTEMS

SUMMARY

The Department of Electronics and Communication Engineering organized a certificate course on "IoT/Embedded Systems" from 27.02.2023 to 04.03.2023(6 Days) at Embedded Laboratory.

During the inauguration session on 27.02.2023 Ms.C.Harini, III year ECE delivered the welcome address.

Ms.P.Archana, III year ECE introduced the resource person.

Dr.J.Sundarajan, Principal inaugurated the program and delivered the inaugural address.

The resource person Dr.S.Madhavapandian, Design Lead, Tessolve Semiconductor Pvt. Ltd., Bengaluru during his address gave detailed explanation of IoT and Embedded systems. The certificate program was conducted as per the schedule

Finally, he discussed about the questions asked in interviews. He encouraged the students to do more projects in IoT to solve the real time problems.


141 Students attended who participated and successfully completed the Quiz program were awarded with certificates.

Ms.A.Meera Jafri, III ECE delivered the vote of thanks.

S. 
Program
Coordinator


HOD-ECE

Head of the Department
Department of Electronics & Communication Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) 624 401


IQAC

Coordinator - IQAC
NPR College of Engineering & Technology
Natham, Dindigul (DT)-624 401


Principal
Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
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Natham, Dindigul (DT) - 624 401.





DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON IoT/EMBEDDED SYSTEMS

COURSE MATERIAL

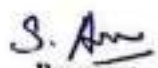
Material Link:

CHAPTER1- 5

<https://drive.google.com/drive/folders/1Ke07HwIPYHJ127bUsHmBW2DfrH6g1g7usp=sharing>

Further Study:

1. Honbo Zhou, "Internet of Things in the cloud: A middleware perspective", CRC press, 2012.
2. Vijay Madiseti and Arshdeep Bahga, "Internet of Things (A Hands-on Approach)", VPT, 1st Edition, 2014.
3. Joseph Yiu, The Definitive Guide to the ARM CORTEX M3/M4, Second Edition, Elsevier, 2010.
4. Andrew N Sloss, Dominic Symes, Chris Wright, ARM System Developers Guide Designing and Optimising System Software, Elsevier, 2006
5. Michael J Flynn and Wayne Luk, Computer System Design, System On Chip, Wiley India 2011


S. An
Program
Coordinator


HoD-ECE


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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CERTIFICATE COURSE ON IoT/EMBEDDED SYSTEMS

CERTIFICATES OF THE PROGRAM

TESSOLVE
A Hero Electronix Venture

Certificate of Completion

This is to certify that

AARTHY M

Has successfully completed the Certification Training Program on

IOT / Embedded Systems

Authorised by NPR College of Engineering and Technology, Natham

from 27-02-2023 to 04-03-2023

Certificate No. : TESSOLVE/2023-24/3811
Date of Issue : 6/3/2023

Srinivas Chinamalli
Srinivas Chinamalli
CEO

Dr. J.SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

NPR College of Engineering & Technology

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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

ADD ON COURSE (2022-2023)

INDEX

COURSE CODE& NAME: 22AO01& Artificial Intelligence Tools for Electrical Drive Control

ACADEMIC YEAR: 2022-23

SEMESTER: ODD

DURATION: 35 HOURS

S.No.	Particulars	Page No.
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9	Quiz Question Paper With Answer	15
10	Student's Feedback	18
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PROGRAM

CO-ORDINATOR

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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

PERMISSION LETTER

DATE: 20.10.2022

From

The Head of the Department,
Electrical and Electronics Engineering,
NPR College of Engineering & Technology,
Natham.

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Respected Sir,


Sub: Request for permission to conduct Add on course for EEE students – Regarding

With reference to the above subject, the application is hereby submitted for your approval to conduct Add on Course on “**Artificial Intelligence Tools for Electrical Drive Control**” to our students from 01.11.2022 to 07.11.2022 (5 Days) in our college premises. In this regard we have proposed **Er. R.Muruganandham, Lakshmi Electrical Drives Private Ltd, Coimbatore** and his team as a resource person for this Add on course. Kindly permit us to conduct the same.

Thanking you



Yours faithfully,


Head of the Department
Department of Electrical & Electronics Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401



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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ADD ON COURSE ON

ARTIFICIAL INTELLIGENCE TOOLS FOR ELECTRICAL DRIVE CONTROL

RESOURCE PERSON'S PROFILE

Name	:	Er.R.Muruganandham
Designation	:	Senior Engineer
Company Name	:	Lakshmi Electrical Drives Pvt Ltd, Coimbatore
About Resource Person	:	He is having 19 years Experience in Managing Projects and Resources in Electrical System Design and Control Systems, Knowledge of low and medium voltage power systems and applicable standards.

Name	:	Er.T.Ramesh Subburam
Designation	:	Industrial Engineer
Company Name	:	Lakshmi Electrical Drives Pvt Ltd, Coimbatore
About Resource Person	:	He is working as an Industrial Engineer at Lakshmi Electrical Drives Pvt Ltd, Coimbatore with more knowledge in AI Tools, PLC, SCADA, HMI, Industrial drives and handling industrial automation panels.

PROGRAM

CO-ORDINATOR

(Dr. S. Prakash)

HOD/EEE

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CIRCULAR

NPRCET/OFF/EEE/VAC/2022-23

DATE: 21/10/2022

This is to inform that Department of Electrical and Electronics Engineering is planned to conduct a Certificate program on “**Artificial Intelligence Tools for Electrical Drive Control**” for III & IV year EEE students in our college campus during this Odd semester 2022 -2023. Interested students can enroll their name to the program coordinator on or before 28.10.22.

The details of the training program are given below :

COURSE NAME	:	Artificial Intelligence Tools for Electrical Drive Control
RESOURCE PERSONS	:	1. Er. R.Muruganandham 2. Er.T.Ramesh Subburam Lakshmi Electrical Drives Private Ltd, Coimbatore
VENUE	:	Electrical Machines Lab
DATE & DURATION	:	01.11.2022 to 07.11.2022 & 35 Hours
PROGRAM COORDINATOR	:	Dr.S.Prakash, AP/EEE, NPRCET

Copy to:

1. All the HoDs
2. IQAC
3. Notice Board
4. File
5. All the class rooms



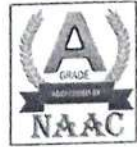
PRINCIPAL
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*The Management, Principal, Staff and Students
Cordially invite you for the inauguration of*

Add on Course on
Artificial Intelligence Tools for Electrical Drive Control

On 01st November, 2022

Venue: Electrical Machines Lab at 10.00 AM

CHIEF GUEST

Er. R.Muruganandham

Lakshmi Electrical Drives Private Ltd, Coimbatore

PRINCIPAL

Dr.J.Sundararajan

NPR College of Engineering & Technology

Felicitates the Function



Organized By



*Department of Electrical and Electronics Engineering,
NPR College of Engineering & Technology, NPR Nagar,*

Natham.





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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ADD ON COURSE ON

ARTIFICIAL INTELLIGENCE TOOLS FOR ELECTRICAL DRIVE CONTROL

COURSE CONTENT

Course Duration : 35 hours

CHAPTER 1 : CONTROL CIRCUIT COMPONENTS

- Switches – Push button, selector, drum, limit, pressure, temperature (Thermostat), float, zero speed and proximity switches.
- Relays – Voltage relay, DC series current relay, frequency response relay, latching relay and phase failure relay (single phasing preventer), Over current relay
- Timer – Thermal Pneumatic and Electronic timer
- Solid state relay, Simple ON-OFF motor control circuit
- Remote control operation and interlocking of drives

CHAPTER 2 : AC MOTOR CONTROL CIRCUITS

- Motor current at start and during acceleration
- No load speed and final speed of motor, DOL starter
- Automatic auto transformer starter (open circuit and closed circuit transition)
- Star/Delta starter (semi automatic and automatic)
- Starter for two speed two winding motor
- Reversing the direction of rotation of induction motor
- Three step rotor resistance starter for wound induction motor
- Secondary frequency acceleration starter

CHAPTER 3 : INDUSTRIAL CONTROL CIRCUITS

- Planner machine control
- Skip hoist control
- Automatic control of a water pump
- Control of electric oven Control of air compressor
- Control of over head crane
- Trouble spots in control circuits
- General procedure for trouble shooting



CHAPTER 4 : PROGRAMMABLE LOGIC CONTROLLER AUTOMATION

- Types of automation (manufacturing and nonmanufacturing)
- Advantages of automation



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- Modes of operation
- PLC scan, Memory organization
- Input module, Output module (schematic and wiring diagram)
- Types of Programming Devices
- PLC Types (Fixed and Modular)
- Criteria for selection of suitable PLC
- List of various PLCs available.

CHAPTER 5 : PLC PROGRAMMING

- Different programming languages
- Ladder diagram, Relay type instruction
- Timer instruction, ON delay and OFF delay Timer
- Retentive Timer Instruction – Cascading Timers
- Ladder logic diagram for DOL Starter
- Automatic STAR-DELTA Starter -rotor resistance starter
- EB to Generator changeover system

Criteria to get Certificate

- Students should register their names for this course
- Students must have 85% attendance
- Students should secure 50% marks in the exam

Prepared By: Dr.S.Prakash, AP/EEE, NPRCET


HOD/EEE

Head of the Department
Department of Electrical & Electronics Engineering
NPR College of Engineering & Technology
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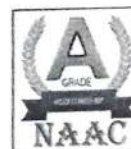

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- Coordinator - IQAC
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PRINCIPAL

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Natham, Dindigul (Dt) - 624 401.



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ADD ON COURSE ON

ARTIFICIAL INTELLIGENCE TOOLS FOR ELECTRICAL DRIVE CONTROL

REGISTERED STUDENT'S LIST

S.No.	Register Number	Name of the student	Year
1.	920821105003	Jeevadarani P	II - EEE
2.	920821105008	Logesh S	II - EEE
3.	920821105014	Naresh Karthik M S	II - EEE
4.	920821105026	Vishal Ganesh J	II - EEE
5.	920821105301	Gokulakrishnan N	II - EEE
6.	920820105001	Baskar A	III - EEE
7.	920820105003	Govindarajan A	III - EEE
8.	920820105005	Ishas Ahamed A	III - EEE
9.	920820105007	Jeyaram M	III - EEE
10.	920820105008	Justin Thiraviyam A	III - EEE
11.	920820105009	Kabil Sharma M	III - EEE
12.	920820105010	Logesh Kumar M	III - EEE
13.	920820105012	Mohammed Ashik S	III - EEE
14.	920820105013	Ramar V	III - EEE
15.	920820105014	Saravanakumar S	III - EEE
16.	920820105015	Saravanamuthu K	III - EEE
17.	920820105016	Sarwesh R	III - EEE
18.	920820105017	Tharun N	III - EEE
19.	920820105018	Thavamani A	III - EEE
20.	920820105019	Venkatesh V	III - EEE
21.	920820105302	Bharatha Raja S	III - EEE
22.	920820105303	Brintha R	III - EEE
23.	920820105304	Ganesh S	III - EEE
24.	920820105305	Geethanjali Devi M	III - EEE
25.	920820105306	Hareesh K S	III - EEE
26.	920820105307	Kalaiselvi S	III - EEE
27.	920820105308	Krishna Pandiyan S	III - EEE
28.	920820105309	Lakshmanan T	III - EEE
29.	920820105310	Loganathan M	III - EEE
30.	920820105311	Mohammed Harish H	III - EEE





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S.No.	Register Number	Name of the student	Year
31.	920820105312	Monika K	III - EEE
32.	920820105314	Praveen Kumar R	III - EEE
33.	920820105315	Reegan S	III - EEE
34.	920820105316	Sanron Mathi S	III - EEE
35.	920820105317	Shylesh Kumar V	III - EEE
36.	920820105318	Siva S	III - EEE
37.	920819105001	Ahamed Afzar A	IV - EEE
38.	920819105002	Aravind Kumar K	IV - EEE
39.	920819105003	Guru Prasath A	IV - EEE
40.	920819105004	Karthikeyan R	IV - EEE
41.	920819105005	Kasthuri M	IV - EEE
42.	920819105006	Lakshmi Priya A	IV - EEE
43.	920819105007	Logeshwaran N	IV - EEE
44.	920819105009	Pitchiyatha D	IV - EEE
45.	920819105010	Poornakumar V	IV - EEE
46.	9208191050011	Pradap Kannan B	IV - EEE
47.	920819105012	Rajamurugan M	IV - EEE
48.	920819105013	Rajasekar M	IV - EEE
49.	920819105014	Sujeethran S	IV - EEE
50.	920819105015	Usha Devi	IV - EEE

PROGRAM COORDINATOR

(Dr. S. Prakash)

HOD/EEE

IQAC

PRINCIPAL

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Department of Electrical & Electronics Engineering
NPR College of Engineering & Technology
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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
ADD ON COURSE ON
ARTIFICIAL INTELLIGENCE TOOLS FOR ELECTRICAL DRIVE CONTROL
Course Schedule

EXTERNAL RESOURCE PERSON	INTERNAL RESOURCE PERSONS
1. Er. R.Muruganandham	1. Dr.P.Kanirajan Professor/EEE
2. Er.Ramesh Subburam	2. Mr.K.Rajesh AP/EEE

Day 1 01.11.2022	9.00 a.m.	Registration	
	9.30 a.m. to 10.00 a.m.	Inauguration	
	10.00 a.m. to 11.10 a.m.	Session 1	Control Circuit Components Er. R.Muruganandham
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Solid state relay, Simple ON-OFF motor control circuit Er.T.Ramesh Subburam
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	Remote control operation and interlocking of drives Er. R.Muruganandham
	3.40 p.m. to 3.50 p.m.	Tea Break	
Day 2 02.11.2022	9.30 a.m. to 11.10 a.m.	Session 1	PLC PROGRAMMING Different programming languages Ladder diagram – Relay type instruction Mr.K.Rajesh, AP/EEE
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Ladder logic diagram for DOL Starter Dr.P.Kanirajan, Professor/EEE
	1.10 p.m. to 2.00 p.m.	Lunch Break	
	2.00 p.m. to 3.40 p.m.	Session 3	Automatic STAR-DELTA Starter rotor resistance starter Mr.K.Rajesh AP/EEE
	3.40 p.m. to 3.50 p.m.	Tea Break	
Day 3 03.11.2022	3.50 p.m. to 4.30 p.m.	Session 4	EB to Generator changeover system Dr.P.Kanirajan Professor/EEE
	9.30 a.m. to 11.10 a.m.	Session 1	Types of automation (manufacturing and nonmanufacturing) Mr.K.Rajesh, AP/EEE
	11.10 a.m. to 11.30 a.m.	Tea Break	
	11.30 a.m. to 1.10 p.m.	Session 2	Types of Programming Devices





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			Er.T.Ramesh Subburam
	1.10 p.m. to 2.00 p.m.		<i>Lunch Break</i>
	2.00 p.m. to 3.40 p.m.	Session 3	Criteria for selection of suitable PLC Mr.K.Rajesh, AP/EEE
	3.40 p.m. to 3.50 p.m.		<i>Tea Break</i>
	3.50 p.m. to 4.30 p.m.	Session 4	List of various PLCs available. Dr.P.Kanirajan, Professor/EEE
Day 4 04.11.2022	9.30 a.m. to 11.10 a.m.	Session 1	Automatic auto transformer starter (open circuit and closed circuit transition) Er.T.Ramesh Subburam
	11.10 a.m. to 11.30 a.m.		<i>Tea Break</i>
	11.30 a.m. to 1.10 p.m.	Session 2	Starter for two speed two winding motor Dr.P.Kanirajan, Professor/EEE
	1.10 p.m. to 2.00 p.m.		<i>Lunch Break</i>
	2.00 p.m. to 3.40 p.m.	Session 3	Reversing the direction of rotation of induction motor Mr.K.Rajesh, AP/EEE
	3.40 p.m. to 3.50 p.m.		<i>Tea Break</i>
	3.50 p.m. to 4.30 p.m.	Session 4	Three step rotor resistance starter for wound induction motor Dr.P.Kanirajan, Professor/EEE
Day 5 07.11.2022	9.30 a.m. to 11.10 a.m.	Session 1	Industrial Control Circuits Planner machine control, Skip hoist control, Automatic control of a water pump Er.R.Muruganandham
	11.10 a.m. to 11.30 a.m.		<i>Tea Break</i>
	11.30 a.m. to 1.10 p.m.	Session 2	Control of over head crane Trouble spots in control circuits Er.T.Ramesh Subburam.
	1.10 p.m. to 2.00 p.m.		<i>Lunch Break</i>
	2.00 p.m. to 3.40 p.m.	Session 3	Control of electric oven Control of air compressor Mr.K.Rajesh, AP/EEE
	3.40 p.m. to 3.50 p.m.		<i>Tea Break</i>
	3.50 p.m. to 4.30 p.m.	Session 4	General procedure for trouble shooting Er. R.Muruganandham
	4.30 p.m. to 5.00 p.m.		Valedictory



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COORDINATOR

HOD/EEE

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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

ADD ON COURSE ON

ARTIFICIAL INTELLIGENCE TOOLS FOR ELECTRICAL DRIVE CONTROL

STUDENT'S ATTENDANCE

S.No	Register Number	Student Name	01.11.22		02.11.22		03.11.22		04.11.22		07.11.22	
			FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1.	920821105003	Jeevadharani P	/	/	/	/	/	/	/	/	/	/
2.	920821105008	Logesh S	/	/	/	/	/	/	/	/	/	/
3.	920821105014	Naresh Karthik M S	/	/	/	/	/	/	/	/	/	/
4.	920821105026	Vishal Ganesh J	/	/	/	/	/	/	/	/	/	/
5.	920821105301	Gokulakrishnan N	/	/	/	/	/	/	/	/	/	/
6.	920820105001	Baskar A	/	/	a	a	/	/	/	/	/	/
7.	920820105003	Govindarajan A	/	/	/	/	/	/	/	/	/	/
8.	920820105005	Ishas Ahamed A	/	/	/	/	/	/	/	/	a	a
9.	920820105007	Jeyaram M	/	/	/	/	/	/	/	/	/	/
10.	920820105008	Justin Thiraviyam A	/	/	/	/	a	a	/	/	a	a
11.	920820105009	Kabil Sharma M	/	/	/	/	/	/	/	/	a	a
12.	920820105010	Logesh Kumar M	/	/	/	/	/	/	/	/	/	/
13.	920820105012	Mohammed Ashik S	/	/	/	/	/	/	/	/	/	/
14.	920820105013	Ramar V	/	/	/	/	/	/	/	/	/	/
15.	920820105014	Saravanakumar S	/	/	/	/	/	/	/	/	/	/
16.	920820105015	Saravanamuthu K	/	/	/	/	/	/	/	/	/	/
17.	920820105016	Sarwesh R	/	/	/	/	/	/	/	/	/	/
18.	920820105017	Tharun N	/	/	/	/	/	/	/	/	/	/
19.	920820105018	Thavamani A	/	/	/	/	/	/	/	/	/	/
20.	920820105019	Venkatesh V	/	/	a	a	/	/	/	/	/	/
21.	920820105302	Bharatha Raja S	/	/	/	/	/	/	/	/	/	/
22.	920820105303	Brintha R	/	/	/	/	/	/	/	/	/	/
23.	920820105304	Ganesh S	/	/	/	/	/	/	/	/	/	/





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S.No.	Register Number	Student Name	01.11.22		02.11.22		03.11.22		04.11.22		07.11.22	
			FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
24.	920820105305	Geethanjali Devi M	/	/	/	/	/	/	/	/	/	/
25.	920820105306	Hareesh K S	/	/	/	/	/	/	/	/	/	/
26.	920820105307	Kalaiselvi S	/	/	/	/	/	/	/	/	/	/
27.	920820105308	Krishna Pandiyan S	/	/	/	/	/	/	/	/	/	/
28.	920820105309	Lakshmanan T	/	/	a	a	/	/	/	/	/	/
29.	920820105310	Loganathan M	/	/	/	/	/	/	/	/	/	/
30.	920820105311	Mohammed Harish H	/	/	/	/	/	/	/	/	/	/
31.	920820105312	Monika K	/	/	/	/	/	/	/	/	/	/
32.	920820105314	Praveen Kumar R	/	/	/	/	/	/	/	/	/	/
33.	920820105315	Reegan S	/	/	/	/	/	/	/	/	/	/
34.	920820105316	Sanron Mathi S	/	/	/	/	/	/	/	/	/	/
35.	920820105317	Shylesh Kumar V	/	/	/	/	/	/	/	/	/	/
36.	920820105318	Siva S	/	/	/	/	/	/	/	/	/	/
37.	920819105001	Ahamed Afzar A	/	/	/	/	a	a	/	/	/	/
38.	920819105002	Aravind Kumar K	/	/	/	/	/	/	/	/	/	/
39.	920819105003	Guru Prasath A	/	/	/	/	a	a	/	/	/	/
40.	920819105004	Karthikeyan R	/	/	/	/	/	/	/	/	/	/
41.	920819105005	Kasthuri M	/	/	/	/	/	/	/	/	/	/
42.	920819105006	Lakshmi Priya A	/	/	a	a	/	/	/	/	/	/
43.	920819105007	Logeshwaran N	/	/	/	/	/	/	/	/	/	/
44.	920819105009	Pitchiyatha D	/	/	/	/	/	/	a	a	/	/
45.	920819105010	Poornakumar V	/	/	/	/	/	/	/	/	/	/
46.	9208191050011	Pradap Kannan B	/	/	/	/	/	/	/	/	/	/
47.	920819105012	Rajamurugan M	a	a	/	/	/	/	/	/	/	/
48.	920819105013	Rajasekar M	/	/	/	/	/	/	/	/	/	/
49.	920819105014	Sujeethran S	/	/	/	/	/	/	/	/	a	a
50.	920819105015	Ushadevi C	/	/	/	/	/	/	/	/	/	/





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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

ADD ON COURSE ON

ARTIFICIAL INTELLIGENCE TOOLS FOR ELECTRICAL DRIVE CONTROL

STUDENT'S ATTENDANCE

S.No	Register Number	Student Name	01.11.22		02.11.22		03.11.22		04.11.22		07.11.22	
			FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
PRESENT			49	49	46	46	47	47	49	49	46	46
ABSENT			01	01	04	04	03	03	01	01	04	04
TOTAL			50	50	50	50	50	50	50	50	50	50
PROGRAM COORDINATOR			Pr	Pr	Pr	Pr	Pr	Pr	Pr	Pr	Pr	Pr

PROGRAM COORDINATOR

(Signature)
De. S. Prakash

HOD/EEE

(Signature)

IQAC

(Signature)

PRINCIPAL

(Signature)

Coordinator - IQAC

Dr. J. SUNDARARAJAN

NPR College of Engineering & Technology

B.E., M.Tech., Ph.D.

Natham, Dindigul (Dt)-624 401

Principal

N.P.R. College of Engineering

Natham, Dindigul (Dt) - 624 401.





DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ADD ON COURSE ON

ARTIFICIAL INTELLIGENCE TOOLS FOR ELECTRICAL DRIVES COURSE

SAMPLE QUESTION PAPER & ANSWER

NAME OF THE STUDENT:

MARKS: 10

1. Plugging is suitable for _____ type loads.
 - a) Gravitational
 - b) Electrostatic
 - c) Weightless
 - d) Leading
2. In DC shunt machine ϕ is directly proportional to I_a .
 - a) True
 - b) False
3. Braking resistance should be selected in order to limit the braking current.
 - a) True
 - b) False
4. Torque developed in the motor is _____.
 - a) $K_m \phi I_a$
 - b) $K_m \phi I_a^3$
 - c) $2K_m \phi I_a$
 - d) $K_m \phi I_a^2$
5. Full form of TVR is _____.
 - a) Terminal voltage reversal
 - b) Total voltage reversal
 - c) Terminal voltage redirect
 - d) Total voltage reversal





6. Calculate the current in DC shunt field winding using the following data: $I_a=15$ A, $I_f=21$, $R=22$, $N=484$.
- a) 4 A
 - b) 2 A
 - c) 7 A
 - d) 6 A
7. The shape of the speed-armature current characteristics in DC shunt motor is _____
- a) Hyperbolic
 - b) Parabola
 - c) Negative slope linear line
 - d) Ellipse
8. The shape of the speed-torque characteristics in DC shunt motor is _____
- a) Rectangular Hyperbolic
 - b) Whole x-y plane
 - c) Circle
 - d) Ellipse
9. DC shunt motors are used where the high _____ is required.
- a) Starting torque
 - b) Maximum torque
 - c) Minimum torque
 - d) Breakdown torque
10. The relationship between the torque(T) and power(P) developed in the DC shunt motor is _____ (Neglecting all the losses)
- a) $T \propto \sqrt{P}$
 - b) $T \propto P^2$
 - c) $T \propto \sqrt[3]{P}$
 - d) $T \propto P$





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ANSWERS:


1. a
2. b
3. a
4. a
5. a
6. d
7. c
8. b
9. a
10. d




PROGRAM COORDINATOR
(Dr. S. Prakash)


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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

ADD ON COURSE ON


ARTIFICIAL INTELLIGENCE TOOLS FOR ELECTRICAL DRIVE CONTROL

STUDENT'S FEEDBACK

Date: 7.11.22

Name of the Student : R. Sarvesh	Year / Semester: III / V
Name of the Program: Add on Course on Artificial Intelligence Tools for Electrical Drive Control	

S.No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1	Course Content	✓				
2	Way of Exposed New Knowledge and Practices		✓			
3	Examples Provided during this Course	✓				
4	Course Delivered by Resource Person	✓				
5	Time Management		✓			
6	Overall rating of this Course	✓				


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(Dr. S. Prakash)


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ADD ON COURSE ON

ARTIFICIAL INTELLIGENCE TOOLS FOR ELECTRICAL DRIVE CONTROL

STUDENT'S FEEDBACK

Date: 7.11.22

Name of the Student : <u>M. Greethanjali Devi</u>	Year / Semester: <u>III / V</u>
Name of the Program: Add on Course on Artificial Intelligence Tools for Electrical Drive Control	

S.No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1	Course Content	✓				
2	Way of Exposed New Knowledge and Practices	✓				
3	Examples Provided during this Course	✓				
4	Course Delivered by Resource Person		✓			
5	Time Management		✓			
6	Overall rating of this Course	✓				
7	Any Other Comments / Suggestions	NIL				

PROGRAM COORDINATOR

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(Dr. S. Prakash)

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Ichm

2

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ADD ON COURSE ON

DESIGN OF INDUSTRIAL POWER DISTRIBUTION AND LIGHTING SYSTEM

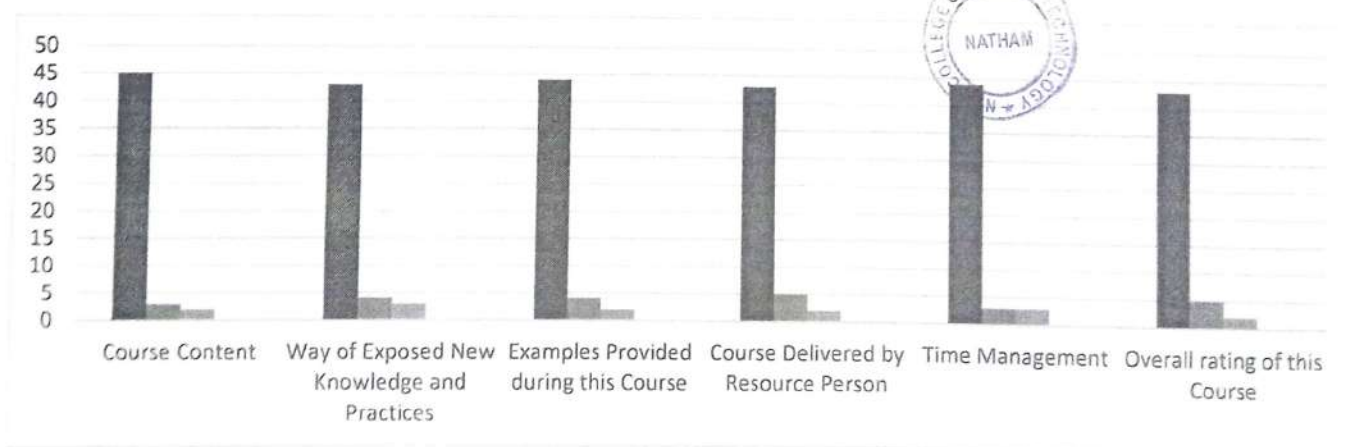
STUDENT'S FEEDBACK ANALYSIS REPORT

TOTAL STRENGTH: 50

DATE: 07.11.2022

S.No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1	Course Content	45	03	02	00	00
2	Way of Exposed New Knowledge and Practices	43	04	03	00	00
3	Examples Provided during this Course	44	04	02	00	00
4	Course Delivered by Resource Person	43	05	02	00	00
5	Time Management	44	03	03	00	00
6	Overall rating of this Course	43	05	02	00	00
	Average	44	4	2	00	00

Total number of students successfully completed the course: 30



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COORDINATOR

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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

ADD ON COURSE ON

ARTIFICIAL INTELLIGENCE TOOLS FOR ELECTRICAL DRIVE CONTROL

SUMMARY REPORT

The Department of Electrical and Electronics Engineering organized Add on course on "Artificial Intelligence Tools for Electrical Drive Control" from 01.11.2022 to 07.11.2022 (5 days) at Electrical Machines Lab Ms.C.Usha Devi IV Year student delivered the welcome address.

Principal of our college **Dr.J.Sundararajan** inaugurated the program and delivered the inaugural address. **Er. R.Muruganandham** from Lakshmi Electrical Drives Private Ltd, Coimbatore had participated with us and shared his knowledge with our students. This five days course gave us the good over view on Advanced Control Methods of Electrical Drives and provided lots of information regarding the topic. In addition to this, it also gave the information on future outcomes.

They shared their knowledge of fundamentals and principles of Electrical Drives and control techniques which enables the students to have skills to resolve complex real world problems for decision support. Our students learnt various existing and emerging technologies of concept of Control of Electric drives 30 students of EEE department from II Year, III Year and IV Year have attended the course and completed it successfully and were awarded with certificates.

Finally, the course was concluded by Mr.N.Tharun, III Year EEE by delivering the vote of thanks.




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Department of Electrical & Electronics Engineering
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Certificate of Completion

This is to certify that Mr./Ms. C.Usha Devi IV - EEE has successfully completed the five day Add on course entitled "Artificial Intelligence Tools for Electrical Drive Control" organized by Department of Electrical and Electronics Engineering, NPR College of Engineering & Technology. The course was conducted from 01/11/2022 to 07/11/2022.

CONGRATULATIONS ON YOUR ACHIEVEMENT!



PROGRAMME CO-ORDINATOR
DR.S.PRAKASH

HOD/EEE
[DR.P.KANIRAJAN]

PRINCIPAL
[DR.J.SUNDARARAJAN]



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ADD ON COURSE ON

ARTIFICIAL INTELLIGENCE TOOLS FOR ELECTRICAL DRIVE CONTROL

COURSE MATERIAL / MANUAL

1. https://drive.google.com/file/d/19dZ43H-epM4Xfz37SYRt_zG2eLHHoINb/view
2. <https://drive.google.com/file/d/1cyP4NUFiiT1GM9z3hOw2M0USY5DL15TJ/view>
3. <https://drive.google.com/file/d/1GiyMKZz1tHx2BMXc0jnVUpIycK-PWPjL/view>
4. https://drive.google.com/file/d/1_w8N5CWc8itm_elhNBvEXiBhWMFnkfIK/view
5. https://drive.google.com/file/d/19Z6JXkpBeNRe5cM3JSkzlot_w5SebKYb/view

PROGRAM COORDINATOR

D. S. Prakash

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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

CERTIFICATE COURSE (2022-2023)

INDEX

COURSE CODE & NAME: 22EECC01 & CERTIFICATE COURSE ON INDUSTRIAL AUTOMATION

ACADEMIC YEAR: 2022-23

SEMESTER: ODD

DURATION: 35 HOURS

S.No	Particulars	Page No
1	Permission letter	2
2	Resource person's profile	3
3	Circular to students	4
4	Course content	5
5	Invitation	8
6	Registered students Name list	9
7	Course Schedule	11
8	Student daily attendance	13
9	Quiz sample question paper with answer	15
10	Photo gallery	18
11	Student's feedback	19
12	Feedback analysis	21
13	Summary	22
14	Course material/manual	23
15	Certificates of the course	24



K. V. Mani
PROGRAM COORDINATOR

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(Dr. K. Vijayakumar) Head of the Department
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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

PERMISSION LETTER

DATE: 07-10-2022

From:

The Head of the Department,
Electrical and Electronics Engineering,
NPR College of Engineering & Technology,
Natham.

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Respected Sir,

Sub: Request for permission to conduct certificate course for EEE students – Regarding

With reference to the above subject, the application is hereby submitted for your approval to conduct certificate course on “**Industrial Automation**” to our students from 17/10/2022 to 21/10/2022 (5 Days) in our college premises. In this regard, we have proposed **Mr.S.Jayaseelan, PLC, HMI Programmer & Trainer, TVS Training Services, Chennai** as a resource person for this certificate course program. Kindly permit us to conduct the same.

Thanking you.

Yours faithfully



[Signature]
Head of the Department
Department of Electrical & Electronics Engineering
NPR College of Engineering & Technology
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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CERTIFICATE COURSE ON

INDUSTRIAL AUTOMATION

RESOURCE PERSON'S PROFILE

Name	:	Mr.S.Jayaseelan
Designation	:	PLC,HMI Programmer & Trainer
Company Name	:	TVS Training and Service, Chennai
About Resource Person	:	He is working as a PLC, HMI Programmer and Trainer in TVS Training and Services, Chennai. He has 15 years of experience in designing, developing, and delivering comprehensive training programs. He handled Industrial Pneumatics, PLC & HMI Programming, Mechatronics & Automation, Embedded systems, IoT, Control panel design projects.

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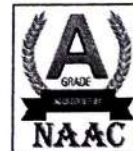




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CIRCULAR

NPRCET/OFF/EEE/VAC/2022-2023

DATE: 08.10.2022

This is to inform that Department of Electrical and Electronics Engineering is planned to conduct a Certificate Course on “**Industrial Automation**” for III & IV EEE students in our college campus during this odd semester 2022-2023. Interested students can enroll their name to the program coordinator on or before 13.10.2022

The details of the training program are given below :

COURSE NAME	INDUSTRIAL AUTOMATION
RESOURCE PERSONS	1.Mr.S.Jayaseelan TVS Training and Service, Chennai 2.Dr.P.Kanirajan, Prof/EEE, NPRCET
VENUE	Industrial Automation Lab
DATE & DURATION	17/10/2022 to 21/10/2022
PROGRAM COORDINATOR	Dr.K.Vijayakumar, AP/EEE, NPRCET



Copy to:

1. All the HoDs
2. IQAC
3. All the Class Rooms
4. Notice Board
5. File

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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

CERTIFICATE PROGRAM ON

INDUSTRIAL AUTOMATION

COURSE CONTENT

Course Duration : 35 Hours

CHAPTER 1 : INTRODUCTION OF PLC, SCADA

- ✓ PLC Introduction
- ✓ PLC Hardware
- ✓ Working of PLC
- ✓ PLC Applications
- ✓ I/O Devices

CHAPTER 2 : PROGRAMMING LOGIC GATES FUNCTION IN PLC

- ✓ PLC Logic Function
- ✓ PLC Software Installation
- ✓ Ladder Logic Diagram
- ✓ PLC AND Logic
- ✓ PLC OR, NAND, NOT Logic
- ✓ Implementing Mathematical Operation on PLC

CHAPTER 3 : INDUSTRIAL FIELD INSTRUMENTATION & CONTROLLERS

- ✓ Industrial Automation System structure
- ✓ Functional levels and instrumentation signal levels
- ✓ Industrial field instruments-Selection for measuring common process variables
- ✓ Industrial Control Valves, Signal conditioners, and intelligent transmitters
- ✓ Industrial Control loops
- ✓ PID Controller
- ✓ Introduction to Data Acquisition Systems (DAS) with NI-LabVIEW software

CHAPTER 4 : PROGRAMMABLE LOGIC CONTROLLERS

- ✓ Need of PLC
- ✓ Industrial Controllers - PLC basics and architectures
- ✓ PLC - IEC 61131-3 Programming Languages & Visualization / HMI
- ✓ Structured Programming
- ✓ Functions & Function blocks
- ✓ PLC Hardware - CPU and Discrete Input/ Output Cards
- ✓ Analog Input/ Output Cards and control loops





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CHAPTER 5: PLC PROGRAMMING

- ✓ PLC Instruction
- ✓ Programming Jump to Subroutine
- ✓ Return operations in PLC
- ✓ IO Mapping
- ✓ PLC Ladder Logic
- ✓ ON/OFF Control for Thermal Process

CHAPTER 6 : SUPERVISORY CONTROL AND DATA ACQUISITION

- ✓ Introduction to SCADA
- ✓ GE i-Fix 6.0 or above SCADA Software
- ✓ SCADA - Network Communications
- ✓ Communication with RTUs
- ✓ Analog/Digital Communications on Plant Floors
- ✓ Communication standards

CHAPTER 7 : SCADA INTERFACING

- ✓ OPC Server
- ✓ OLE for Process Control
- ✓ Programmable logic controller
- ✓ Real Time Unit
- ✓ SCADA Interface Configuration concepts

CHAPTER 8 : HUMAN MACHINE INTERFACING

- ✓ Introduction to HMI
- ✓ HMI Software
- ✓ Types of HMI Screens
- ✓ HMI Programming
- ✓ HMI in Industrial Automation



CHAPTER 9: PNEUMATIC & FIELD INSTRUMENTS

- ✓ Introduction to P & FI
- ✓ Calibration
- ✓ Transducer
- ✓ Sensor
- ✓ Basic Instrumentation Parameters & Variables
- ✓ Level Measurement
- ✓ Temperature , Flow, Pressure Measurement



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CHAPTER 10: PROJECTS

- ✓ Process of temperature control
- ✓ Process of Lightning system control

Criteria to get Certificate

- ✓ Students should register their names for this course
- ✓ Students must have 85% attendance
- ✓ Students should secure 75% marks in the exam

K. Vijaya Kumar

PROGRAM COORDINATOR

[Signature]

HOD/EEE

[Signature]

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Coordinator - IQAC
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Natham, Dindigul (DT) - 624 401

Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401.





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The Management, Principal, Staff and Students

Cordially invite you for the inauguration of

"Certificate Course on Industrial Automation"

On 17th October, 2022

Venue: Automation Lab at 10.00 A.M.

CHIEF GUEST

Mr.S.Jeyaseelan

TVS Training and Service, Chennai.

PRINCIPAL

Dr.J.Sundararajan

NPR College of Engineering & Technology

Felicitates the function



Organized By



Department of Electrical and Electronics Engineering,

NPR College of Engineering and Technology, NPR Nagar,

Natham.





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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CERTIFICATE COURSE ON INDUSTRIAL AUTOMATION

REGISTERED STUDENT'S NAME LIST

S. No.	Register Number	Student Name	Year
1.	920820105001	Baskar A	III EEE
2.	920820105003	Govinthavasan A	III EEE
3.	920820105004	Harish G	III EEE
4.	920820105005	Ishas Ahamed A	III EEE
5.	920820105007	Jeyaram M	III EEE
6.	920820105008	Justin Thiraviyam A	III EEE
7.	920820105013	Ramar V	III EEE
8.	920820105014	Saravanakumar S	III EEE
9.	920820105015	Saravanamuthu K	III EEE
10.	920820105017	Tharun N	III EEE
11.	920820105018	Thavamani A	III EEE
12.	920820105019	Venkatesh V	III EEE
13.	920820105301	Arun Kumar S	III EEE
14.	920820105302	Bharatha Raja S	III EEE
15.	920820105303	Brintha R	III EEE
16.	920820105304	Ganesh S	III EEE
17.	920820105305	Geethanjali Devi M	III EEE
18.	920820105306	Hareesh K S	III EEE
19.	920820105307	Kalaiselvi S	III EEE
20.	920820105308	Krishna Pandiyan S	III EEE
21.	920820105309	Lakshmanan T	III EEE
22.	920820105310	Loganathan M	III EEE
23.	920820105311	Mohammed Harish H	III EEE
24.	920820105312	Monika K	III EEE
25.	920820105313	Poovarasam R	III EEE
26.	920820105314	Praveen Kumar R	III EEE
27.	920820105315	Reegan S	III EEE
28.	920820105316	Sanron Mathi S	III EEE
29.	920820105317	Shylesh Kumar V	III EEE
30.	920820105318	Siva S	III EEE





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S. No.	Register Number	Student Name	Year
31.	920819105001	Ahamed Afzar A	IV EEE
32.	920819105002	Aravind Kumar K	IV EEE
33.	920819105003	Guru Prasath A	IV EEE
34.	920819105004	Karthikeyan R	IV EEE
35.	920819105005	Kasthuri M	IV EEE
36.	920819105006	Lakshmi Priya A	IV EEE
37.	920819105007	Logeshwaran N	IV EEE
38.	920819105009	Pitchiyatha D	IV EEE
39.	920819105010	Poornakumar V	IV EEE
40.	9208191050011	Pradap Kannan B	IV EEE
41.	920819105012	Rajamurugan M	IV EEE
42.	920819105013	Rajasekar M	IV EEE
43.	920819105014	Sujeethran S	IV EEE
44.	920819105015	Ushadevi C	IV EEE
45.	920819105016	Vignesh M	IV EEE

K. Vijaya

PROGRAM COORDINATOR

(Dr. K. Vijaya)

[Signature]

HOD/EEE

Head of the Department
Department of Electrical & Electronics
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401

[Signature]

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Coordinator - IQAC
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401

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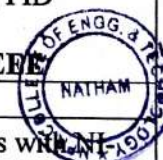
CERTIFICATE COURSE ON

INDUSTRIAL AUTOMATION

COURSE SCHEDULE

EXTERNAL RESOURCE PERSON	INTERNAL RESOURCE PERSON
Mr.S.Jeyaseelan	Dr.P.Kanirajan, Prof/EEE

Day 1 17.10.2022	9.00 AM	Registration	
	9.30 AM to 10.00 AM	Inauguration	
	10.00 AM - 11.10 AM	Session 1	Introduction Of PLC,SCADA Mr.S.Jeyaseelan
	11.10 AM to 11.30 AM	Tea Break	
	11.30 AM to 1.10 PM	Session 2	PLC logic gates functions Mr.S.Jeyaseelan
	1.10 PM to 2.00 PM	Lunch Break	
	2.00 PM to 3.40 PM	Session 3	PLC Software installation, Ladder Logic diagram Mr.S.Jeyaseelan
	3.40 PM to 3.50 PM	Tea Break	
	3.50 PM to 4.30 PM	Session 4	Implementing Mathematical Operation on PLC Mr.S.Jeyaseelan
Day 2 18.10.2022	9.30 AM - 11.10 AM	Session 1	Industrial Field Instrumentation Dr.P.Kanirajan, Prof/EEE
	11.10 AM to 11.30 AM	Tea Break	
	11.30 AM to 1.10 PM	Session 2	Industrial Control Valves, Signal Conditioners Mr.S.Jeyaseelan
	1.10 PM to 2.00 PM	Lunch Break	
	2.00 PM to 3.40 PM	Session 3	Industrial Control loops, PID Controller Dr.P.Kanirajan, Prof/EEE
	3.40 PM to 3.50 PM	Tea Break	
	3.50 PM to 4.30 PM	Session 4	Data Acquisition Systems with Labview software Mr.S.Jeyaseelan
Day 3 19.10.2022	9.30 AM to 11.10 AM	Session 1	PLC Controllers and Architecture Dr.P.Kanirajan, Prof/EEE
	11.10 AM to 11.30 AM	Tea Break	
	11.30 AM to 1.10 PM	Session 2	PLC Hardware, IO Cards Mr.S.Jeyaseelan
	1.10 PM to 2.00 PM	Lunch Break	





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	2.00 PM to 3.40 PM	Session 3	PLC Programming Mr.S.Jeyaseelan
	3.40 PM to 3.50 PM	Tea Break	
	3.50 PM to 4.30 PM	Session 4	PLC Ladder Logic, ON/OFF Control for thermal process Dr.P.Kanirajan, Prof/EEE
Day 4 20.10.2022	9.30 AM – 11.10 AM	Session 1	SCADA Systems Mr.S.Jeyaseelan
	11.10 AM to 11.30 AM	Tea Break	
	11.30 AM to 1.10 PM	Session 2	SCADA Software Mr.S.Jeyaseelan
	1.10 PM to 2.00 PM	Lunch Break	
	2.00 PM to 3.40 PM	Session 3	SCADA Network Communication Mr.S.Jeyaseelan
	3.40 PM to 3.50 PM	Tea Break	
	3.50 PM to 4.30 PM	Session 4	Communication with RTUs, SCADA Interfacing Mr.S.Jeyaseelan
Day 5 21.10.2022	9.30 AM – 11.10 AM	Session 1	HMI Interfacing Mr.S.Jeyaseelan
	11.10 AM to 11.30 AM	Tea Break	
	11.30 AM to 1.10 PM	Session 2	Pneumatic and Field Instruments Dr.P.Kanirajan, Prof/EEE
	1.10 PM to 2.00 PM	Lunch Break	
	2.00 PM to 3.40 PM	Session 3	Process of temperature control Mr.S.Jeyaseelan
	3.40 PM to 3.50 PM	Tea Break	
	3.50 PM to 4.30 PM	Session 4	Process of Lightning system control Mr.S.Jeyaseelan
	4.30 PM to 5.00 PM	Valedictory	



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MOD/EEE

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CERTIFICATE COURSE ON

INDUSTRIAL AUTOMATION

STUDENT'S ATTENDANCE

S.No.	Register Number	Student Name	17.10.22		18.10.22		19.10.22		20.10.22		21.10.22	
			FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1.	920820105001	Baskar A	/	/	/	/	/	/	/	/	/	/
2.	920820105003	Govinthavasan A	/	/	/	/	/	/	/	/	/	/
3.	920820105004	Harish G	/	/	/	/	/	/	/	/	a	a
4.	920820105005	Ishas Ahamed A	/	/	/	/	/	/	/	/	/	/
5.	920820105007	Jeyaram M	/	/	/	/	/	/	/	/	/	/
6.	920820105008	Justin Thiraviyam A	/	/	/	/	/	/	/	/	/	/
7.	920820105013	Ramar V	/	/	/	/	/	/	/	/	/	/
8.	920820105014	Saravanakumar S	/	/	/	/	a	a	/	/	/	/
9.	920820105015	Saravanamuthu K	/	/	/	/	/	/	/	/	/	/
10.	920820105017	Tharun N	/	/	/	/	/	/	/	/	/	/
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13.	920820105301	Arun Kumar S	/	/	/	/	/	/	/	/	/	/
14.	920820105302	Bharatha Raja S	/	/	/	/	/	/	a	a	/	/
15.	920820105303	Brintha R	/	/	/	/	/	/	/	/	/	/
16.	920820105304	Ganesh S	/	/	/	/	/	/	/	/	/	/
17.	920820105305	Geethanjali Devi M	/	/	/	/	/	/	/	/	/	/
18.	920820105306	Hareesh K S	/	/	/	/	/	/	/	/	/	/
19.	920820105307	Kalaiselvi S	/	/	/	/	/	/	/	/	/	/
20.	920820105308	Krishna Pandiyan S	/	/	/	/	/	/	/	/	/	/
21.	920820105309	Lakshmanan T	/	/	/	/	a	a	/	/	/	/
22.	920820105310	Loganathan M	/	/	/	/	/	/	/	/	/	/
23.	920820105311	Mohammed Harish H	/	/	/	/	/	/	/	/	/	/
24.	920820105312	Monika K	/	/	/	/	/	/	/	/	/	/
25.	920820105313	Poovarasam R	/	/	/	/	/	/	/	/	/	/
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27.	920820105315	Reegan S	/	/	/	/	/	/	/	/	/	/
28.	920820105316	Sanron Mathi S	/	/	/	/	/	/	/	/	/	/
29.	920820105317	Shylesh Kumar V	/	/	/	/	/	/	/	/	/	/
30.	920820105318	Siva S	a	a	/	/	/	/	/	/	/	/
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32.	920819105002	Aravind Kumar K	/	/	/	/	/	/	/	/	/	/
33.	920819105003	Guru Prasath A	/	/	/	/	/	/	/	/	/	/
34.	920819105004	Karthikeyan R	/	/	/	/	/	/	/	/	/	/
35.	920819105005	Kasthuri M	/	/	/	/	/	/	/	/	/	/
36	920819105006	Lakshmi Prasanna A	/	/	/	/	/	/	/	/	/	/





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S.No	Register Number	Student Name	21.03.23		22.03.23		23.03.23		24.03.23		25.03.23	
			FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
37.	920819105007	Logeshwaran N	/	/	A	A	/	/	/	/	/	/
38.	920819105009	Pitchiyatha D	/	/	/	/	/	/	/	/	A	A
39.	920819105010	Poornakumar V	/	/	/	/	/	/	/	/	/	/
40.	9208191050011	Pradap Kannan B	/	/	/	/	/	/	/	/	/	/
41.	920819105012	Rajamurugan M	/	/	/	/	/	/	/	/	/	/
42.	920819105013	Rajasekar M	/	/	/	/	/	/	/	/	/	/
43.	920819105014	Sujeethran S	A	A	/	/	/	/	/	/	/	/
44.	920819105015	Ushadevi C	/	/	/	/	/	/	/	/	/	/
45.	920819105016	Vignesh M	/	/	/	/	/	/	/	/	/	/
PRESENT			43	43	43	43	43	43	44	44	43	43
ABSENT			02	02	02	02	02	02	01	01	02	02
TOTAL			45	45	45	45	45	45	45	45	45	45
PROGRAM COORDINATOR			KM	KM	KM	KM	KM	KM	KM	KM	KM	KM

K. Vijaya Kumar

PROGRAM COORDINATOR

hms

HOD/EEE

hms

IQAC

J. Sundararaj

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CERTIFICATE COURSE ON

INDUSTRIAL AUTOMATION

SAMPLE QUESTION PAPER & ANSWER

NAME OF THE STUDENT:

MARKS: 10

1. Which of the following output devices is used as logical outputs that can switch a hydraulic or pneumatic flow?

- a) Lights
- b) Motor starters
- c) Servo motors
- d) Solenoid Valves

2. A typical block diagram of PLC does NOT consist of

- a) Data supply module
- b) communication interface module
- c) chassis
- d) central processing unit



3. PLC operates on the following signals

- a) Digital
- b) Impulse
- c) Analog
- d) Frequency



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4. PLC has become popular, because it performs ----- functions.

- a) Data transfer
- b) Timing and counting
- c) Logical
- d) Analog

5. Fault tolerance of SCADA System means:

- a) Ability to restart running applications
- b) Ability to recover communication connection
- c) Ability to connect with many I/O devices
- d) Ability to manage and coordinate system errors

6. What is the maximum number of inputs and outputs that are there in a small PLC?

- a) 200
- b) 50
- c) 100
- d) 500



7. In a PLC, which of the following is NOT a subpart of Central Processing Unit(CPU)?

- a) Programmer
- b) Microprocessor
- c) Memory
- d) Power supply



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8. Which part of the SCADA system initiates almost all communication with remote sites and interface with an operator?

- a) Communication device
- b) RTU
- c) SCADA Software
- d) MTU

9. A technology for the application of mechanical, electronics, and computer – based systems to control and operate the systems is called

- a) PLC
- b) Sequential controller
- c) Microprocessor – based systems
- d) Automation



10. AND Function in ladder logic uses:

- a) Normally closed contacts in parallel
- b) Normally closed contacts in series
- c) Normally open contacts in series
- d) Normally open contacts in parallel

ANSWERS: 1) D 2) A 3) A 4) B 5) D 6) A 7) A 8) D 9) D 10) C


PROGRAM COORDINATOR

[Dr. K. Vijaya Kumar]


HOD/EEE

Head of the Department

Department of Electrical & Electronics Engineering

NPR College of Engineering & Technology

Natham, Dindigul (Dt) - 624 401


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Coordinator - IQAC

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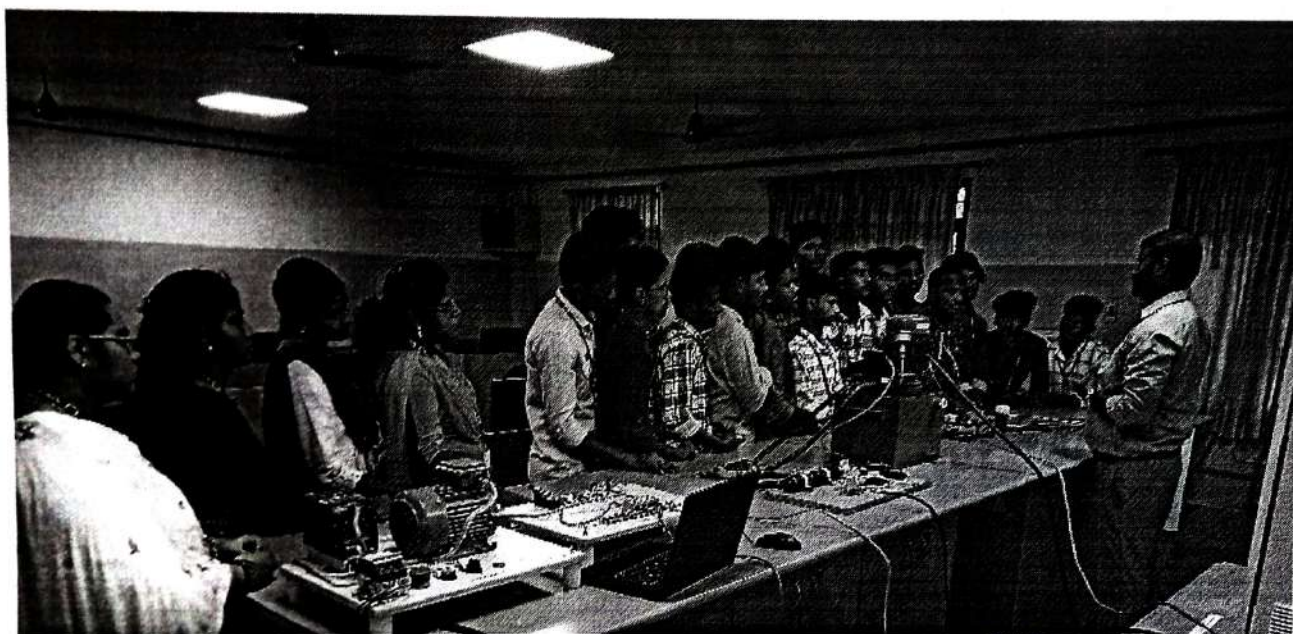
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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CERTIFICATE COURSE ON

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PHOTO GALLERY



Photograph during Hands on training given by the Resource Person



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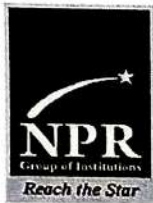
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[Signature]
Dr. K. Vijaya Kumar

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Department of Electrical & Electronics Engineering
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Coordinator - IQAC

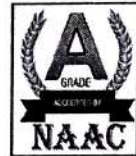
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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CERTIFICATE COURSE ON

INDUSTRIAL AUTOMATION

STUDENT'S FEEDBACK

Date: 25-10-2022

Name of the Student : <u>V. Poorna kumar</u>	Year / Semester: <u>IV</u> / <u>VII</u>
Name of the Program: Certificate Course on Industrial Automation	

S.No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1	Course Content	✓				
2	Way of Exposed New Knowledge and Practices	✓				
3	Examples Provided during this Course		✓			
4	Course Delivered by Resource Person	✓				
5	Time Management		✓			
6	Overall rating of this Course	✓				



V. Poorna kumar
Signature of the Student

K. V. Suresh

PROGRAM COORDINATOR

[Signature]

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[Signature]

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[Signature]

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Dr. K. Vijayakumar

Head of the Department

Department of Electrical & Electronics Engineering

NPR College of Engineering & Technology

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Page 19 of 24

Dr. J. SUNDARARAJU

D.E., M.Tech

Principal

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CERTIFICATE COURSE ON INDUSTRIAL AUTOMATION STUDENT'S FEEDBACK

Date: 21-10-2022

Name of the Student : S. KRISHNA PANDIYAN	Year / Semester:
Name of the Program: Certificate Course on Industrial Automation	

S.No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1	Course Content	✓				
2	Way of Exposed New Knowledge and Practices	✓				
3	Examples Provided during this Course	✓				
4	Course Delivered by Resource Person		✓			
5	Time Management	✓				
6	Overall rating of this Course	✓				




Signature of the Student



PROGRAM COORDINATOR



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PRINCIPAL

J. SUNDARARAJAN

[Dr. K. Vijaya Kumar]

Head of the Department

Department of Electrical & Electronics Engineering

NPR College of Engineering & Technology

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Coordinator - IQAC

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INDUSTRIAL AUTOMATION

STUDENT'S FEEDBACK

Date: 21-10-2022

Name of the Student : S. KRISHNA PANDIYAN	Year / Semester:
Name of the Program: Certificate Course on Industrial Automation	

S.No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1	Course Content	✓				
2	Way of Exposed New Knowledge and Practices	✓				
3	Examples Provided during this Course	✓				
4	Course Delivered by Resource Person		✓			
5	Time Management	✓				
6	Overall rating of this Course	✓				




Signature of the Student



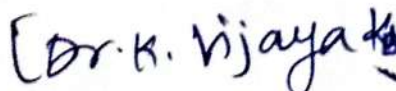
PROGRAM COORDINATOR



HOD/EEE



IQAC



Head of the Department

Department of Electrical & Electronics Engineering
NPR College of Engineering & Technology
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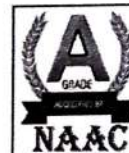
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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CERTIFICATE COURSE ON

INDUSTRIAL AUTOMATION

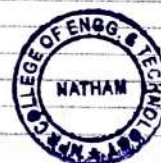
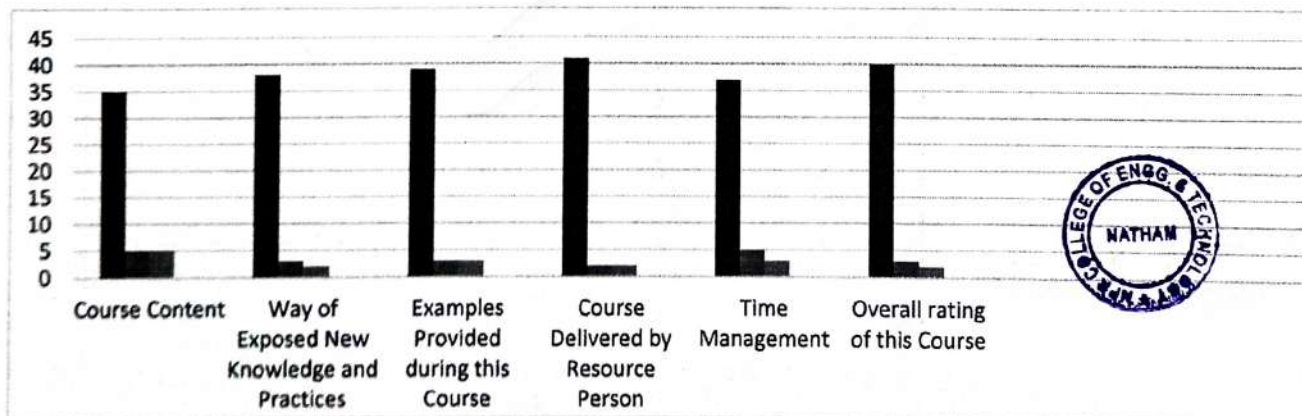
STUDENT'S FEEDBACK SUMMARY REPORT

TOTAL STRENGTH: 25

DATE: 21-04-23

S.No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1	Course Content	35	5	5	0	0
2	Way of Exposed New Knowledge and Practices	38	3	2	0	0
3	Examples Provided during this Course	39	3	3	0	0
4	Course Delivered by Resource Person	41	2	2	0	0
5	Time Management	37	5	3	0	0
6	Overall rating of this Course	40	3	2	0	0
	Average	38	3	3	0	0

NUMBER OF STUDENTS SUCCESSFULLY COMPLETED THE COURSE: 25



PROGRAM COORDINATOR

HOD/EEE

IQAC

PRINCIPAL

Dr. K. Vijaya Kumar

Head of the Department
Department of Electrical & Electronics Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401

Coordinator - IQAC
Dr. J. SUNDARARAJAN
B.E., M.Tech., Ph.D.
Principal
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CERTIFICATE COURSE ON

INDUSTRIAL AUTOMATION

SUMMARY REPORT

The Department of Electrical and Electronics Engineering organized certificate course on "INDUSTRIAL AUTOMATION" from 17.10.2022 to 21.10.2022 (5 days) at Industrial Automation Lab. Final Year student Ms.C.UshaDevi has delivered welcome address.

Principal of our college **Dr.J.Sundarajan** inaugurated the program and delivered the inaugural address. **Mr.S.Jayaseelan** from TVS Training and centre had participated with us and shared their knowledge with our students. This five days course gave us the good over view on **Industrial Automation** and provided lots of information regarding the topic. In addition to this, it also gave the information on future outcomes.

They shared their knowledge of fundamentals and how to work with Industrial Automation and Program techniques which enables the students to have skills to resolve complex real world problems in for decision support.

Our students learnt various existing and emerging technologies of PLC, SCADA & HMI in Electrical and Electronics Engineering experiments. 25 students of EEE department from III Year & IV Year students has attended the course and completed it successfully and awarded with certificates.

Finally the course was concluded by Mr.N.Logeshwaran, IV Year EEE, delivered vote of thanks.



[Signature]

PROGRAM COORDINATOR

[Signature]

HOD/EEE

[Signature]

IQAC

[Signature]

PRINCIPAL

[Signature]
Dr. K. Vijayakumar

Head of the Department
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[Signature]
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CERTIFICATE COURSE ON INDUSTRIAL AUTOMATION COURSE MATERIAL

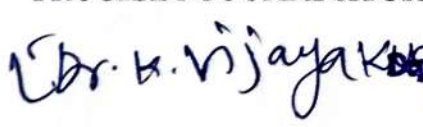
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4. https://kanchiuniv.ac.in/coursematerials/PLC_K_Saraswathi.pdf
5. <https://www.electroheat.com/wp-content/uploads/2016/04/HMI-User-Manual-1.pdf>
6. https://sitrain.us/step/pdfs/version2/Basics_of_PLCs.pdf



PROGRAM COORDINATOR



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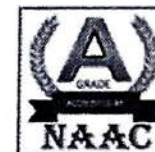




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Certificate of Completion

This is to certify that Mr./Ms. N.LOGESHWARAN IV - EEE has successfully completed the five day Certificate course entitled "INDUSTRIAL AUTOMATION" organized by Department of Electrical and Electronics Engineering, NPR College of Engineering & Technology. The course was conducted from 17/10/2022 to 21/10/2022.

CONGRATULATIONS ON YOUR ACHIEVEMENT!



PROGRAMME CO-ORDINATOR
[DR.K.VIJAYAKUMAR]

HOD/EEE
[DR.P.KANIRAJAN]

Dr. J. SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

NPR College of Engineering & Technology

Natham, Dindigul - 624 401.

PRINCIPAL

[DR.J.SUNDARARAJAN]



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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

ADD ON COURSE (2022-2023)

INDEX

COURSE CODE & NAME: 22EEAO02 & AUTOMATING POWER WORLD WITH PYTHON

ACADEMIC YEAR: 2022-23

SEMESTER: EVEN

DURATION: 35 HOURS

S.No.	Particulars	Page No.
1	Permission letter	2
2	Circular	3
3	Resource Person's Profile	4
4	Invitation	5
5	Course content	6
6	Registered student's Name list	8
7	Course schedule	10
8	Student's attendance	12
9	Quiz sample questions paper with answers	14
10	Student's feedback	17
11	Feedback analysis	19
12	Summary report	20
13	Course material/manual	21
14	Sample certificate of the program	22

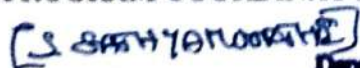



PROGRAM COORDINATOR


HOD/EEE


IQAC


PRINCIPAL



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NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401

Coordinator - IQAC

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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

PERMISSION LETTER

DATE: 09-03-2022

From

The Head of the Department,
Electrical and Electronics Engineering,
NPR College of Engineering & Technology,
Natham.

To

The Principal,
NPR College of Engineering & Technology,
Natham.

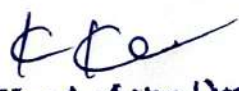
Respected Sir,

Sub: Request for permission to Conduct Add-On Course for EEE students – Regarding.

With reference to the above subject, the application is here by submitted for your approval to Add-On course on **"AUTOMATING POWER WORLD WITH PYTHON"** to our students from 21/03/2022 to 25/03/2022 (5 Days) in our college premises. In this regard, we have proposed **Mr.V.Kalyana Raman, Trident Tech Labs, Chennai** and his team as a resource person for this Add-On Course. Kindly permit us to conduct the same.

Thanking you.

Yours faithfully


Head of the Department
Department of Electrical & Electronics Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401

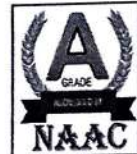




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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

CIRCULAR

NPRCET/OFF/EEE/VAC/2022-2023

DATE: 10.03.2022

This is to inform that Department of Electrical and Electronics Engineering is planned to conduct a Add on Course on “AUTOMATING POWER WORLD WITH PYTHON” for III & IV Year EEE students in our college campus during this even semester 2022-2023. Interested students can enroll their name to the program coordinator on or before 17.03.2022.

The details of the training program are given below :

COURSE NAME	AUTOMATING POWER WORLD WITH PYTHON
RESOURCE PERSON	Mr.V.Kalyana Raman Trident Tech Labs, Chennai
VENUE	Power system simulation laboratory
DATE & DURATION	21/03/2022 to 25/03/2022 & 35 Hours
PROGRAM COORDINATOR	Mr.S.Sathyamoorthi, AP/EEE, NPRCET

Copy to:

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2. IQAC
3. All the Class Rooms
4. Notice Board
5. File



PRINCIPAL
Dr. J.SUNDARARAJAM

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Principal

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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

ADD-ON COURSE ON

AUTOMATING POWER WORLD WITH PYTHON

RESOURCE PERSON'S PROFILE

Name	:	Mr.V.Kalyana Raman
Designation	:	Manager & Course Trainer
Company Name	:	Trident Tech Labs, Chennai.
About Resource Person	:	He is working as a manger cum senior Course Trainer at Trident Tech Labs, Chennai. He has more knowledge's in Software Design, Power world simulator, CADD, MATLAB programming and also he gives software solution to power industries.


PROGRAM COORDINATOR

[S. SATHYANARAYANAN]


HOD/EEE

Head of the Department

Department of Electrical & Electronics Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) 624 401


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Coordinator - IQAC


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The Management, Principal, Staff and Students Cordially invite you for the inauguration of

“Add-On Course on AUTOMATING POWER WORLD WITH PYTHON”

On 21st March, 2023

Venue: PSS Lab at 10.00 AM

CHIEF GUEST

Mr.V.Kalyana Raman

Trident Tech Labs. Chennai.

PRINCIPAL

Dr.J.Sundararajan

NPR College of Engineering & Technology

Felicitates the function



Organized By



Department of Electrical and Electronics Engineering,

NPR College of Engineering and Technology,

NPR Nagar, Natham.

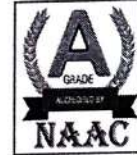




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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

ADD-ON COURSE ON

AUTOMATING POWER WORLD WITH PYTHON

COURSE CONTENT

Course Duration : 35 hours

CHAPTER 1 : POWER SYSTEMS MODELING USING POWER WORLD

- Interact with Power World Simulator through text-based interfaces and graphic one-line diagrams
- Build and modify power system models and one-line diagrams
- Exchange information with spreadsheets and text files
- Create rich colour contours, incorporate GIS shape files, and enhance the appearance and dynamic behaviour of one-line diagrams
- Voltage control, Generation Control and Area Interchange
- Linear Sensitivity and Fault Analysis
- System equivalents

CHAPTER 2 : PYTHON INSTALLATION, OVERALL ARCHITECTURE, BASIC SYNTAX, KEY DATA STRUCTURES

- Python Overview
- Introduction to Python, Objects and Data Structure Basics
- Python Loops and Control Statements
- Python Methods and Functions
- Python OOPS Concepts, Error And Exception Handling

CHAPTER 3: PYTHON DEVELOPMENT ENVIRONMENT WITH PYCHARM AND PYTHON PACKAGE INSTALLER

- Installing and Managing Python Packages
- Package Tool Window
- Supported Languages and Platforms
- Start with a project in PyCharm
- Code with Smart Assistance





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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

ADD-ON COURSE ON

AUTOMATING POWER WORLD WITH PYTHON

CHAPTER 4: STEADY-STATE POWER SYSTEM SECURITY ANALYSIS WITH POWER WORLD SIMULATOR

- Fundamentals of power system modeling and voltage stability?
- Techniques for conditioning and solving hard-to-solve cases
- How to model system contingencies in detail, including conditional remedial action schemes (RAS)/special protection schemes (SPS)?
- How to determine thermal and stability limits on power transfer?
- How to develop a generator interconnection study with a comprehensive steady-state power system security analysis.?

CHAPTER 5 : TRANSIENT STABILITY ANALYSIS WITH POWERWORLD SIMULATOR

- Fundamentals of transient stability analysis and model relationships
- Navigation of Simulator's remarkably easy-to-use transient stability analysis interface
- Tools and techniques for model validation
- Detailed modeling of transient contingencies
- Specialized tools for wind turbine modeling
- How to store and plot results?
- How to visualize transient stability simulations?



Criteria to get Certificate

- Students should register their names for this course
- Students must have 85% attendance
- Students should secure 75% marks in the exam

[Signature]

PROGRAM COORDINATOR

[Signature]

HOD/EEE

Head of the Department

[Signature]

IQAC

[Signature]

PRINCIPAL

Dr. J. SUNDARARAJAN,

B.E., M.Tech., Ph.D.

Principal

Department of Electrical & Electronics Engineering

NPR College of Engineering & Technology

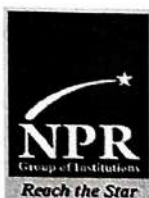
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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ADD-ON COURSE ON

AUTOMATING POWER WORLD WITH PYTHON

REGISTERED STUDENT'S NAME LIST

S. No.	Register Number	Student Name	Year
1.	920820105003	Govinthavasan A	III EEE
2.	920820105004	Harish G	III EEE
3.	920820105005	Ishas Ahamed A	III EEE
4.	920820105007	Jeyaram M	III EEE
5.	920820105008	Justin Thiraviyam A	III EEE
6.	920820105013	Ramar V	III EEE
7.	920820105014	Saravanakumar S	III EEE
8.	920820105015	Saravanamuthu K	III EEE
9.	920820105017	Tharun N	III EEE
10.	920820105018	Thavamani A	III EEE
11.	920820105019	Venkatesh V	III EEE
12.	920820105301	Arun Kumar S	III EEE
13.	920820105302	Bharatha Raja S	III EEE
14.	920820105303	Brintha R	III EEE
15.	920820105304	Ganesh S	III EEE
16.	920820105305	Geethanjali Devi M	III EEE
17.	920820105306	Hareesh K S	III EEE
18.	920820105307	Kalaiselvi S	III EEE
19.	920820105308	Krishna Pandiyan S	III EEE
20.	920820105309	Lakshmanan T	III EEE
21.	920820105310	Loganathan M	III EEE
22.	920820105311	Mohammed Harish H	III EEE
23.	920820105312	Monika K	III EEE
24.	920820105313	Poovarasam R	III EEE
25.	920820105314	Praveen Kumar R	III EEE
26.	920820105315	Reegan S	III EEE
27.	920820105316	Sanron Mathi S	III EEE
28.	920820105317	Shylesh Kumar V	III EEE





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S. No.	Register Number	Student Name	Year
29.	920820105318	Siva S	III EEE
30.	920819105001	Ahamed Afzar A	IV EEE
31.	920819105002	Aravind Kumar K	IV EEE
32.	920819105003	Guru Prasath A	IV EEE
33.	920819105004	Karthikeyan R	IV EEE
34.	920819105005	Kasthuri M	IV EEE
35.	920819105006	Lakshmi Priya A	IV EEE
36.	920819105007	Logeshwaran N	IV EEE
37.	920819105009	Pitchiyatha D	IV EEE
38.	920819105010	Poornakumar V	IV EEE
39.	9208191050011	Pradap Kannan B	IV EEE
40.	920819105012	Rajamurugan M	IV EEE
41.	920819105013	Rajasekar M	IV EEE
42.	920819105014	Sujeethran S	IV EEE
43.	920819105015	Ushadevi C	IV EEE
44.	920819105016	Vignesh M	IV EEE

[Signature]

PROGRAM COORDINATOR

(S. SATHYANARAYAN)

[Signature]

HOD/EEE

Head of the Department
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[Signature]

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Coordinator - IQAC

[Signature]

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ADD-ON COURSE ON

AUTOMATING POWER WORLD WITH PYTHON

COURSE SCHEDULE

EXTERNAL RESOURCE PERSON	INTERNAL RESOURCE PERSON
Mr.V.Kalyana Raman	1. Dr.P.Kanirajan, Prof/EEE
	2. Mr.S.Sathyamoorthi, AP/EEE

Day 1 19.12.2017	9.00 AM	Registration	
	9.30 AM to 10.00 AM	Inauguration	
	10.00 AM to 11.10 AM	Session 1	Introduction To Powerworld Simulator: Interface And Common Tools Mr.V.Kalyana Raman
	11.10 AM to 11.30 AM	Tea Break	
	11.30 AM to 1.10 PM	Session 2	Build and modify power system models and one-line diagrams Mr.V.Kalyana Raman
	1.10 PM to 2.00 PM	Lunch Break	
	2.00 PM to 3.40 PM	Session 3	Exchange information with spreadsheets and text files Mr.S.Sathyamoorthi, AP/EEE
	3.40 PM to 3.50 PM	Tea Break	
	3.50 PM to 4.30 PM	Session 4	Create rich colour contours, incorporate GIS shape files Mr.S.Sathya Moorthi, AP/EEE
Day 2 20.12.2017	9.30 AM – 11.10 AM	Session 1	Basics Of Power Systems Modeling And Analysis Tools in Power world Simulator Mr.V.Kalyana Raman
	11.10 AM to 11.30 AM	Tea Break	
	11.30 AM to 1.10 PM	Session 2	Fault analysis (time permitting); and System equivalents (time Permitting). Mr.S.Sathyamoorthi, AP/EEE
	1.10 PM to 2.00 PM	Lunch Break	
	2.00 PM to 3.40 PM	Session 3	linear sensitivity analysis Mr.V.Kalyana Raman
	3.40 PM to 3.50 PM	Tea Break	
Day 3 21.12.2017	3.50 PM to 4.30 PM	Session 4	Generation control and area interchange Mr.V.Kalyana Raman
	9.30 AM – 11.10 AM	Session 1	Power System Economics And Market Modeling With Power world Simulator Mr.V.Kalyana Raman
	11.10 AM to 11.30 AM	Tea Break	
	11.30 AM to 1.10 PM	Session 2	Fundamentals of linear programming optimization techniques Dr.P.Kanirajan, Prof/EEE

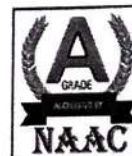




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	1.10 PM to 2.00 PM	Lunch Break	
	2.00 PM to 3.40 PM	Session 3	Model system contingencies in detail Mr.V.Kalyana Raman
	3.40 PM to 3.50 PM	Tea Break	
	3.50 PM to 4.30 PM	Session 4	Develop a time-step grid for hourly system simulation Mr.S.Sathya Moorthi, AP/EEE
Day 4 22.12.2017	9.30 AM – 11.10 AM	Session 1	Fundamentals of power system modeling and voltage stability Mr.V.Kalyana Raman
	11.10 AM to 11.30 AM	Tea Break	
	11.30 AM to 1.10 PM	Session 2	Model system contingencies in details special protection schemes Dr.P.Kanirajan, Prof/EEE
	1.10 PM to 2.00 PM	Lunch Break	
	2.00 PM to 3.40 PM	Session 3	Determination of thermal and stability limits on power transfer Mr.S.Sathya Moorthi, AP/EEE
	3.40 PM to 3.50 PM	Tea Break	
	3.50 PM to 4.30 PM	Session 4	Develop a generator interconnection study with a comprehensive steady-state power system security analysis. Dr.P.Kanirajan, Prof/EEE
Day 5 23.12.2017	9.30 AM – 11.10 AM	Session 1	Fundamentals of transient stability analysis and model relationships. Mr.V.Kalyana Raman
	11.10 AM to 11.30 AM	Tea Break	
	11.30 AM to 1.10 PM	Session 2	Detailed modeling of transient contingencies Mr.V.Kalyana Raman
	1.10 PM to 2.00 PM	Lunch Break	
	2.00 PM to 3.40 PM	Session 3	Specialized tools for wind turbine modeling; Mr.V.Kalyana Raman
	3.40 PM to 3.50 PM	Tea Break	
	3.50 PM to 4.30 PM	Session 4	visualize transient stability simulations Mr.V.Kalyana Raman
	4.30 PM to 5.00 PM	Valedictory	



PROGRAM COORDINATOR

[Signature]

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[Signature]

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[Signature]

Head of the Department

Department of Electrical & Electronics Engineering

NPR College of Engineering & Technology

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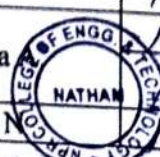
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S.No	Register Number	Student Name	21.03.23		22.03.23		23.03.23		24.03.23		25.03.23	
			FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
37.	920819105009	Pitchiyatha D	/	/	a	a	/	/	/	/	/	/
38.	920819105010	Poornakumar V	/	/	/	/	/	/	/	/	/	/
39.	9208191050011	Pradap Kannan B	/	/	/	/	/	/	/	/	a	a
40.	920819105012	Rajamurugan M	/	/	/	/	/	/	/	/	/	/
41.	920819105013	Rajasekar M	/	/	/	/	/	/	/	/	/	/
42.	920819105014	Sujeethran S	/	/	/	/	/	/	/	/	/	/
43.	920819105015	Ushadevi C	/	/	/	/	/	/	/	/	/	/
44.	920819105016	Vignesh M	/	/	/	/	/	/	/	/	/	/
PRESENT			42	42	43	43	42	42	42	42	42	42
ABSENT			02	02	01	01	02	02	02	02	02	02
TOTAL			44	44	44	44	44	44	44	44	44	44
PROGRAM COORDINATOR			S.Sathyam	S.Sathyam	S.Sathyam	S.Sathyam	S.Sathyam	S.Sathyam	S.Sathyam	S.Sathyam	S.Sathyam	S.Sathyam

PROGRAM COORDINATOR

HOD/EEE

IQAC

PRINCIPAL

S. SATHYANARAYAN

Head of the Department

Coordinator - IQAC

Dr. J. SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

Department of Electrical & Electronics

NPR College of Engineering & Technology

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ADD-ON COURSE ON

AUTOMATING POWER WORLD WITH PYTHON

SAMPLE QUESTION PAPER & ANSWER

NAME OF THE STUDENT:

MARKS: 10

1) What is/are the necessities of Simulation Process in VHDL?

- A. Requirement to test designs before implementation & usage
- B. Reduction of development time
- C. Decrease the time to market
- D. All of the above

2) Timing analysis is more efficient with synchronous systems whose maximum operating frequency is evaluated by the _____ path delay between consecutive flip-flops.

- A. shortest
- B. average
- C. longest
- D. unpredictable

3) Which functions are performed by static timing analysis in simulation?

- A. Computation of delay for each timing path
- B. Logic analysis in a static manner
- C. Both a and b
- D. None of the above



4) An event is nothing but _____ target signal, which is to be updated.

- A. Fixed
- B. Change on
- C. Both a and b
- D. None of the above



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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ADD-ON COURSE ON

AUTOMATING POWER WORLD WITH PYTHON

SAMPLE QUESTION PAPER & ANSWER

- 5) Which concept proves to be beneficial in acquiring concurrency and order independence?
- A. Alpha delay
 - B. Beta delay
 - C. Gamma delay
 - D. Delta delay
- 6) After an initialization phase, the simulator enters the _____ phase.
- A. Compilation
 - B. Elaboration
 - C. Execution
 - D. None of the above
- 7) Which among the following is not a characteristic of 'Event-driven Simulator'?
- A. Identification of timing violations
 - B. Storage of state values & time information
 - C. Time delay calculation
 - D. No event scheduling
- 8) Which type of simulator/s neglect/s the intra-cycle state transitions by checking the status of target signals periodically irrespective of any events?
- A. Event-driven Simulator
 - B. Cycle-based Simulator
 - C. Both a and b
 - D. None of the above
- 9) In the simulation process, which step specifies the conversion of VHDL intermediate code so that it can be used by the simulator?
- A. Compilation
 - B. Elaboration





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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ADD-ON COURSE ON

AUTOMATING POWER WORLD WITH PYTHON

SAMPLE QUESTION PAPER & ANSWER

C. Initialization

D. Execution

10) Which type of simulation mode is used to check the timing performance of a design?

A. Behavioural

B. Switch-level

C. Transistor-level

D. Gate-level

ANSWERS:

1) d

2) c

3) c

4) b

5) d

6) c

7) d

8) b

9) b

10) d




PROGRAM COORDINATOR


HOD/EEE


IQAC


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Department of Electrical & Electronics Engineering
NPR College of Engineering & Technology
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Natham, Dindigul (Dt) - 624 401

Principal

Department of Electrical & Electronics Engineering
NPR College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401

Technology Principal
College of Engineering & Technology
Nathan, Dindiger (TN) - 024 38

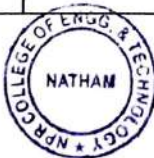


ADD-ON COURSE ON
AUTOMATING POWER WORLD WITH PYTHON
STUDENT'S FEEDBACK

Date: 25-03-23

Name of the Student : Venkatesh . V	Year / Semester: III / VI
Name of the Program: Automating Power World with Python	

S.No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1	Course Content	✓				
2	Way of Exposed New Knowledge and Practices		✓			
3	Examples Provided during this Course	✓				
4	Course Delivered by Resource Person	✓				
5	Time Management		✓			
6	Overall rating of this Course	✓				




Signature of the Student


PROGRAM COORDINATOR


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Head of the Department
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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ADD-ON COURSE ON

AUTOMATING POWER WORLD WITH PYTHON

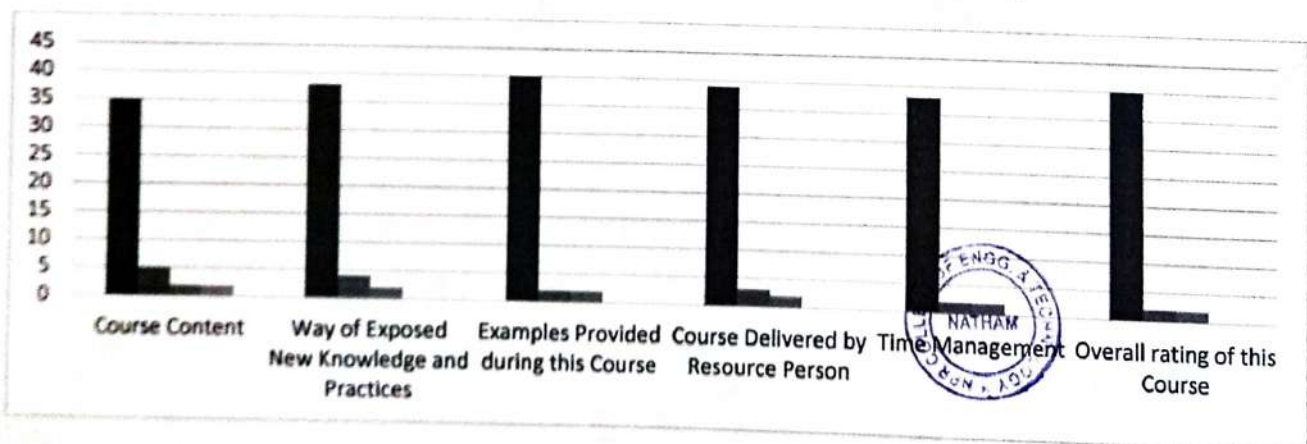
STUDENT'S FEEDBACK SUMMARY REPORT

TOTAL STRENGTH: 44

DATE: 25-03-23

S.No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1	Course Content	35	5	2	2	0
2	Way of Exposed New Knowledge and Practices	38	4	2	0	0
3	Examples Provided during this Course	40	2	2	0	0
4	Course Delivered by Resource Person	39	3	2	0	0
5	Time Management	38	2	2	0	0
6	Overall rating of this Course	40	2	2	0	0
	Average	38	3	2	0.3	0

NUMBER OF STUDENTS SUCCESSFULLY COMPLETED THE COURSE: 44



PROGRAM COORDINATOR

[S. SATHYANARAYANA]

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Head of the Department

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ADD-ON COURSE ON

AUTOMATING POWER WORLD WITH PYTHON

SUMMARY REPORT

The Department of Electrical and Electronics Engineering organized a Add-On Course on "Automating Power world with Python" from 21-03-23 to 25-03-23 (5 days) at Power System Simulation Lab, Karthik.R Third Year student has delivered welcome address.

Dr.J.Sundararajan, Principal of our college inaugurated the program and delivered the inaugural address. Mr.S.Sathya Moorthy, AP/EEE, Dr.P.Kanirajan Prof/EEE had participated with us and shared his knowledge with our students. This five days course gave us the good over view on "Automating Power World with Python" and provided lots of information regarding the topic. In addition to this, it also gave the information on future outcomes of power world simulator and Python.

They shared their knowledge of fundamentals and principles of **Power world Simulator** in automation of power system which enables the students to have skills to resolve complex real world problems for decision support.

Our students learnt various existing and emerging technologies of **Power world Simulator**. 44 students of EEE department from III and IV year has attended the course and completed it successfully. Finally the course was concluded by A.Lakshmi Priya, IV year EEE student by delivered vote of thanks.





PROGRAM COORDINATOR



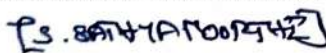
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Certificate of Completion

This is to certify that Mr./Ms. N.THARUN III - EEE has successfully completed the five day Add-On course entitled "AUTOMATING POWER WORLD WITH PYTHON" organized by Department of Electrical and Electronics Engineering, NPR College of Engineering & Technology. The course was conducted from 21/03/2023 to 25/03/2023.

CONGRATULATIONS ON YOUR ACHIEVEMENT!




PROGRAMME CO-ORDINATOR
MR.S.SATHYAMOORTHY


HOD/EEE
[DR.K.KANIMOZHI]


Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
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Natham, Dindigul - 624 401.

PRINCIPAL
[DR.J.SUNDARARAJAN]



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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ADD- ON COURSE ON

AUTOMATING POWER WORLD WITH PYTHON

COURSE MATERIAL

1. <https://www.powerworld.com/training/course-descriptions/introduction-to-powerworld-simulator>
2. <https://www.slideserve.com/luther/power-world-simulator>
3. <https://www.jetbrains.com/help/pycharm/quick-start-guide.html>
4. <https://www.degruyter.com/view/journals/ijeeeps/14/6/article-p535.xml?language=en>
5. <https://www.slideserve.com/search/single-power-flow-solution-ppt-presentation>





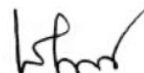
PROGRAM COORDINATOR

(S. SATHYANARAYAN)



HOD/EEE

Head of the Department
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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

CERTIFICATE COURSE (2022-2023)

INDEX

COURSE CODE& NAME: 22EECC02 & DEVELOPMENT OF LABVIEW APPLICATIONS

ACADEMIC YEAR: 2022-23

SEMESTER: EVEN

DURATION: 35 HOURS

S.No.	Particulars	Page No.
1	Permission Letter	2
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3	Circular to Students	4
4	Invitation	5
5	Course Content	6
6	Registered Student's Name List	9
7	Course Schedule	12
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9	Quiz Sample Question Paper With Answer	16
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11	Student's Feedback	21
12	Feedback Analysis	24
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14	Certificates of the Course	26
15	Course Material/Manual	27




PROGRAM COORDINATOR


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Head of the Department
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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

PERMISSION LETTER

DATE: 04-04-2023

From:

The Head of the Department,
Electrical and Electronics Engineering,
NPR College of Engineering & Technology,
Natham.

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Respected Sir,

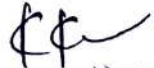
Sub: Request for permission to conduct certificate course for EEE students – Regarding

With reference to the above subject, the application is hereby submitted for your approval to conduct certificate course on “DEVELOPMENT OF LAB VIEW APPLICATIONS” to our students from 17/04/2023 to 21/04/2023 (5 Days) in our college premises. In this regard, we are proposed **Mr.K.Thirupathy Raja, Hi-Tech CAD CAM Centre, Madurai, Dr.K.Vijayakumar and Dr.S.Prakash, AP/EEE, NPRCET** as a resource person for this certificate course. Kindly permit us to conduct the same.

Thanking you.

Yours faithfully




Head of the Department
Department of Electrical & Electronics Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) 624 401



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CIRCULAR

NPRCET/OFF/EEE/VAC/2022-2023

DATE: 06.04.2023

This is to inform that Department of Electrical and Electronics Engineering is planned to conduct a Certificate Course on “**DEVELOPMENT OF LAB VIEW APPLICATIONS**” for III & IV EEE students in our college campus during this even semester 2022-2023. Interested students can enroll their name to the program coordinator on or before 10.04.23

The details of the training program are given below :

COURSE NAME	DEVELOPMENT OF LAB VIEW APPLICATIONS
RESOURCE PERSONS	1.Mr.K.Thirupathy Raja Hi-Tech CAD CAM Centre, Madurai 2.Dr.K.Vijayakumar, AP/EEE, NPRCET 3.Dr.S.Prakash, AP/EEE, NPRCET
VENUE	PSS Main Lab
DATE & DURATION	17.04.2023 to 21.04.2023 (35 Hours)
PROGRAM COORDINATOR	Mr.T.Siva Kumar, AP/EEE, NPRCET

Copy to:

1. All the HoDs
2. IQAC
3. All the Class Rooms
4. Notice Board
5. File



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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

CERTIFICATE PROGRAM ON

DEVELOPMENT OF LAB VIEW APPLICATIONS

COURSE CONTENT

Course Duration :35 hours

CHAPTER 1 : INTRODUCTION OF LABVIEW

- ✓ LabVIEW Environment : Definition
- ✓ Necessity of LabVIEW
- ✓ Definitions of VI
- ✓ LabVIEW benefits
- ✓ Programming and Execution methods
- ✓ Introductions of 3rd party interfaces and toolkits

CHAPTER 2 : DESIGNING THE SOFTWARE

- ✓ How to start up the Vis?
- ✓ Front panel designing and working environment
- ✓ Definitions of Control and Indicators
- ✓ Types of Control and Indicators
- ✓ Explanations of Control Palette
- ✓ Explanations of Block Diagram and its working
- ✓ Terminals
- ✓ Functional Platte
- ✓ Status Bar or Window tool bar

CHAPTER 3 : BASIC PROGRAMMING

- ✓ How to use Numerical functions?
- ✓ Designing of Boolean operations
- ✓ Comparator applications
- ✓ Exercises in basic programming

CHAPTER 4 : DESIGNING OF SUB PROGRAMS

- ✓ Need of SubVI
- ✓ What is SubVI?
- ✓ How to use the Connector Pane with terminals?
- ✓ Various types in SubVI plots





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CHAPTER 5 : PROGRAMMING LOOPS

- ✓ About For loops
- ✓ How to use Shift registers?
- ✓ While loop designing
- ✓ Flat Sequences
- ✓ Applications based on Loops

CHAPTER 6 : STRUCTURES

- ✓ Case Structure : Definition and designing method
- ✓ Event Structure : Definition and designing method
- ✓ Working models in structures

CHAPTER 7 : DATA HANDLING

- ✓ Introduction of String, Arrays and Clusters
- ✓ Working with string functions
- ✓ About arrays and designing
- ✓ How to do clustering in Vis?
- ✓ Differentiations between Waveform charts and Waveform Graphs
- ✓ Acquire and use the system files based on File I/O functions
- ✓ Report Generations in various files such as MS excel, TDMS, LVM files

CHAPTER 8 : EXTERNAL INTERFACES

- ✓ MAX and VISA explanations
- ✓ GPIB communications
- ✓ Serial communications and interfacing methods
- ✓ LabVIEW instrumentation drivers

CHAPTER 9 : DATA ACQUISITIONS PROCESS AND INSTRUMENT CONTROL BASED ON EMBEDDED CONTROLLERS

- ✓ Acquiring the real time digital data to the Lab VIEW User interface
- ✓ Controlling the LED operations
- ✓ Acquiring of real time analog sensor values
- ✓ Controlling the Motors
- ✓ Create most interaction Vis

CHAPTER 10 : PROJECTS

- ✓ Process of temperature control
- ✓ Process of Lightning system control





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Criteria to get Certificate

- ✓ Students should register their names for this course
- ✓ Students must have 85% attendance
- ✓ Students should secure 75% marks in the exam

PROGRAM COORDINATOR

HOD/EEE

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*The Management, Principal, Staff and Students
Cordially invite you for the Inauguration of*

"Certificate Course on Development of LabView Applications"

On 17th April, 2023

Venue: PSS Lab at 10.00 AM

CHIEF GUEST

Mr.K.Thirupathy Raja

Hi-Tech CAD CAM Centre, Madurai.

PRINCIPAL

Dr.J.Sundararajan

NPR College of Engineering & Technology

Felicitates the function



Organized By



Department of Electrical and Electronics Engineering,

NPR College of Engineering & Technology, NPR Nagar,

Natham.





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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CERTIFICATE COURSE ON DEVELOPMENT OF LABVIEW AND APPLICATIONS

REGISTERED STUDENTS NAME LIST

S. No.	Register Number	Student Name	Year
1.	920820105001	Baskar A	III - EEE
2.	920820105002	Bharathiraja C	III - EEE
3.	920820105003	Govinthavasan A	III - EEE
4.	920820105004	Harish G	III - EEE
5.	920820105005	Ishas Ahamed A	III - EEE
6.	920820105007	Jeyaram M	III - EEE
7.	920820105008	Justin Thiraviyam A	III - EEE
8.	920820105009	Kabil Sharma M	III - EEE
9.	920820105010	Logesh Kumar M	III - EEE
10.	920820105011	Mahendra S	III - EEE
11.	920820105012	Mohammed Ashik S	III - EEE
12.	920820105013	Ramar V	III - EEE
13.	920820105014	Saravana kumar S	III - EEE
14.	920820105015	Saravana Muthu K	III - EEE
15.	920820105016	Sarwesh R	III - EEE
16.	920820105017	Tharun N	III - EEE
17.	920820105018	Thavamani A	III - EEE
18.	920820105019	Venkatesh V	III - EEE
19.	920820105301	Arun Kumar S	III - EEE



S. No.	Register Number	Student Name	Year
20.	920820105302	Bharatha Raja S	III – EEE
21.	920820105303	Brintha R	III – EEE
22.	920820105304	Ganesh S	III – EEE
23.	920820105305	Geethanjali Devi M	III – EEE
24.	920820105306	Hareesh K.S	III – EEE
25.	920820105307	Kalaiselvi S	III – EEE
26.	920820105308	Krishna Pandiyan S	III – EEE
27.	920820105309	Lakshmanan T	III – EEE
28.	920820105310	Loganathan M	III – EEE
29.	920820105311	Mohammed Harish H	III – EEE
30.	920820105312	Monika K	III – EEE
31.	920820105313	Poovarasana R	III - EEE
32.	920820105314	Praveen Kumar R	III - EEE
33.	920820105315	Reegan S	III – EEE
34.	920820105316	Sanron Mathi S	III – EEE
35.	920820105317	Shylesh Kumar V	III – EEE
36.	920821105318	Siva S	III – EEE
37.	920819105001	Ahamed Afzar A	IV- EEE
38.	920819105002	Aravind kumar K	IV- EEE
39.	920819105003	Guru Prasath A	IV- EEE
40.	920819105004	Karthi Keyan R	IV- EEE
41.	920819105005	Kasthuri M	IV- EEE





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S. No.	Register Number	Student Name	Year
42.	920819105006	Lakshmi Priya A	IV- EEE
43.	920819105007	Logeshwaran N	IV- EEE
44.	920819105009	Pitchiyatha D	IV- EEE
45.	920819105010	Poornakumar V	IV- EEE
46.	920819105011	Pradapkannan B	IV- EEE
47.	920819105012	Rajamurugan M	IV- EEE
48.	920819105013	Rajasekar M	IV- EEE
49.	920819105014	Sujeethran S	IV- EEE
50.	920819105015	Ushadevi C	IV- EEE

PROGRAM COORDINATOR

HOD/EEE

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Coordinator - IQAC

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CERTIFICATE COURSE ON

DEVELOPMENT OF LABVIEW APPLICATIONS

Course Schedule

EXTERNAL RESOURCE PERSON	INTERNAL RESOURCE PERSONS
Mr.K.Thirupathy Raja	1. Dr.K.Vijayakumar AP/EEE 2. Dr.S.Prakash AP/EEE

Day 1 17.04.2023	9.00 AM	Registration
	9.30 AM – 10.00 AM	Inauguration
	10.00 AM - 11.10 AM	Session 1 Introduction of Labview Mr.K.Thirupathy Raja
	11.10 AM to 11.30 AM	Tea Break
	11.30 AM to 1.10 PM	Session 2 Front panel designing and working environment Mr.K.Thirupathy Raja
	1.10 PM to 2.00 PM	Lunch Break
	2.00 PM to 3.40 PM	Session 3 Programming and Execution methods Dr.K.Vijayakumar AP/EEE
	3.40 PM to 3.50 PM	Tea Break
Day 2 18.04.2023	3.50 PM to 4.30 PM	Session 4 Definitions of Control and Indicators Dr.S.Prakash AP/EEE
	9.30 AM to 11.10 AM	Session 1 Explanations of Controls Palette Dr.S.Prakash AP/EEE
	11.10 AM to 11.30 AM	Tea Break
	11.30 AM to 1.10 PM	Session 2 Explanations Block Diagram and its working Dr.K.Vijayakumar AP/EEE
	1.10 PM to 2.00 PM	Lunch Break
	2.00 PM to 3.40 PM	Session 3 Status Bar or Window tool bar Dr.S.Prakash AP/EEE
	3.40 PM to 3.50 PM	Tea Break
Day 3 19.04.2023	3.50 PM to 4.30 PM	Session 4 Exercises in basic programming Dr.K.Vijayakumar AP/EEE
	9.30 AM to 11.10 AM	Session 1 How to use the Connector Pane with terminals Mr.K.Thirupathy Raja
	11.10 AM to 11.30 AM	Tea Break





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	11.30 AM to 1.10 PM	Session 2	Various types in Sub VI plots Mr.K.Thirupathy Raja
	1.10 PM to 2.00 PM		<i>Lunch Break</i>
	2.00 PM to 3.40 PM	Session 3	Programming Loops Dr.K.Vijayakumar AP/EEE
	3.40 PM to 3.50 PM		<i>Tea Break</i>
	3.50 PM to 4.30 PM	Session 4	Applications based on Loops Dr.S.Prakash AP/EEE
Day 4 20.04.2023	9.30 AM – 11.10 AM	Session 1	Case Structure : Definition and designing method Mr.K.Thirupathy Raja
	11.10 AM to 11.30 AM		<i>Tea Break</i>
	11.30 AM to 1.10 PM	Session 2	Working models in structures Dr.K.Vijayakumar AP/EEE
	1.10 PM to 2.00 PM		<i>Lunch Break</i>
	2.00 PM to 3.40 PM	Session 3	Working with string functions Dr.S.Prakash AP/EEE
	3.40 PM to 3.50 PM		<i>Tea Break</i>
	3.50 PM to 4.30 PM	Session 4	LabVIEW instrumentation drivers Mr.K.Thirupathy Raja
Day 5 21.04.2023	9.30 AM – 11.10 AM	Session 1	Acquiring the real time digital data to the Lab VIEW User interface. Mr.K.Thirupathy Raja
	11.10 AM to 11.30 AM		<i>Tea Break</i>
	11.30 AM to 1.10 PM	Session 2	Controlling the Motors Dr.K.Vijayakumar AP/EEE
	1.10 PM to 2.00 PM		<i>Lunch Break</i>
	2.00 PM to 3.40 PM	Session 3	Process of temperature control Mr.K.Thirupathy Raja
	3.40 PM to 3.50 PM		<i>Tea Break</i>
	3.50 PM to 4.30 PM	Session 4	Process of Lightning system control Mr.K.Thirupathy Raja
	4.30 PM to 5.00 PM		Valedictory

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CERTIFICATE COURSE ON

DEVELOPMENT OF LAB VIEW APPLICATIONS

RESOURCE PERSON'S PROFILE

Name	:	Mr.K.Thirupathy Raja
Designation	:	Course Trainer
Company Name	:	Hi-Tech CAD CAM Centre. Madurai.
About Resource Person	:	He is working as a Course Trainer at Hi-Tech CAD CAM Centre, Madurai. He has more knowledge's in Software Design, ECAD , MATLAB Programming. He handled Labview, Arduinio, Embedded, Aerospace, Automotive projects.


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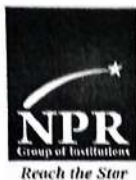

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CERTIFICATE COURSE ON

DEVELOPMENT OF LABVIEW APPLICATIONS

STUDENT'S ATTENDANCE

S.No.	Reg.No.	Name of the Student	17.4.23		18.4.23		19.4.23		20.4.23		21.4.23	
			FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1.	920820105001	Baskar A	/	/	/	/	/	/	/	/	/	/
2.	920820105002	Bharathiraja C	/	/	/	/	/	/	/	/	a	a
3.	920820105003	Govinthavasan A	/	/	/	/	/	/	/	/	/	/
4.	920820105004	Harish G	/	/	/	/	/	/	/	/	/	/
5.	920820105005	Ishas Ahamed A	/	/	/	/	/	/	/	/	/	/
6.	920820105007	Jeyaram M	/	/	/	/	/	/	/	/	/	/
7.	920820105008	Justin Thiraviyam A	/	/	/	/	/	/	/	/	/	/
8.	920820105009	Kabil Sharma M	/	/	/	/	/	/	a	a	/	/
9.	920820105010	Logesh Kumar M	/	/	/	/	/	/	/	/	/	/
10.	920820105011	Mahendra S	/	/	/	/	/	/	/	/	/	/
11.	920820105012	Mohammed Ashik S	/	/	/	/	/	/	/	/	/	/
12.	920820105013	Ramar V	/	/	/	/	/	/	/	/	/	/
13.	920820105014	Saravanakumar S	/	/	/	/	/	/	/	/	/	/
14.	920820105015	Saravana Muthu K	/	/	/	/	/	/	/	/	/	/
15.	920820105016	Sarwesh R	a	a	/	/	/	/	/	/	/	/
16.	920820105017	Tharun N	/	/	/	/	/	/	/	/	/	/
17.	920820105018	Thavamani A	/	/	/	/	/	/	/	/	/	/
18.	920820105019	Venkatesh V	/	/	/	/	a	a	/	/	/	/
19.	920820105301	Arun Kumar S	/	/	/	/	a	a	/	/	/	/
20.	920820105302	Bharatha Raja S	/	/	/	/	/	/	/	/	/	/
21.	920820105303	Brintha R	/	/	/	/	/	/	/	/	/	/
22.	920820105304	Ganesh S	/	/	/	/	/	/	/	/	/	/
23.	920820105305	Geethanjali Devi M	/	/	a	a	/	/	/	/	/	/
24.	920820105306	Hareesh K.S	/	/	/	/	/	/	a	a	/	/
25.	920820105307	Kalaiselvi S	/	/	/	/	/	/	/	/	/	/
26.	920820105308	Krishna Pandiyan S	/	/	/	/	/	/	/	/	/	/
27.	920820105309	Lakshmanan T	a	a	/	/	/	/	/	/	/	/
28.	920820105310	Loganathan M	/	/	/	/	/	/	/	/	/	/
29.	920820105311	Mohammed Harish H	/	/	/	/	/	/	/	/	/	/
30.	920820105312	Monika K	/	/	/	/	/	/	/	/	/	/
31.	920820105313	Poovarasan R	/	/	/	/	/	/	/	/	/	/
32.	920820105314	Praveen Kumar R	/	/	/	/	/	/	/	/	/	/
33.	920820105315	Reegan S	/	/	/	/	/	/	/	/	/	/





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CERTIFICATE COURSE ON

DEVELOPMENT OF LABVIEW APPLICATIONS

STUDENT'S ATTENDANCE

S.No.	Reg.No.	Name of the Student	17.4.23		18.4.23		19.4.23		20.4.23		21.4.23	
34.	920820105316	Sanron Mathi S	/	/	/	/	/	/	/	/	/	/
35.	920820105317	Shylesh Kumar V	/	/	/	/	/	/	/	/	/	/
36.	920820105318	Siva S	/	/	/	/	/	/	a	a	/	/
37.	920819105001	Ahamed Afzar A	/	/	/	/	/	/	/	/	/	/
38.	920819105002	Aravind kumar K	/	/	/	/	/	/	/	/	/	/
39.	920819105003	Guru Prasath A	/	/	/	/	/	/	/	/	/	/
40.	920819105004	Karthi Keyan R	/	/	a	a	/	/	/	/	/	/
41.	920819105005	Kasthuri M	/	/	/	/	/	/	/	/	/	/
42.	920819105006	Lakshmi Priya A	/	/	/	/	/	/	/	/	/	/
43.	920819105007	Logeshwaran N	/	/	/	/	/	/	/	/	/	/
44.	920819105009	Pitchiyatha D	/	/	/	/	/	/	/	/	/	/
45.	920819105010	Poornakumar V	/	/	/	/	/	/	/	/	/	/
46.	920819105011	Pradapkannan B	a	a	/	/	/	/	/	/	/	/
47.	920819105012	Rajamurugan M	/	/	/	/	/	/	/	/	/	/
48.	920819105013	Rajasekar M	/	/	/	/	/	/	/	/	/	/
49.	920819105014	Sujeethran S	/	/	/	/	/	/	/	/	a	a
50.	920819105015	Ushadevi C	/	/	/	/	/	/	/	/	/	/
PRESENT			47	47	48	48	48	48	47	47	48	48
ABSENT			03	03	02	02	02	02	03	03	02	02
TOTAL			50	50	50	50	50	50	50	50	50	50
PROGRAM COORDINATOR			<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

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SAMPLE QUESTION PAPER & ANSWER

NAME OF THE STUDENT:

MARKS: 10

1. Among the following, which is the right formula for inductance?

- a) $L = \frac{emf \cdot t}{I}$
- b) $L = \frac{emf}{t \cdot I}$
- c) $L = \frac{emf \cdot I}{t}$
- d) $L = \frac{emf}{t \cdot I}$

2. Among the following, which is the right formula for inductance of N turns?

- a) $L = \frac{e}{t} N i$
- b) $L = N \cdot i \cdot e \cdot t$
- c) $L = \frac{N i}{e t}$
- d) $L = \frac{N}{i e t}$

3. For a coil having a magnetic circuit of constant reluctance, the flux is _____ to the current.

- a) Directly proportional
- b) Inversely proportional
- c) Not related
- d) Very large compared to





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SAMPLE QUESTION PAPER & ANSWER

4. For a coil having a magnetic circuit of constant reluctance, if the flux increases, what happens to the current?

- a) Increases
- b) Decreases
- c) Remains constant
- d) Becomes zero

5. The unit for inductance is _____

- a) Ohm
- b) Henry
- c) A/m
- d) A/s

6. If either the inductance or the rate of change of current is doubled, the induced e.m.f?

- a) Remains constant
- b) Becomes zero
- c) Doubles
- d) Becomes half





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SAMPLE QUESTION PAPER & ANSWER

7. If the current changes from 5A to 3A in 2 seconds and the inductance is 10H, calculate the emf.

- a) 5V
- b) 10V
- c) 15V
- d) 20V

8. If the current changes from 5A to 3A in x sec and inductance is 10H. The emf is 10V, calculate the value of x.

- a) 2s
- b) 3s
- c) 4s
- d) 5s

9. If the current changes from 3A to 5A in 2s and the emf is 10V. Calculate the inductance.

- a) 10H
- b) 20H
- c) 30H
- d) 40H





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SAMPLE QUESTION PAPER & ANSWER

10. As the number of turns in the coil increases, what happens to the inductance of the coil?

- a) Increases
- b) Decreases
- c) Remains the same
- d) Becomes zero

ANSWERS:

- 1. a
- 2. b
- 3. d
- 4. a
- 5. a
- 6. b
- 7. a
- 8. d
- 9. c
- 10. a




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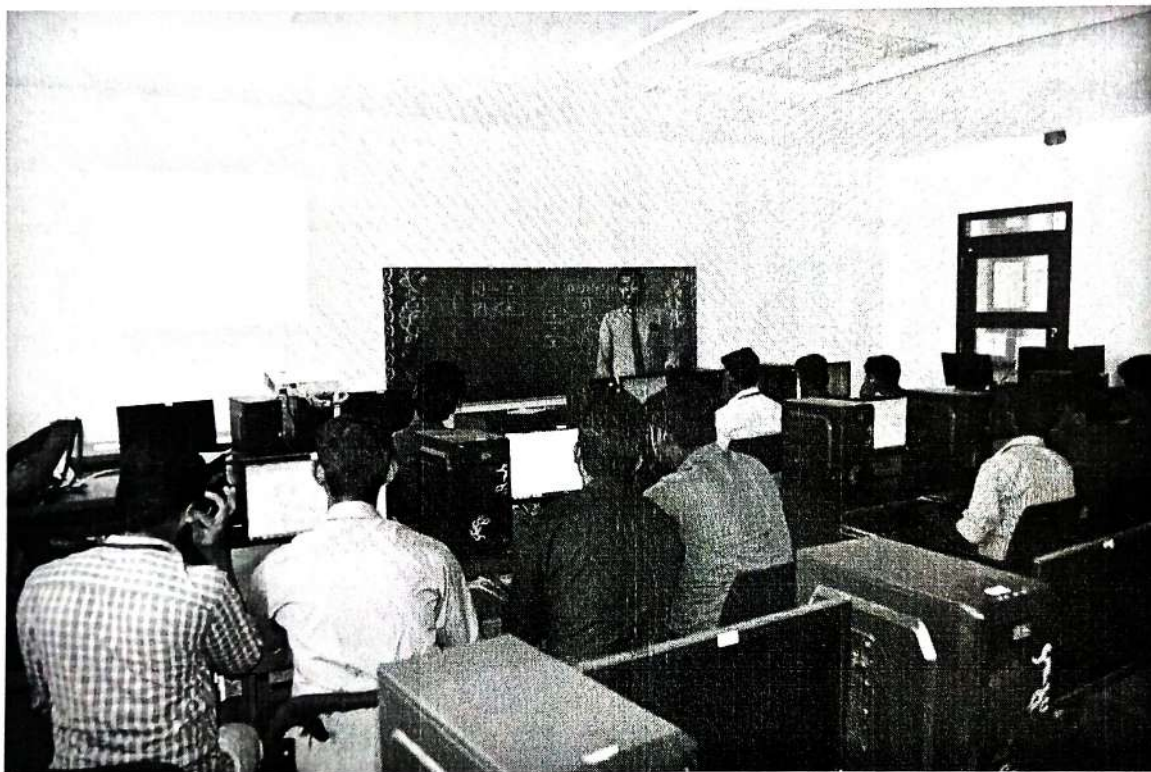
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CERTIFICATE COURSE PHOTOGRAPHS ON
DEVELOPMENT OF LABVIEW APPLICATIONS
PHOTO GALLERY



Resource Person Mr.K.Thirupathy Raja during Hands on Training to III & IV Year Students


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CERTIFICATE COURSE ON

DEVELOPMENT OF LABVIEW APPLICATIONS

STUDENT'S FEEDBACK

Date: 21-4-23

Name of the Student : S. Kalaiselvi	Year / Semester: III / VI
Name of the Program: Certificate Course on Development of LAB VIEW Applications	

S.No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1	Course Content	✓				
2	Way of Exposed New Knowledge and Practices		✓			
3	Examples Provided during this Course	✓				
4	Course Delivered by Resource Person	✓				
5	Time Management		✓			
6	Overall rating of this Course	✓				


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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CERTIFICATE COURSE ON

DEVELOPMENT OF LABVIEW APPLICATIONS

STUDENT'S FEEDBACK

Date: 21.4.23

Name of the Student : <u>Poorna Kumar. V</u>	Year / Semester: <u>IV / 08</u>
Name of the Program: Certificate Course on Development of LAB VIEW Applications	

S.No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1	Course Content		✓			
2	Way of Exposed New Knowledge and Practices	✓				
3	Examples Provided during this Course	✓				
4	Course Delivered by Resource Person		✓			
5	Time Management		✓			
6	Overall rating of this Course		✓			


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STUDENT'S FEEDBACK

Date: 21/4/23

Name of the Student : <u>Thavamani</u>	Year / Semester: <u>3rd / 06</u>
Name of the Program: Certificate Course on Development of LAB VIEW Applications	

S.No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1	Course Content	✓				
2	Way of Exposed New Knowledge and Practices	✓				
3	Examples Provided during this Course		✓			
4	Course Delivered by Resource Person	✓				
5	Time Management		✓			
6	Overall rating of this Course		✓			



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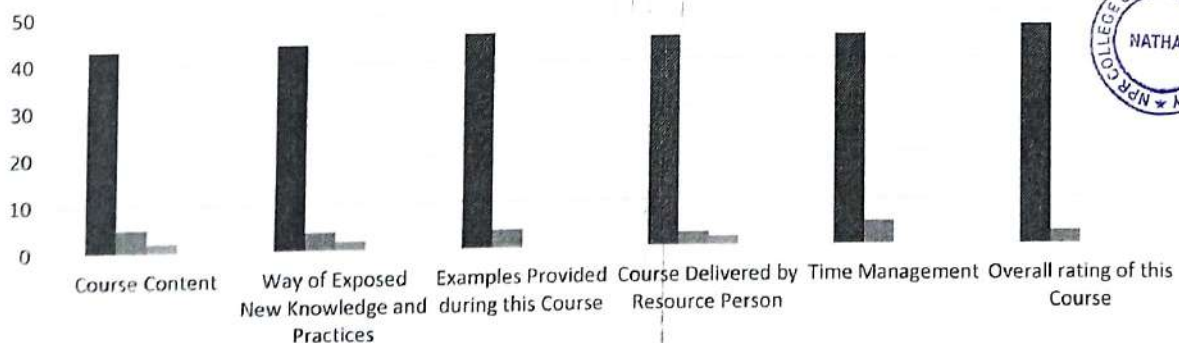
STUDENT'S FEEDBACK SUMMARY REPORT

TOTAL STRENGTH: 50

DATE: 21-04-23

S.No.	Content	Excellent	Good	Satisfactory	Poor	Very Poor
1	Course Content	43	5	2	0	0
2	Way of Exposed New Knowledge and Practices	44	4	2	0	0
3	Examples Provided during this Course	46	4	0	0	0
4	Course Delivered by Resource Person	45	3	2	0	0
5	Time Management	45	5	0	0	0
6	Overall rating of this Course	47	3	0	0	0
	Average	45	4	6	0	0

NUMBER OF STUDENTS SUCCESSFULLY COMPLETED THE COURSE: 50



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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CERTIFICATE COURSE ON

DEVELOPMENT OF LAB VIEW APPLICATIONS

SUMMARY REPORT

The Department of Electrical and Electronics Engineering organized a Certificate Course on "Development of Labview Applications" from 17.04.2023 to 21.04.2023 (5 days) at PSS Lab. Final Year student Ms.A.Lakshmi Priya, delivered the welcome address.

Principal of our college **Dr.J.Sundararajan** inaugurated the program and delivered the inaugural address. **Mr.K.Thirupathy Raja** from Hi-Tech CAD CAM Centre. Madurai., had participated with us and shared his knowledge with our students. This five days course gave us the good over view on "Development of Lab View Applications" and provided lots of information regarding the topic. In addition to this, it also gave the information on future outcomes.

They shared their knowledge of fundamentals and how to work with LAB VIEW and Program techniques which enables the students to have skills to resolve complex real world problems for decision support.

Our students learnt various existing and emerging technologies of LAB VIEW in Electrical and Electronics Engineering experiments. 50 students of EEE department from III Year & IV Year have attended the course and completed it successfully and were awarded with certificates.

Finally, the course was concluded by Mr.V.Venkatesh, III Year EEE by delivering the vote of thanks.

PROGRAM COORDINATOR

HOD/EEE

IQAC

PRINCIPAL

Head of the Department
Department of Electrical & Electronics Engineering
NPR College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401

Coordinator - IQAC
NPR College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401

Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
NPR College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.





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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Certificate of Completion

This is to certify that Mr./Ms. K.Monika III - EEE has successfully completed the five day certificate course entitled "Development of Labview Applications" organized by Department of Electrical and Electronics Engineering, NPR College of Engineering & Technology. The course was conducted from 17/04/2023 to 21/04/2023.

CONGRATULATIONS ON YOUR ACHIEVEMENT!



PROGRAMME CO-ORDINATOR
MR.T.SIVAKUMAR

HOD/EEE
[DR.K.KANIMOZHI]

PRINCIPAL
[DR.J.SUNDARARAJAN]



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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CERTIFICATE PROGRAM ON

DEVELOPMENT OF LABVIEW AND APPLICATIONS

COURSE MATERIAL

1. https://wwwusers.ts.infn.it/~rui/univ/Acquisizione_Dati/Lezioni/VIII%20%20Labview%20%20Introduction/LabVIEW%20Introduction-SixHour.pdf
2. https://www.halvorsen.blog/documents/teaching/courses/labview_automation/labview_basic.php
3. <https://microcontrollerslab.com/labview-programming-examples/>
4. <https://www.ni.com/getting-started/labview-basics/>
5. http://eee-research.unm.edu/jimp/415/labview/LV_Intro_Six_Hours.pdf





PROGRAM COORDINATOR


HOD/EEE


IQAC


PRINCIPAL


Dr. J. SUNDARARAJAN
B.E., M.Tech., Ph.D.
Principal
Coordinator - IQAC
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CERTIFICATE COURSE ON ASSEMBLY AND MAINTENANCE OF AUTOMOBILE

INDEX

COURSE NAME: 22MECC02 – ASSEMBLY AND MAINTENANCE OF AUTOMOBILE

ACADEMIC YEAR: 2022-2023

SEMESTER: EVEN

DURATION: 35 HOURS

S.NO.	PARTICULARS	PAGE NO.
1	PERMISSION LETTER	2
2	RESOURCE PERSON'S PROFILE	3
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15	CERTIFICATE OF THE PROGRAM	21

G. Ariffin
PROGRAM
CO-ORDINATOR

G. Sundararajan

R. S. I.
HoD/MECH

Head of the Department

Department of Mechanical Engineering
NPR College of Engineering & Technology
Natham Dindigul / DT - 624 401



IQAC



Dr. J. Sundararajan
PRINCIPAL

Dr. J. SUNDARARAJAN

B.E., M.Tech., Ph.D.

Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.



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CERTIFICATE COURSE ON ASSEMBLY AND MAINTENANCE OF AUTOMOBILE PERMISSION LETTER

DATE: 14.02.2023

From

Mr.G.Sundararajan,
Assistant Professor,
Department of Mechanical Engineering,
NPR College of Engineering & Technology,
Natham.

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Respected Sir,

Sub: Seeking permission to conduct Certificate Course for Mechanical Engineering students -
Regarding.

We have planned to conduct a Certificate Course on **"ASSEMBLY AND MAINTENANCE OF AUTOMOBILE"** to our Mechanical Engineering students from 27.0.2023 to 19.04.2023 (18 Days / 35Hours) from 4.30 p.m. to 6.00 p.m. in our college premises. We have proposed **Mr.N.Sivakumar, Service Manager, GG-Automobiles, Meenakshi Bazaar Scott Rd, Madurai**, as the resource person for this certificate course, Kindly permit us to conduct the same.

Thanking you

Yours faithfully,

PSJ





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DEPARTMENT OF MECHANICAL ENGINEERING
CERTIFICATE COURSE ON ASSEMBLY AND MAINTENANCE OF AUTOMOBILE
RESOURCE PERSON PROFILE

Name : Mr.N.SIVAKUMAR

Designation : Service Manager

Organization : GG-Automobiles, Meenakshi Bazaar Scott Road, Madurai

About the Resource Person : Mr. N.Sivakumar is currently working as Service manager with GG-Automobiles, Meenakshi Bazaar Scott Road, Madurai. He has completed his DME (Mech) in Thanapandiyan Polytechnic College, Madurai. He is an experienced technical person with a demonstrated history of working in the Automobile industry.





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NPRCET/OFF/MECH/VAC/2022-2023

DATE: 14.03.2023

CIRCULAR

This is to inform that Department of Mechanical Engineering has planned to conduct a Certificate Course on "ASSEMBLY AND MAINTENANCE OF AUTOMOBILE" for the II,III & IV year Mechanical Engineering students during the Academic year 2022-2023. Interested students can enroll their name to the program coordinator on or before 20/03/2023.

The details of the training program are given below:

COURSE NAME	:	ASSEMBLY AND MAINTENANCE OF AUTOMOBILE
RESOURCE PERSON	:	Mr.N.Sivakumar
VENUE	:	Workshop Block - Mechanical
DATE & DURATION	:	2.12.2020 to 25.01.2021, 30Hours
PROGRAM COORDINATOR	:	Mr.G.Sundararajan, Assistant Professor Department of Mechanical Engineering.

Copy to:

1. All the HoDs
2. IQAC
3. All the Class Rooms
4. Notice Board
5. File
6. Program Co-ordinator



PRINCIPAL

Dr. J.SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology

Natham, Dindigul (TN) - 624 401.



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The Management, Principal, Staff and Students
Cordially invite you for the inauguration of
CERTIFICATE COURSE ON
ASSEMBLY AND MAINTENANCE OF
AUTOMOBILE

On 27th March, 2023

Venue: NPRCET Rear Block AC Seminar hall at 03.00 PM.

Chief Guest

Mr.N.Sivakumar

Service Manager

GG-Automobiles, Madurai

Dr.J.Sundararajan

Principal,

*NPR College of Engineering &
Technology*

Felicitates the function



Organized By



*Department of Mechanical Engineering,
NPR College of Engineering & Technology, NPR Nagar,
Natham.*





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AGENDA

Inauguration on 27.03.2023 AN

- ❖ Prayer Song : Tamilthai vazhthu
- ❖ Welcome Address : Ms.K. Shobana
IV- Year Mechanical
- ❖ Felicitation Address : Dr. J. Sundararajan
Principal
- ❖ Honoring the Chief Guest : Mr. V.Ruban
II- Year Mechanical
- ❖ Chief Guest Introduction : Mr. M. Mathan Raj
Assistant Professor
Mechanical Engineering
- ❖ Chief Guest Address : Mr.M.Muthuraj
CEO & FOUNDER
Profenna Technologies, Madurai

Valedictory on 19.04.2023

- ❖ Vote of Thanks : Ms. G.Mahalakshimi
IV-Year Mechanical
- ❖ National Anthem





DEPARTMENT OF MECHANICAL ENGINEERING

**CERTIFICATE COURSE ON ASSEMBLY AND MAINTENANCE OF AUTOMOBILE
COURSE CONTENT**

Chapter 1:

- Introduction to Engine, Description of internal & external combustion engines, Classification of IC engines,
- Principle & working of 2&4-stroke diesel engine (Compression ignition Engine (C.I), Principle of Spark Ignition Engine(SI), differentiate between 2-stroke and 4 stroke, C.I engine and S.I Engine.
- Direct injection and Indirect injection, Technical terms used in engine, Engine specification.
- Basic engine components -Engine cams & Description & functions of pistons, piston rings.
- Common troubles and remedies of piston. Description and function of Crank shaft, Engine bearings.

Chapter 2:

- Valves & Valve Trains : Function of Engine Valves, different types, materials, Type of valve operating mechanism, Importance of Valve seats, Valve-timing setting.
- Description of Camshafts & drives, importance of Cam lobes, Timing belts & chains.
- Trouble shooting procedure for Excessive smoke, overheating, knocking or abnormal noise.

Chapter 3:

- Intake & exhaust systems - Carbureted systems, Principle of Carburetor, type of carburetor.
- Working of constant velocity type carburetor, Carburetor operation-Carburetion, Carburetor systems, Metering jets, Accelerating, Carburetor barrels, Carburetor filters
- Diesel fuel Injection system, Tanks & lines, air cleaners, Intake manifolds.

Chapter 4:

- Braking Systems - Braking fundamentals, Principles of braking, description, construction and operation of Drum & disc brakes, advantage over drum brake.
- Description and working principle of master cylinder, Hydraulic pressure & force, Brake fade.
- Braking system components- Brake pedal/lever, Brake fluid hose, Brake fluid, Bleeding, Applying brakes, Brake force, Brake light switch.

Chapter 5:

- Clutches & Transmission:- Clutch principles, Wet & dry clutches Single-plate clutches, Multi-plate clutches, Operating mechanisms, Automatic clutch.
- Gearbox layout & operation Gearbox layouts, description of gear shift mechanism, gear ratio, Gearbox operation, Gear drive position - Neutral, 1st to 5th position.

Criteria to get Certificate:

Average assignment score = 25% of average of best 3 assignments out of the total 4 assignments given in the course.

Exam score = 75% of the proctored certification exam score out of 100

Final score = Average assignment score + Exam score

Prepared By: Mr.G.Sundararajan, AP/MECH

Approved By

PROGRAM CO-ORDINATOR

HOD/MECH

IQAC

PRINCIPAL

G. Sundararajan

Head of the Department
Department of Mechanical Engineering
NPR College of Engineering & Technology
Natham Dindigul (DT) - 624 401

Dr. J. Sundararajan

B.E., M.Tech., Ph.D.,

Principal

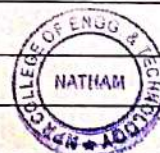
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DEPARTMENT OF MECHANICAL ENGINEERING

**CERTIFICATE COURSE ON ASSEMBLY AND MAINTENANCE OF AUTOMOBILE
REGISTERED STUDENTS NAME LIST**

S. No.	Register Number	Name of the student	Class
1.	920821114012	Gokul M	II - MECH
2.	920821114030	Vidhya Shankar P	II - MECH
3.	920821114304	Satheesh G	II - MECH
4.	920820114321	Prakash Kumar G	III - MECH
5.	920820114323	Rajmohan R	III - MECH
6.	920820114324	Raj Venkatesh R	III - MECH
7.	920820114335	Tamil Arasan R N	III - MECH
8.	920820114336	Venkatesh S	III - MECH
9.	920819114001	Abilash A	IV - MECH
10.	920819114003	Anbarasan V	IV - MECH
11.	920819114004	Jegathgurunaatha Ashwin S	IV - MECH
12.	920819114005	Ayyam Perumal P	IV - MECH
13.	920819114006	Balakumaresan S	IV - MECH
14.	920819114008	Dineshpandi B	IV - MECH
15.	920819114010	Gowthaman M	IV - MECH
16.	920819114012	Iman Mohammed T	IV - MECH
17.	920819114013	Maha Lakshmi G	IV - MECH
18.	920819114014	Manikandan N	IV - MECH
19.	920819114015	Manikandan R	IV - MECH
20.	920819114016	Meenakshi Sundaram G	IV - MECH
21.	920819114018	Mohamed Siddiq A	IV - MECH
22.	920819114019	Mohana Ragul P	IV - MECH
23.	920819114020	Mugeshwaran N	IV - MECH
24.	920819114021	Muthusamy P	IV - MECH
25.	920819114022	Nagaraj S	IV - MECH
26.	920819114023	Naveen Raj K	IV - MECH
27.	920819114024	Nitheswar M	IV - MECH
28.	920819114025	Payyavula Sai Prasad	IV - MECH
29.	920819114026	Raghulpandian B	IV - MECH
30.	920819114027	Rakesh M	IV - MECH
31.	920819114028	Rakesh S	IV - MECH
32.	920819114029	Ramakrishnan B	IV - MECH





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S. No.	Register Number	Name of the student	Class
33	920819114030	Ramanan M	IV - MECH
34	920819114031	Ramkumar A	IV - MECH
35	920819114032	Ruban P	IV - MECH
36	920819114033	Sangaran S	IV - MECH
37	920819114034	Sankar G	IV - MECH
38	920819114035	Saravanakumar M	IV - MECH
39	920819114036	Shaarif Ahamed S	IV - MECH
40	920819114037	Shobana K	IV - MECH
41	920819114038	Siva Kumar S	IV - MECH
42	920819114039	Velpackiyaraj M	IV - MECH
43	920819114701	Veeramani Kandan M	IV - MECH



G. Anjitha
PROGRAM CO-ORDINATOR
G. Sundararajan

PSL
HoD/MECH
Head of the Department
Department of Mechanical Engineering
NPR College of Engineering & Technology
Natham Dindigul (TN) - 624 401



DEPARTMENT OF MECHANICAL ENGINEERING
CERTIFICATE COURSE ON ASSEMBLY AND MAINTENANCE OF AUTOMOBILE
COURSE SCHEDULE

Venue : Workshop Block - Mechanical

Time: 4.30 p.m. to 6.00 p.m.

External Resource Person:

1. Mr. N. Sivakumar, Service Manager.

Internal Resource Person:

Mr. G. Sundararajan, AP/MECH

S. No.	Date	Syllabus	Resource Person	Hours
1	27.03.2023	Introduction to Engine, Description of internal & external combustion engines, Classification of IC engines.	Mr.N.Sivakumar, Service Manager	2
2	28.03.2023	Principle & working of 2&4-stroke diesel engine (Compression ignition Engine (C.I), Principle of Spark Ignition Engine (S.I), differentiate between 2-stroke and 4 stroke, C.I engine and S.I Engine.	Mr.N.Sivakumar, Service Manager	2
3	29.03.2023	Direct injection and Indirect injection, Technical terms used in engine, Engine specification, Basic engine components - Engine cams & Description & functions of pistons, piston rings.	Mr.N.Sivakumar, Service Manager	2
4	30.03.2023	Common troubles and remedies of piston. Description and function of Crank shaft, Engine bearings.	Mr.N.Sivakumar, Service Manager	2
5	31.03.2023	Function of Engine Valves, different types, materials, Type of valve operating mechanism, Importance of Valve seats, Valve-timing setting.	Mr.G.Sundararajan, AP/Mech	2
6	03.04.2023	Description of Camshafts & drives, importance of Cam lobes, Timing belts & chains. Trouble shooting procedure for Excessive smoke, overheating, knocking or abnormal noise.	Mr.N.Sivakumar, Service Manager	
7	04.04.2023	Intake & exhaust systems - Carbureted systems, Principle of Carburetor, type of carburetor.	Mr.G.Sundararajan, AP/Mech	2
8	05.04.2023	Working of constant velocity type carburetor, Carburetor operation- Carburetion, Carburetor systems, Metering jets, Accelerating, Carburetor barrels, Carburetor filters.	Mr.N.Sivakumar, Service Manager	2



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9	06.04.2023	Diesel fuel Injection system, Tanks & lines, air cleaners, Intake manifolds.	Mr. G. Sundararajan, AP/Mech,	2
10	07.04.2023	Braking Systems - Braking fundamentals, Principles of braking, description, construction and operation of Drum & disc brakes, advantage over drum brake.	Mr. G. Sundararajan, AP/Mech,	2
11	08.04.2023	Clutch principles, Wet & dry clutches Single-plate clutches, Multi-plate clutches.	Mr. N. Sivakumar, Service Manager	2
12	10.04.2023	Operating mechanisms, Description of cam chain mechanism. Automatic clutch	Mr. N. Sivakumar, Service Manager	2
13	11.04.2023	Gearbox layout & operation Gearbox layouts, description of gear shift mechanism, gear ratio.	Mr. N. Sivakumar, Service Manager	2
14	12.04.2023	Trouble shooting procedure for Clutch slip when accelerating, clutch will not disengage, motor cycle creeps with clutch disengaged.	Mr. G. Sundararajan, AP/Mech,	2
15	13.04.2023	Misfirin, Study about LPG / CNG powered engines used in Two Wheelers. Safety while handling gas units.	Mr. G. Sundararajan, AP/Mech,,	2
16	17.04.2023	Emission Control-Sources of emission, Combustion, Hydrocarbons, Hydrocarbons in exhaust gases.	Mr. G. Sundararajan, AP/Mech,	2
17	18.04.2023	Suspension Systems- Principles of suspension, Suspension force, Description, location, suspension- description, construction and working principle of telescopic front suspension, suspension oil.	Mr. N. Sivakumar, Service Manager	2
18	19.04.2023	Shock absorber types-Hydraulic shock absorbers, Gas-pressurized shock absorbers, Load-adjustable shock absorbers, Automatic load- adjustable shock absorbers.	Mr. N. Sivakumar, Service Manager	1
Total Hours				35

G. Senthil

PROGRAM
CO-ORDINATOR

G. Sundararajan

DEL N
HOD/MECH



IQAC

PRINCIPAL

Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal

Head of the Department
Department of Mechanical Engineering
NPR College of Engineering & Technology
Natham, Dindigul (TN) - 624 401



NPR College of Engineering & Technology
Natham, Dindigul (TN) - 624 401



DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE COURSE ON ASSEMBLY AND MAINTENANCE OF AUTOMOBILE STUDENTS ATTENDANCE

S.No	Reg.No.	Student Name	Year	Days																	
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	23MECC02001	Gokul M	II - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	23MECC02002	Vidhya Shankar P	II - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
3	23MECC02003	Satheesh G	II - MECH	/	/	A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
4	23MECC02004	Prakash Kumar G	III - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
5	23MECC02005	Rajmohan R	III - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
6	23MECC02006	Raj Venkatesh R	III - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
7	23MECC02007	Tamil Arasan R N	III - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
8	23MECC02008	Venkatesh S	III - MECH	/	/	/	/	/	/	/	/	A	/	/	/	/	/	/	/	/	/
9	23MECC02009	Abilash A	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
10	23MECC02010	Anbarasan V	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
11	23MECC02011	Jegathgurunaatha Ashwin S	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	23MECC02012	Ayyam Perumal P	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
13	23MECC02013	Balakumaresan S	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
14	23MECC02014	Dineshpandi B	IV - MECH	/	/	/	/	/	A	/	/	/	/	/	/	/	/	/	/	/	/
15	23MECC02015	Gowthaman M	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
16	23MECC02016	Iman Mohammed T	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
17	23MECC02017	Maha Lakshmi G	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
18	23MECC02018	Manikandan N	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
19	23MECC02019	Manikandan R	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
20	23MECC02020	Meenakshi Sundaram G	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
21	23MECC02021	Mohamed Siddiq A	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
22	23MECC02022	Mohana Ragul P	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
23	23MECC02023	Mugeshwaran N	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
24	23MECC02024	Muthusamy P	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
25	23MECC02025	Nagaraj S	IV - MECH	/	/	/	/	/	/	/	/	/	/	A	/	/	/	/	/	/	/
26	23MECC02026	Naveen Raj K	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
27	23MECC02027	Nitheswar M	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
28	23MECC02028	Payyavula Sai Prasad	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
29	23MECC02029	Raghulpandian B	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
30	23MECC02030	Rakesh M	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
31	23MECC02031	Rakesh S	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
32	23MECC02032	Ramakrishnan B	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
33	23MECC02033	Ramanan M	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	A	/	/	/	/	/
34	23MECC02034	Ramkumar A	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
35	23MECC02035	Ruban P	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
36	23MECC02036	Sangaran S	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
37	23MECC02037	Sankar G	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
38	23MECC02038	Saravanakumar M	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/



DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE COURSE ON ASSEMBLY AND MAINTENANCE OF AUTOMOBILE

SAMPLE QUESTION PAPER WITH ANSWER KEY

1. What is an Automobile?
 - a) Self-propelled vehicle
 - b) Used for carrying passengers and goods on the ground
 - c) Contains the power source for its propulsion
 - d) All of the mentioned [Answer]**

2. Automobile can be classified based on which of the following parameter?
 - a) Fuel Used
 - b) Transmission
 - c) Drive
 - d) All of the mentioned [Answer]**

3. Which of the following serves as a cooling and ventilation of engine lubricating oil?
 - a) Piston
 - b) Cam shaft
 - c) Oil sump [Answer]**
 - d) Crank case

4. Which of these were or are used in automobiles to provide suspension?.
 - a) Coil springs
 - b) Torsion bars
 - c) Leaf springs
 - d) All of the mentioned [Answer]**

5. Which of the following is not a part of the transmission system?
 - a) Clutch
 - b) Wheels [Answer]**
 - c) Gear box
 - d) Axles

6. Which of the following is a classification of IC Engine?



a) Otto cycle engine [Answer]

- b) Four-stroke engines
- c) S.I Engines
- d) All of the above

7. What is the function of the alternator?

a) Recharging the Battery [Answer]

- b) Voltage Regulator
- c) Auto-ignition
- d) None of the above

8. Which of the following is found in an automobile's electrical system?

- a) Lighting systems
- b) Battery
- c) Alternators

d) All of the mentioned [Answer]

9. Which of the following is necessary for the description of an automobile?

- a) Model
- b) Capacity
- c) Make

d) All of the mentioned [Answer]

10. Which of the following parameter is not necessary for the description of an automobile?

- a) Model
- b) Type
- c) Capacity

d) Colour [Answer]

11. What is an IC Engine?

a) The fuel is ignited and burned inside the engine [Answer]

- b) The fuel is burned inside a combustion chamber
- c) The fuel is ignited inside a combustion chamber
- d) None of the above

12. Which of the following material is used to make connecting rod?

- a) Cast iron
- b) Mild steel
- c) Forged steel [Answer]



d) Tool steel

13. Which of the following is a type of Gasket?

a) Single sheet rigid

b) Copper asbestos

c) Steel asbestos

d) All of the mentioned [Answer]

14. Which of the following isn't a cylinder block part?

a) Carburetor

b) Cylinder in which piston slides up and down

c) Openings for valves

d) Passages for the flow of cooling water [Answer]


15. Which of the following provides passages for the flow of cooling water?

a) Crankcase

b) Cylinder block

c) Piston

d) Cylinder head [Answer]


PROGRAM CO-ORDINATOR
G. Sundararajan


HoD/MECH

Head of the Department
Department of Mechanical Engineering
VPR College of Engineering & Technology
Narham, Dindigul (DT) 624 401





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DEPARTMENT OF MECHANICAL ENGINEERING
CERTIFICATE COURSE ON ASSEMBLY AND MAINTENANCE OF
AUTOMOBILE
STUDENT FEEDBACK

Name of the Student : P. Muthusamy	Year / Semester: IV - year / VIII - sem
Name of the Program:	

CONTENT	EXCELLENT	GOOD	FAIR	SATISFACTORY
COURSE CONTENT	/			
TECHNICAL SKILL	/			
INTERACTION		/		
PRACTICAL SESSION	/			
COMMUNICATION	/			

Any Other Comments / Suggestions: —



P. Muthusamy
Signature of the student

G. Sunthararajan
PROGRAM COORDINATOR
G. Sunthararajan

Devi
HoD/MECH



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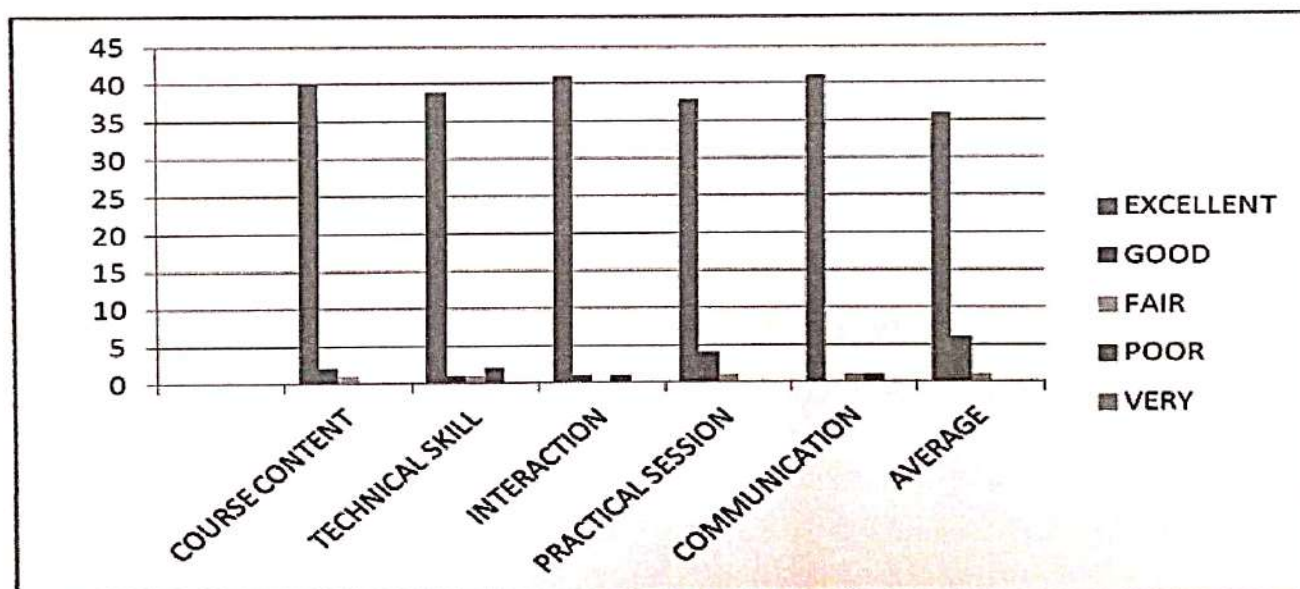
DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE COURSE ON ASSEMBLY AND MAINTENANCE OF AUTOMOBILE STUDENT FEEDBACK SUMMARY REPORT

REGISTERED STUDENTS: 43

DATE: 20.04.2021

CONTENT	EXCELLENT	GOOD	FAIR	POOR	VERY POOR
COURSE CONTENT	40	2	1	0	0
TECHNICAL SKILL	39	1	1	2	0
INTERACTION	41	1	0	1	0
PRACTICAL SESSION	38	4	1	0	0
COMMUNICATION	41	0	1	1	0
AVERAGE	36	6	1	0	0



G. Sundararajan
PROGRAM
CO-ORDINATOR

G. Sundararajan

DCI
HoD/MECH
Head of the Department

Department of Mechanical Engineering
NPR College of Engineering & Technology
Natham, Dindigul / DM - 624 401



IQAC
IQAC



Dr. J. Sundararajan
PRINCIPAL

Dr. J. Sundararajan
B.E., M.Tech., Ph.D.,
Principal

NPR College of Engineering & Technology
Natham, Dindigul (DM) - 624 401



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DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE COURSE ON ASSEMBLY AND MAINTENANCE OF AUTOMOBILE

SUMMARY REPORT

The Department of Mechanical Engineering organized a certificate course on assembly and maintenance of automobile, from 27.03.2023 to 19.04.2023 (35 Hours) in our college premises. Mr. K. Manikandan student of III year Mechanical Engineering delivered the welcome address.

Dr. J. Sundararajan, Principal inaugurated the programme and felicitated the students. This certificate course gave over view of assembly and maintenance of automobile. Mr. N. Sivakumar, Service Manager, GG- Automobiles, Madurai had shared his knowledge about assembly and maintenance of automobile. Basically, certificate courses are the process of improving the skill set as well as the knowledge of the entrepreneurs. This can be done through various methods such as practical sessions or training program specially designed to increase the entrepreneurial acumen. So that students enable to have skills that will help them to improve their knowledge.

The students learnt various existing and available sources to gain knowledge. 43 Students attended from II, III and IV year Mechanical Engineering classes. Students those who participated and successfully completed the Quiz program were awarded with certificates. Ms.G. Mahalakshmi IV year student was delivered Vote of thanks.

G. Sundararajan
PROGRAM
CO-ORDINATOR
G. Sundararajan

Dr. J. Sundararajan
HoD/MECH
Head of the Department
Department of Mechanical Engineering
NPR College of Engineering & Technology
Natham, Dindigul (TN) - 624 401



Dr. J. Sundararajan
IQAC



Dr. J. Sundararajan
PRINCIPAL
Dr. J. Sundararajan,
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DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE COURSE ON ASSEMBLY AND MAINTENANCE OF AUTOMOBILE COURSE MATERIAL

Material Link:

Chapter 1: <https://www.youtube.com/watch?v=cKYtjVAg8R4>

Chapter 2: <http://nptel.ac.in/courses/125106001>

Chapter 3: <https://www.youtube.com/watch?v=FP2USTR09GY>

Chapter 4: <http://nptel.ac.in/courses/125106001>

Chapter 5: <https://www.youtube.com/watch?v=FP2USTR09GY>



G. Ananthan
PROGRAM

CO-ORDINATOR

G. Sundararajan

D. S. N
HoD/MECH

Head of the Department

Department of Mechanical Engineering
NPR College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401

W. S. N
IQAC

Coordinator - IQAC

NPR College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401

[Signature]
PRINCIPAL

Principal

NPR College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401



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NPR Nagar, Natham PIN: 624 401, Dindigul Dist, Tamilnadu. Ph:04544 246500,501,502.www.nprcet.org



Certificate Course

Certificate of Completion

This is to certify that Mr./ ~~Ms.~~ SATHEESH.G (II-Mech) has successfully completed the certificate course on "22MECC02- Assembly and Maintenance of Automobile", organised by Department of Mechanical Engineering, NPR College of Engineering & Technology, Natham, for 35 hours duration from 27.03.2023 to 19.04.2023 during the academic year 2022-2023.

Mr.G.Sundararajan
Course Coordinator

Dr.T.Saravana Kannan
HoD – Mech

Dr.J.Sundararajan
Principal





DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE COURSE ON CREO 6.0 FOR MECHANICAL ENGINEERS

INDEX

COURSE NAME: **22MECC001- CREO 6.0 FOR MECHANICAL ENGINEERS**

ACADEMIC YEAR: **2022-2023**

SEMESTER: **ODD**

DURATION: **35 HOURS**

S.NO.	PARTICULARS	PAGE NO.
1	PERMISSION LETTER	2
2	RESOURCE PERSON'S PROFILE	3
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4	INVITATION	5
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8	COURSE SCHEDULE	10
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13	SUMMARY REPORT	18
14	COURSE MATERIAL/MANUAL	19
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PROGRAM CO-ORDINATOR

T. BALASUBRAHMANJ

HoD MECH

Head of the Department
Department of Mechanical Engineering
NPR College of Engineering & Technology
Natham, Dindigul - 624 401

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PRINCIPAL

J. SUNDARARAJAN,
B.E., R.Tech., Ph.D.





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DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE COURSE ON CREO 6.0 FOR MECHANICAL ENGINEERS

PERMISSION LETTER

From Mr.T.Balasubramani,

Department of Mechanical Engineering,
NPR College of Engineering & Technology,
Natham.

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Respected Sir,

Sub: Seeking permission to conduct Certificate Course for Mechanical Engineering students -
Regarding.

We have planned to conduct a Certificate Course on "Certificate Course on CREO 6.0 for Mechanical Engineers" to our second year Mechanical Engineering students from 19.09.2022 to 13.10.2022 (18 Days/35Hours) from 04.30.p.m. to 06.30.p.m. in our college premises. We have proposed **Mr.M.Muthuraj, CEO & Founder, Profeena Technologies, Madurai**, as the resource person for this certificate course, Kindly permit us to conduct the same.

Thanking you,

Yours faithfully,

Date: 24.08.2022

Place: Natham



DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE COURSE ON CREO 6.0 FOR MECHANICAL ENGINEERS

RESOURCE PERSON PROFILE

Name : **Mr.M.Muthuraj**

Designation : **CEO & Founder**

Organization : **Profeena Technologies, Madurai.**

About the Resource Person : Mr. M.Muthuraj is currently CEO & Founder of Profeena Technologies, Madurai. He has completed his BE (Mech) in IRTT, Erode and ME (Thermal) in GCT, Coimbatore. He is Currently Pursuing Ph.D in Anna University. He is an experienced technical person with a demonstrated history of working. He has more than 20 branches all over Tamilnadu.





DEPARTMENT OF MECHANICAL ENGINEERING

NPRCET/OFF/MECH/VAC/2022-2023

Date: 23/08/2022

CIRCULAR

This is to inform that Department of Mechanical Engineering has planned to conduct a Certificate Course on “**Certificate Course on CREO 6.0 for Mechanical Engineers**” for the students during the Academic year 2022-2023. Interested students can enroll their name to the program coordinator on or before: 15/09/2022.

The details of the training program are given below

Course Name	CREO 6.0 FOR MECHANICAL ENGINEERS
Resource Person	Mr.M.Muthuraj
Venue	CAD / CAM Laboratory
Date & Duration	19.09.2022 to 13.10.2022, 35Hours
Program Coordinator	Mr.T.Balaubramani, Assistant Professor Department of Mechanical Engineering



Copy to:

1. All the HoDs
2. IQAC
3. All the Class Rooms
4. Notice Board
5. File
6. Program Co-ordinator

PRINCIPAL
Dr. JSUNDARARAJAN,
B.E., M.Tech., Ph.D.

Principal
NPR College of Engineering & Technology
Natham, Dindigul - 624 401.



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The Management, Principal, Staff and Students

Cordially invite you for the inauguration of

CERTIFICATE COURSE ON
CERTIFICATE COURSE ON CREO 6.0 FOR
MECHANICAL ENGINEERS

On 19th AUGUST, 2022 @ 03.30 p.m.

Venue: Auditorium

Chief Guest

Mr. M. Muthuraj

CEO/FOUNDER

Profenna Technologies, Madurai

Dr. J. Sundararajan

Principal,

NPR College of Engineering & Technology

Felicitates the function



Organized By



Department of Mechanical Engineering,

NPR College of Engineering & Technology,

NPR Nagar, Natham,



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Agenda

1. Prayer Song : Tamilthai Vazhthu
2. Welcome Address : Mr.K.Balai, II MECH
3. Felicitation Address : Dr. J. Sundararajan,
Principal, NPRCET.
4. Presidential Address : Dr. K. K. Shyam Umasankar,
Executive Director, NPRGI.
5. Chief Guest Address : Mr.M.Muthu Raj, CEO & Founder
Profenna Technologies Madurai.
6. Vote of Thanks : Mr.M.Gokul, II MECH
7. National Anthem



DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE COURSE ON CERTIFICATE COURSE ON CREO 6.0 FOR MECHANICAL ENGINEERS

COURSE CONTENT

1. Introduction, design process & technical graphics used in the design process. Engineering ethics. Overview of traditional drawing tools. ANSI Standard Sheet Sizes, Title Blocks & Borders. CAD. Creo Parametric (Pro/Engineer) as a solid modeling software package.
2. Alphabet of Lines, line drawing techniques, scales & 3-D Modeling. Creo Parametric: Creating a simple object Part I. Engineering geometry, introduction to projections, multiview, isometric, oblique, and perspective. Pro/E: Creating a simple object Part II (Hole, Chamfer, Round etc.)
3. Implementing design intent using relations Visualizing a multiview drawing, the Six Principal Views, Multiview from 3-D CAD Model. Pro/E: Revolved protrusions, mirror copies, model analysis. Fundamental views of edges & planes for visualization. Pro/E: Obtain information, suppress, resume insert, modify features.
4. Multiview Representation, ANSI Standards. Pro/E: Sketcher Tools & Datum Planes. Visualization of multiview drawings, & dimensioning. Pro/E: Pattern and Copy. Auxiliary View, applications. Auxiliary view in CAD. Pro/E: Engineering Drawings.
5. Pictorial, Oblique, Perspective Projections. Section views. Creo Parametric: Engineering drawings
6. Section views basics & by using 3-D CAD techniques. Creo Parametric: Engineering Drawings
7. Tolerancing, Interchangeability & tolerance representation. Creo Parametric: Assembly Fundamentals and Constraints; Working drawings, assemblies & part lists. (1 hour) Creo Parametric: Creating assembly drawing, sweep & blend.
8. Final project, which includes *reverse engineering*, technical report writing and oral public presentation with poster (35 - hours - spread in the 14 weeks).

Criteria to get Certificate:

- Average assignment score = 25% of average of best 3 assignments out of the total 4 assignments given in the course.
- Exam score = 75% of the proctored certification exam score out of 100 Final score = Average assignment score + Exam score.

Prepared By: Mr. T. Balasubramani, AP/Mech




Programme Coordinator

T. BALASUBRAMANI


HoD – Mech

Head of the Department
Department of Mechanical Engineering
NPR College of Engineering & Technology
Natham, Dindigul (Dist. - 624 401)


IQAC


Principal

Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.

Principal
NPR College of Engineering & Technology
Natham, Dindigul (Dist. - 624 401)



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DEPARTMENT OF MECHANICAL ENGINEERING
CERTIFICATE COURSE ON CERTIFICATE COURSE ON CREO 6.0 FOR MECHANICAL
ENGINEERS

REGISTERED STUDENTS NAME LIST

S. No.	Register Number	Name of the student	Class
1.	920821114001	Aathiraja D	II Mech
2.	920821114002	Anbuselvam I	II Mech
3.	920821114003	Aravinth B	II Mech
4.	920821114004	Arikaran N	II Mech
5.	920821114005	Balaji K	II Mech
6.	920821114006	Brithiv Kumar K	II Mech
7.	920821114007	Chinnaiya N	II Mech
8.	920821114008	Deepak R	II Mech
9.	920821114011	Dhayal Priyadharshan	II Mech
10.	920821114012	Gokul M	II Mech
11.	920821114013	Gunapathi V	II Mech
12.	920821114014	Guruprasanna S	II Mech
13.	920821114016	Jeevakumar S	II Mech
14.	920821114018	Kannan S	II Mech
15.	920821114019	Karthick B	II Mech
16.	920821114020	Kesavapommaiah T	II Mech
17.	920821114021	Manoharan K	II Mech
18.	920821114022	Manoj Kumar R	II Mech
19.	920821114023	Nazeerkhan B	II Mech
20.	920821114024	Nithish P	II Mech
21.	920821114025	Poovarasan R	II Mech
22.	920821114026	Santhosh Kumar K	II Mech
23.	920821114027	Santhoshkumar P	II Mech
24.	920821114028	Sivaprakash P	II Mech
25.	920821114029	Venkat Arjun A	II Mech
26.	920821114030	Vidhya Shankar P	II Mech

27.	920821114301	Ajai Balaji S	II Mech
28.	920821114302	Charanjith K	II Mech
29.	920821114303	Kavinarasu P	II Mech
30.	920821114304	Satheesh G	II Mech
31.	920821114305	Sivaprakasam G	II Mech
32.	920821114306	Sukumar K	II Mech

T. Balasubramani

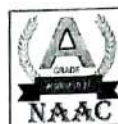
PROGRAM CO-ORDINATOR

T. BALASUBRAMANI

DCJ W
HoD/MECH

Head of the Department
Department of Mechanical Engineering
PR College of Engineering & Technology
Natham Dindigul (DTN 624 401)





DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE COURSE ON CERTIFICATE COURSE ON CREO 6.0 FOR MECHANICAL ENGINEERS

COURSE SCHEDULE

Venue : CAD / CAM Laboratory

Time : 4.30 p.m. to 6.30 p.m.

External Resource Person:

1. Mr. M. Muthuraj, CEO & FOUNDER.

Internal Resource Person:

1. Mr. T. Balasubramani, AP/MECH

S. No.	Date	Syllabus	Resource Person	Hours
1	19.09.2022	Introduction, design process & technical graphics used in the design process. Engineering ethics.	Mr. M. Muthuraj, CEO & FOUNDER	2.0
2	20.09.2022	Overview of traditional drawing tools. ANSI Standard Sheet Sizes, Title Blocks & Borders. CAD. Creo Parametric (Pro/Engineer) as a solid modeling software package.	Mr. M. Muthuraj, CEO & FOUNDER	2.0
3	21.09.2022	Alphabet of Lines, line drawing techniques, scales & 3-D Modeling. Creo Parametric: Creating a simple object Part I.	Mr. M. Muthuraj, CEO & FOUNDER	2.0
4	22.09.2022	Engineering geometry, introduction to projections, multiview, isometric, oblique, and perspective. Pro/E: Creating a simple object Part II (Hole, Chamfer, Round etc.)	Mr. M. Muthuraj, CEO & FOUNDER	2.0
5	23.09.2022	Implementing design intent using relations Visualizing a multiview drawing, the Six Principal Views.	Mr. T. Balasubramani AP/MECH	2.0
6	26.09.2022	Multiview from 3-D CAD Model. Pro/E: Revolved protrusions, mirror copies, model analysis.	Mr. T. Balasubramani AP/MECH	2.0
7	27.09.2022	Fundamental views of edges & planes for visualization. Pro/E: Obtain information, suppress, resume insert, modify features.	Mr. T. Balasubramani AP/MECH,	2.0
8	28.09.2022	Visualization of multiview drawings, & dimensioning. Pro/E: Pattern and Copy	Mr. M. Muthuraj, CEO & FOUNDER	2.0

9	29.09.2022	Auxiliary View, applications. Auxiliary view in CAD. Pro/E: Engineering Drawings.	Mr M.Muthuraj, CEO & FOUNDER	2.0
10	30.09.2022	Pictorial, Oblique, Perspective Projections. Section views. Creo Parametric: Engineering drawings	Mr.M.Muthuraj, CEO & FOUNDER	2.0
11	01.10.2022	Section views basics & by using 3-D CAD techniques. Creo Parametric: Engineering Drawings	Mr.T.Balasubramani AP/MECH,	2.0
12	06.10.2022	Tolerancing, Interchangeability & tolerance representation. Creo Parametric: Assembly Fundamentals and Constraints.	Mr.T.Balasubramani AP/MECH,	2.0
13	07.10.2022	Working drawings, assemblies & part lists (Simple). Creo Parametric: Creating assembly drawing, sweep & blend.	Mr.M.Muthuraj, CEO & FOUNDER	2.0
14	08.10.2022	Working drawings, assemblies & part lists(Constraint). Creo Parametric: Creating assembly drawing, sweep & blend.	Mr.M.Muthuraj, CEO & FOUNDER	2.0
15	10.10.2022	Working drawings, assemblies & part lists(Simple & Constraint). Creo Parametric: Creating assembly drawing, sweep & blend.	Mr.M.Muthuraj, CEO & FOUNDER	2.0
16	11.10.2022	Final project, which includes <i>reverse engineering</i> , technical report writing and oral public presentation with poster (Evaluation – Stage 1)	Mr T Balasubramani AP/MECH,	2.0
17	12.10.2022	Final project, which includes <i>reverse engineering</i> , technical report writing and oral public presentation with poster (Evaluation – Stage 2)	Mr.M.Muthuraj, CEO & FOUNDER	2.0
18	13.10.2022	Final project, which includes <i>reverse engineering</i> , technical report writing and oral public presentation with poster (Evaluation – Stage 3)	Mr.M.Muthuraj, CEO & FOUNDER	1.0
Total Hours				35

T. Balasubramani
PROGRAM
CO-ORDINATOR

T. BALASUBRAMANI

T. Balasubramani
HOD/MECH
Head of the Department
Department of Mechanical Engineering
Nalham College of Engineering & Technology
Nalham, Odisha (India) - 754004



W. Balasubramani
IQAC



M. Balasubramani
PRINCIPAL

Dr. J. SUNDARARAJAN
B. Sc. in Tech. Pol. Sci.



NPR

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DEPARTMENT OF MECHANICAL ENGINEERING
CERTIFICATE COURSE ON CERTIFICATE COURSE ON CREO 6.0 FOR MECHANICAL
ENGINEERS
STUDENTS ATTENDANCE

S.No.	Reg. No.	Name of the student	Year	Days																	
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	22MECC01001	Aathiraja D	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	22MECC01002	Anbuselvam I	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
3	22MECC01003	Aravinth B	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
4	22MECC01004	Arikaran N	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
5	22MECC01005	Balaji K	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
6	22MECC01006	Brithiv Kumar K	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
7	22MECC01007	Chinnaiya N	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
8	22MECC01008	Deepak R	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
9	22MECC01009	Dhayal Priyadharshan	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
10	22MECC01010	Gokul M	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
11	22MECC01011	Gunapathi V	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	22MECC01012	Guruprasanna S	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
13	22MECC01013	Jeevakumar S	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
14	22MECC01014	Kannan S	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
15	22MECC01015	Karthick B	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
16	22MECC01016	Kesavapommaiah T	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
17	22MECC01017	Manoharan K	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
18	22MECC01018	Manoj Kumar R	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
19	22MECC01019	Nazeerkhan B	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
20	22MECC01020	Nithish P	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
21	22MECC01021	Poovarasan R	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
22	22MECC01022	Santhosh Kumar K	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
23	22MECC01023	Santhoshkumar P	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
24	22MECC01024	Sivaprakash P	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
25	22MECC01025	Venkat Arjun A	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
26	22MECC01026	Vidhya Shankar P	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
27	22MECC01027	Ajai Balaji S	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
28	22MECC01028	Charanjith K	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
29	22MECC01029	Kavinarasu P	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
30	22MECC01030	Satheesh G	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
31	22MECC01031	Sivaprakasam G	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
32	22MECC01032	Sukumar K	II Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
Total present				32	31	31	32	31	32	31	32	32	31	32	31	31	31	32	31	32	32
Total absent				-	0	-	-	0	-	0	-	-	0	-	-	0	-	0	-	-	-
Signature																					

PROGRAM CO-ORDINATOR

T. Bala Subramani

HoD/MECH

12

PRINCIPAL

J. SUNDARARAJAN,



DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE COURSE ON CERTIFICATE COURSE ON CREO 6.0 FOR MECHANICAL ENGINEERS

SAMPLE QUESTION PAPER WITH ANSWER KEY

Q1. How can you edit a feature?

- ☐ Select the feature, press Delete, and then create a new feature.
- ☐ **Right-click the feature and select Edit Feature.** [Answer]
- ☐ Keep clicking Undo until the feature is gone.
- ☐ Find the feature in the browser, select Remove, and then create a new feature.

Q2. Which tool creates a plane normal to a sketch path or edge?

- ☐ Plane Through Two Edges
- ☐ **Plane Along Path** [Answer]
- ☐ Plane at Angle
- ☐ Plane Through Three Points

Q3. Which tool measures the precise distance between two points, and creates dimensions that are parallel to the locations of objects?

- ☐ Aligned Dimension
- ☐ **Linear Dimension** [Answer]
- ☐ Angular Dimension
- ☐ Ordinate Dimension

Q4. In simulation, which constraint prevents movement in a specific direction?

- ☐ Frictionless
- ☐ Prescribed Displacement
- ☐ Pin
- ☐ **Fixed** [Answer]



Q5. In the CAM workspace, which strategy removes a part's interior cavity?

- ☐ Slot
- ☐ **2D Pocket [Answer]**
- ☐ Bore
- ☐ 2D Contour

Q6. What does the Zebra Analysis tool do?

- ☐ It applies a metal render.
- ☐ It fixes bodies.
- ☐ **It checks a body's continuity. [Answer]**
- ☐ It splits bodies apart.

Q7. Which command creates a plane at the midpoint between two faces or work planes?

- ☐ **Midplane [Answer]**
- ☐ Plane Tangent to Face at Point
- ☐ Offset Plane
- ☐ Plane at Angle

Q8. Which hole type automatically enters a diameter value based on the type of fastener it will accommodate?

- ☐ Clearance
- ☐ **Simple [Answer]**
- ☐ Drilled
- ☐ Through

Q9. What is required to invite other people into your project folder?

- ☐ A Name
- ☐ **An Email Address [Answer]**
- ☐ An IP Address
- ☐ A Phone Number

Q10. Which tool connects two joints in a way that the motion of one joint can drive the motion of another joint?

- ☐ Drive Joints
- ☐ As-built Joint
- ☐ Motion Study
- ☐ **Motion Link [Answer]**



Q11. Which joint type allows components to translate along two axes and rotate around a single axis?

- ☐ Slider
- ☐ Revolute
- ☐ **Planar** [Answer]
- ☐ Pin-Slot

Q12. Which file type is not a drawing output?

- ☐ DWG file
- ☐ **CSV file** [Answer]
- ☐ STEP file
- ☐ PDF file

Q13. What command do you use to understand the relationship between multiple joints?

- ☐ Lock
- ☐ **Animate Joint** [Answer]
- ☐ Animate Model
- ☐ Motion Link

Q14. Which view shows a drawing part at an enlarged scale?

- ☐ **Detail View** [Answer]
- ☐ Section View
- ☐ Base View
- ☐ Projected View

Q15. Which workspace creates components made from thin, premade material formed into specific shapes?

- ☐ Mesh
- ☐ Simulation
- ☐ Animation
- ☐ **Sheet Metal** [Answer]



T. Balasubrahman

PROGRAM CO-ORDINATOR

T. BALASUBRAHMAN

D. S. L.

HoD/MECH

Department of Mechanical Engineering
College of Engineering, Technology & Innovation
Katham, Tirunelveli - 624 001



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DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE COURSE-CERTIFICATE COURSE ON CREO 6.0 FOR MECHANICAL ENGINEERS

STUDENT FEEDBACK

Name of the Student: <u>SUKUMAR · K</u>	Year / Semester: <u>II</u> - YEAR / <u>III</u> - SEMESTER
Name of the Course: <u>CREO 6.0 - CERTIFICATE COURSE</u>	

S.No.	Description	Excellent	Good	Satisfactory	Poor	Very Poor
1	Course Content	✓				
2	Technical Skill	✓				
3	Interaction		✓			
4	Practical Session	✓				
5	Communication	✓				

Any Other Comments / Suggestions: —



K. Suman
Signature of the Student



DEPARTMENT OF MECHANICAL ENGINEERING
CERTIFICATE COURSE-CERTIFICATE COURSE ON CREO 6.0 FOR MECHANICAL ENGINEERS

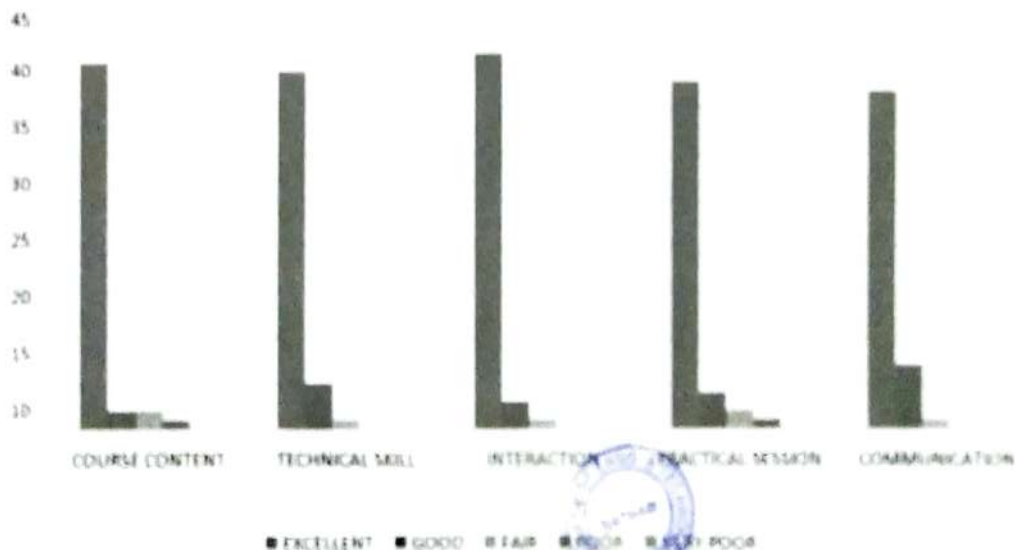
STUDENT FEEDBACK SUMMARY REPORT REGISTERED

STUDENTS: 45

DATE: 13.10.2022

CONTENT	EXCELLENT	GOOD	FAIR	POOR	VERY POOR
COURSE CONTENT	27	2	2	1	-
TECHNICAL SKILL	25	5	2	-	-
INTERACTION	24	3	4	1	-
PRACTICAL SESSION	26	4	2	-	-
COMMUNICATION	25	6	1	-	-
AVERAGE	25.4	4.0	2.2	0.4	0

STUDENT FEEDBACK SUMMARY



T. Balasubramanian
PROGRAM
CO-ORDINATOR

T. Balasubramanian
HoD/MECH
 Head of the Department
 Department of Mechanical Engineering
 NPR College of Engineering & Technology
 Netham, Dindigul - 624 401

V. S. S. S. S.
IQAC

PRINCIPAL

Dr. J. SUNDARARAJAN,

B.E. (Tech), Ph.D.

Principal

NPR College of Engineering & Technology

Netham, Dindigul - 624 401



DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE COURSE ON CERTIFICATE COURSE ON CREO 6.0 FOR MECHANICAL ENGINEERS

SUMMARY REPORT

The Department of Mechanical Engineering organized a Certificate Course on CREO 6.0 for Mechanical Engineers from 19.09.2022 to 13.10.2022 (35 Hours) in our College Premises. II year Mechanical Engineering student Mr.K.Balaji delivered the welcome address.

Dr.J.Sundararajan, Principal of our college inaugurated the program and delivered the inaugural address. Resources person Mr. M.Muthuraj, CEO & Founder, Profenna Technologies, Madurai, shared his technical experience with our students. This course gave overview about 3D Model Creation specially designed to increase the entrepreneurial acumen with CREO software.

He also shared the knowledge of the fundamentals and concepts in 3D Model Creation with CREO software. So that students enable to have skills that would help them to resolve complex real world problems in design field. The students learnt various existing and emerging technologies of 3D Model Creation with CREO software.

The students learnt various existing and available sources to gain knowledge. 32 Students attended from II year Mechanical Engineering classes. During the valedictory function Students those who participated and successfully completed the Sample giving program were awarded with certificates.

Vote of thanks was delivered by II Year student Mr.M Gokul, during the valedictory function on 13.10.2022.

**PROGRAM
CO-ORDINATOR**

T. Balasubramani

HoD/MECH

Head of the Department
Department of Mechanical Engineering
NPR College of Engineering & Technology
Natham, Dindigul - 624 401

IQAC
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DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE COURSE ON CERTIFICATE COURSE ON CREO 6.0
FOR MECHANICAL ENGINEERS

COURSE MATERIAL

Material Link:

Chapter 1: <https://www.youtube.com/watch?v=cKYtjVag8R4>

Chapter 2: <http://nptel.ac.in/courses/125106001>

Chapter 3: <https://www.youtube.com/watch?v=FP2USTR09GY>

Chapter 4: <http://nptel.ac.in/courses/125106001>

Chapter 5: <https://www.youtube.com/watch?v=FP2USTR09GY>

PROGRAM

CO-ORDINATOR

T. Bala Subramani

HoD/MECH

Head of the Department

Department of Mechanical Engineering
NPR College of Engineering & Technology
Natham, Dindigul - 624 401

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Certificate Course

Certificate of Completion

This is to certify that Mr./ ~~Ms.~~ RAJMOHAN.R (III-Mech) has successfully completed the certificate course on "22MECC01- CREO 6.0 for Mechanical Engineers", organised by Department of Mechanical Engineering, NPR College of Engineering & Technology, Natham, for 35 hours duration from 19.09.2022 to 13.10.2022 during the academic year 2022-2023.

Mr.T. Balasubramani
Course Coordinator

Dr.T.Saravana Kannan
HoD – Mech

Dr.J.Sundararajan
Principal





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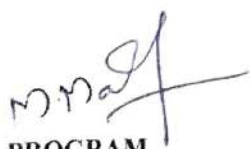
DEPARTMENT OF MECHANICAL ENGINEERING


CERTIFICATE COURSE ON ADVANCED CNC PART PROGRAMMING TECHNIQUES

INDEX

COURSE NAME: 23MEAO01 - ADVANCED CNC PART PROGRAMMING TECHNIQUES
ACADEMIC YEAR: 2022-2023 SEMESTER: ODD DURATION: 35 HOURS

S.NO	PARTICULARS	PAGE NO
1	PERMISSION LETTER	2
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PROGRAM
CO-ORDINATOR


HoD/MECH
Head of the Department
Department of Mechanical Engineering
NPR College of Engineering & Technology
Natham, Dindigul (TN) - 624 401




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PRINCIPAL
Dr. J.SUNDARARAJAN

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DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE COURSE ON ADVANCED CNC PART PROGRAMMING TECHNIQUES

PERMISSION LETTER

DATE: 15.07.2022

From

Mr.M.Mathan Raj,
Assistant Professor,
Department of Mechanical Engineering,
NPR College of Engineering &
Technology,Natham.

To

The Principal,
NPR College of Engineering &
Technology,Natham.

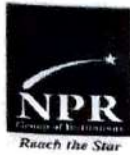
Respected Sir,

Sub: Seeking permission to conduct Certificate Course for Mechanical Engineering students -Regarding.

We have planned to conduct a Certificate Course on “**Advanced CNC Part Programming Techniques**” to our third year Mechanical Engineering students from 16.08.2022 to 05.09.2022 (18 Days/35Hours) from 04.30.p.m. to 06.30.p.m. in our college premises. We have proposed **Mr.G.Karthikeyan, Service Manager, HI-Tech CNC Training Centre, Madurai**, as the resource person for thiscertificated course, kindly permit us to conduct the same.

Thanking you


Yours faithfully,



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DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE COURSE ON ADVANCED CNC PART PROGRAMMING TECHNIQUES

RESOURCE PERSON PROFILE

Name : Mr.G.Karthikeyan,

Designation : Service manager

Institution Name : HI-Tech CNC Training Centre, Madurai.

About Resource
Person :

Mr. G.Karthikeyan is currently working as Service Manager, HI-Tech CNC training center, Madurai. He has completed his BE (Mech) in PTR Engineering College, Madurai. He is an experienced technical person with a demonstrated history of working in the manufacturing sector. He has 5 years experience in the same field.





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DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE COURSE ON ADVANCED CNC PART PROGRAMMING TECHNIQUES

NPR/CET OFF MECH/VAC/2021-2022

DATE: 11/08/2022

CIRCULAR

This is to inform that Department of Mechanical Engineering has planned to conduct a Certificate Course on "Advanced CNC Part Programming Techniques" for the students during the Academic year 2022-2023. Interested students can enroll their name to the program coordinator on or before 13/08/2022.

The details of the training program are given below:

COURSE NAME	ADVANCED CNC PART PROGRAMMING TECHNIQUES
RESOURCE PERSON	Mr G Karthikeyan
VENUE	CAD / CAM Lab
DATE & DURATION	16/08/2022 to 05/09/2022, 35 Hours
PROGRAM COORDINATOR	Mr M Mathan Raj, Assistant Professor Department of Mechanical Engineering NPR College of Engineering & Technology, Natham

Copy to:

1. All the HODs
2. IQAC
3. All the Class Rooms
4. Notice Board
5. File
6. Program Coordinator



PRINCIPAL

Dr. J. SUNDARARAJAN,

B.E., M.Tech., Ph.D.

Principal

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The Management, Principal, Staff and Students

Cordially invite you for the inauguration of

CERTIFICATE COURSE ON

“ADVANCED CNC PART PROGRAMMING TECHNIQUES”

On 16th August, 2022

Venue: CAD/CAM Laboratory at 03.30 p.m.

Chief Guest Mr.G.Karthikeyan

Service manager

HI-Tech CNC Training Centre, Madurai

Dr.J.Sundararajan

Principal,

NPR College of Engineering & Technology

Felicitates the function



Organized By



*Department of Mechanical Engineering, NPR College of
Engineering & Technology, NPR Nagar, Natham*





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AGENDA

Inauguration on 16.08.2022 / AN

- ❖ Prayer Song : Tamilthai vazhthu
- ❖ Welcome Address : Mr.N.Venkatesan
III- Year Mechanical
- ❖ Felicitation Address : Dr. J. Sundararajan
Principal
- ❖ Honoring the Chief Guest : Mr. V.Ruban
III- Year Mechanical
- ❖ Chief Guest Introduction : Mr. M. Mathan Raj
Assistant Professor
Mechanical Engineering
- ❖ Chief Guest Address : Mr.G.Karthikeyan,
Service Manager,
Hi-Tech CNC Centre, Madurai.

Valedictory on 10.09.2022

- ❖ Vote of Thanks : Mr.J.Kabilan
III-Year Mechanical
- ❖ National Anthem





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DEPARTMENT OF MECHANICAL ENGINEERING CERTIFICATE COURSE ON ADVANCED CNC PART PROGRAMMING TECHNIQUES

COURSE CONTENT

Chapter 1:

- Introduction of CNC machines
- Type of CNC Machines
- G-Codes M-Codes
- Tool Holders & Inserts

Chapter 2:

- Cutters Specification
- Basic Programming
- Axis Absolute Method & Incremental Method
- Cutter Radius Compensation

Chapter 3:

- Canned Cycles
- Creation of Sub Program
- Hands on Practical training on production
- Experiment Number : 1 - Straight Cut

Chapter 4:

- Experiment Number : 2 - Circular Cut
- Experiment Number : 3 - Arc Cut - Clockwise
- Experiment Number : 4 - Arc Cut - Counter Clockwise

Chapter 5:

- Experiment Number: 5 - Pocket Milling
- Experiment Number: 6 - Plain Turning
- Experiment Number: 7 - Step Turning
- Experiment Number : 8 - Taper Turning

Criteria to get Certificate:

- Students should register their names for this course
- Students must have 85% attendance.
- Student should secure 75% marks in the Exam


PROGRAM CO-ORDINATOR


HOD/MEC


IQAC


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Head of the Department
Department of Mechanical Engineering
NPR College of Engineering & Technology
Natham, Dindigul (TN) - 624 401


Dr. J. SUNDARARAJAN
B.E., M.Tech, Ph.D.
Principal
NPR College of Engineering & Technology
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DEPARTMENT OF MECHANICAL ENGINEERING CERTIFICATE COURSE ON
ADVANCED CNC PART PROGRAMMING TECHNIQUES

REGISTERED STUDENTS NAME LIST

S. No	Register Number	Name of the Student	Class
1.	920820114001	Abishek Kumar M	III - MECH
2.	920820114002	Ajaykumar B	III - MECH
3.	920820114003	Arunkumar K E	III - MECH
4.	920820114004	Mohanraj S	III - MECH
5.	920820114005	Raguram B	III - MECH
6.	920820114006	Ruban V	III - MECH
7.	920820114007	Sabarinathan S	III - MECH
8.	920820114008	Sivabalan N	III - MECH
9.	920820114009	Sivakumar P	III - MECH
10.	920820114010	Thangavimal V	III - MECH
11.	920820114011	Venkadesan N	III - MECH
12.	920820114301	Abu Ali A	III - MECH
13.	920820114302	Arun Kumar R	III - MECH
14.	920820114303	Asfar Sharuk Hussain L	III - MECH
15.	920820114304	Askar Ali N	III - MECH
16.	920820114305	Babu Shankar V	III - MECH
17.	920820114306	Dhakshinamoorthi T	III - MECH
18.	920820114307	Elancheran A	III - MECH
19.	920820114308	Gopinath T	III - MECH
20.	920820114309	Kabilan J	III - MECH
21.	920820114310	Kamaleswaran V	III - MECH
22.	920820114311	Karthick S	III - MECH
23.	920820114312	Karthick Raj S	III - MECH
24.	920820114313	Lalith Kumar M	III - MECH
25.	920820114314	Mahadu J	III - MECH
26.	920820114315	Mohamed Harish H	III - MECH
27.	920820114318	Mohammed Alijinnah S	III - MECH
28.	920820114319	Mohammed Irfaan J	III - MECH
29.	920820114320	Nithesh M	III - MECH
30.	920820114321	Prakash Kumar G	III - MECH
31.	920820114322	Ragul R	III - MECH
32.	920820114323	Rajmohan R	III - MECH





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S. No	Register Number	Name of the Student	Class
33.	920820114324	Raj Venkatesh R	III - MECH
34.	920820114325	Sanjay Kumar K	III - MECH
35.	920820114327	Seenivasan A	III - MECH
36.	920820114329	Shriram M	III - MECH
37.	920820114330	Sibin B	III - MECH
38.	920820114331	Sivakumar S	III - MECH
39.	920820114332	Sourab Shinde S	III - MECH
40.	920820114334	Surya A	III - MECH
41.	920820114335	Tamil Arasan R N	III - MECH
42.	920820114336	Venkatesh S	III - MECH
43.	920820114337	Vigneshwaran B	III - MECH
44.	920820114339	Vishnu Bala C	III - MECH
45.	920820114340	Maheswaran S	III - MECH

PROGRAM CO-ORDINATOR

HoD/MECH

Head of the Department
Department of Mechanical Engineering
NPR College of Engineering & Technology
Natham, Dindigul / D.T. - 624 401





**DEPARTMENT OF MECHANICAL ENGINEERING CERTIFICATE COURSE ON
ADVANCED CNC PART PROGRAMMING TECHNIQUES
COURSE SCHEDULE**

Venue : CAD/CAM Laboratory

Time: 04.30 p.m. to 06.30 p.m.

External Resource Person:

1. Mr.G.Karthikeyan, Service Manager.

Internal Resource Person:

Mr.M.Mathan Raj, AP/MECH

S. No.	Date	Syllabus	Resource Person	Hou rs
1	16.08.2022	Introduction of CNC machines	Mr.G.KarthikeyanService Manager	2
2	17.08.2022	Type of CNC Machines	Mr.G.Karthikeyan Service Manager	2
3	18.08.2022	G-Codes M-Codes	Mr.G.Karthikeyan, Service Manager	2
4	22.08.2022	Tool Holders & Inserts	Mr.G.Karthikeyan Service Manager	2
5	23.08.2022	Cutters Specification	Mr.M.Mathan Raj, AP/MECH	2
6	24.08.2022	Basic Programming	Mr.M.Mathan Raj, AP/MECH	2
7	25.08.2022	Axis Absolute Method & Incremental Method	Mr.M.Mathan Raj, AP/MECH	2
8	26.08.2022	Cutter Radius Compensation	Mr.G.Karthikeyan, Service Manager	2
9	27.08.2022	Canned Cycles	Mr. G.Karthikeyan, Service Manager	2
10	29.08.2022	Creation of Sub Program	Mr. G.Karthikeyan, Service Manager	2
11	30.08.2022	Hands on Practical trainingin production	Mr.M.Mathan Raj, AP/MECH	2
12	31.08.2022	Experiment Number :1	Mr.M.Mathan Raj, AP/MECH	2



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13	01.09.2022	Experiment Number:2	Mr.M.Mathan Raj AP/MECH	2
14	02.09.2022	Experiment Number :3	Mr. G.Karthikeyan, Service Manager	2
15	05.09.2022	Experiment Number:4	Mr. G.Karthikeyan, Service Manager	2
16	06.09.2022	Experiment Number:5	Mr.M.Mathan Raj, AP/MECH	2
17	07.09.2022	Experiment Number:6	Mr.M.Mathan Raj, AP/MECH	2
18	08.09.2022	Experiment Number:7 & 8	Mr.G.Karthikeyan, Service Manager	1
Total Hours				35


PROGRAM CO-ORDINATOR

HOD/MECH

IQAC

PRINCIPAL
Dr. J. SUNDARARAJAN,
 B.E., M.Tech., Ph.D.
 Principal
 NPR College of Engineering & Technology
 Natham, Dindigul (TN) - 624 401

Head of the Department
 Department of Mechanical Engineering
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DEPARTMENT OF MECHANICAL ENGINEERING
CERTIFICATE COURSE ON ADVANCED CNC PART PROGRAMMING
TECHNIQUES
STUDENTS ATTENDANCE

S.No.	Reg. No.	Name of the student	Year	Days																	
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	22MECC01001	Abishek Kumar M	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	22MECC01002	Ajaykumar B	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
3	22MECC01003	Arunkumar K E	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
4	22MECC01004	Mohanraj S	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	A	/	/
5	22MECC01005	Raguram B	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
6	22MECC01006	Ruban V	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
7	22MECC01007	Sabarinathan S	III-Mech	/	/	A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
8	22MECC01008	Sivabalan N	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
9	22MECC01009	Sivakumar P	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
10	22MECC01010	Thangavimal V	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
11	22MECC01011	Venkadesan N	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	22MECC01012	Abu Ali A	III-Mech	/	/	/	/	/	/	/	A	/	/	/	/	/	/	/	/	/	/
13	22MECC01013	Arun Kumar R	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
14	22MECC01014	Asfar Sharuk Hussain L	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
15	22MECC01015	Askar Ali N	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
16	22MECC01016	Babu Shankar V	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
17	22MECC01017	Dhakshinamoorthi T	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
18	22MECC01018	Elancheran A	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
19	22MECC01019	Gopinath T	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
20	22MECC01020	Kabilan J	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
21	22MECC01021	Kamaleswaran V	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
22	22MECC01022	Karthick S	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
23	22MECC01023	Karthick Raj S	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
24	22MECC01024	Lalith Kumar M	III-Mech	/	/	/	/	A	/	/	/	/	/	/	/	/	/	/	/	/	/
25	22MECC01025	Mahadu J	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
26	22MECC01026	Mohamed Harish H	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
27	22MECC01027	Mohammed Alijinnah S	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
28	22MECC01028	Mohammed Irfaan J	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
29	22MECC01029	Nithesh M	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
30	22MECC01030	Prakash Kumar G	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
31	22MECC01031	Ragul R	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
32	22MECC01032	Rajmohan R	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	A	/	/	/
33	22MECC01033	Raj Venkatesh R	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
34	22MECC01034	Sanjay Kumar K	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
35	22MECC01035	Seenivasan A	III-Mech	/	/	/	/	/	A	/	/	/	/	/	/	/	/	/	/	/	/
36	22MECC01036	Shriram M	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
37	22MECC01037	Sibin B	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
38	22MECC01038	Sivakumar S	III-Mech	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/



[illegible]

HoD/MECH

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DEPARTMENT OF MECHANICAL ENGINEERING
CERTIFICATE COURSE ON ADVANCED CNC PART PROGRAMMING TECHNIQUES
SAMPLE QUESTIONS WITH ANSWER

1. In machining of a workpiece, the material is removed by ____
 - a) drilling action
 - b) melting action
 - c) shearing acting [Answer]**
 - d) using brittleness of the material

2. The depth that the tool is plunged into the surface is called as ____
 - a) feed
 - b) depth of cut [Answer]**
 - c) depth of tool
 - d) working depth

3. Feed is measured in units of ____
 - a) length/revolution [Answer]**
 - b) degree/revolution
 - c) length
 - d) velocity

4. CNC machining centres do not include operations like ____
 - a) milling
 - b) boring
 - c) welding [Answer]**
 - d) tapping

5. In CNC systems multiple microprocessors and programmable logic controllers work ____
 - a) in parallel [Answer]**
 - b) in series
 - c) one after the other
 - d) for 80% of the total machining time



6. Which of the following is not the advantage of CNC machines?

- a) Higher flexibility
- b) Improved quality
- c) Reduced scrap rate
- d) Improved strength of the components [Answer]

7. In how many ways CNC machine tool systems can be classified?

- a) 2
- b) 3 [Answer]
- c) 4
- d) 5

8. Point-to-point systems are used for _____

- a) reaming [Answer]
- b) parting
- c) grooving
- d) facing

9. In part programming, interpolation is used for obtaining _____ trajectory.

- a) helicoidal [Answer]
- b) pentagonal
- c) triangular
- d) zig-zag

10. For CNC machining skilled part programmers are needed.

- a) True [Answer]
- b) False

11. An absolute NC system is one in which all position coordinates are referred to one fixed origin called the zero point.

- a) True [Answer]
- b) False



PROGRAM CO-ORDINATOR


HOD/MECH


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Head of the Department
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CERTIFICATE COURSE ON ADVANCED CNC PART PROGRAMMING TECHNIQUES
STUDENT'S FEEDBACK FORM

Name of the Student : <u>V. Ruban</u>	Year / Semester: <u>III & V</u>
Name of the Program: <u>CNC PART PROGRAMMING TECHNIQUES</u>	

CONTENT	EXCELLENT	GOOD	FAIR	POOR	VERY POOR
COURSE CONTENT	✓				
TECHNICAL SKILL		✓			
INTERACTION		✓			
PRACTICAL SESSION	✓				
COMMUNICATION	✓				

Any Other Comments / Suggestions: —

V. Ruban

M. M. J.
PROGRAM CO-ORDINATOR

P. C. W.
HoD/MECH
Head of the Department
Department of Mechanical Engineering
NPR College of Engineering & Technology
Natham, Dindigul - 624 401

V. S. K.
IQAC

N. J.
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DEPARTMENT OF MECHANICAL ENGINEERING CERTIFICATE COURSE ON ADVANCED CNC PART PROGRAMMING TECHNIQUES

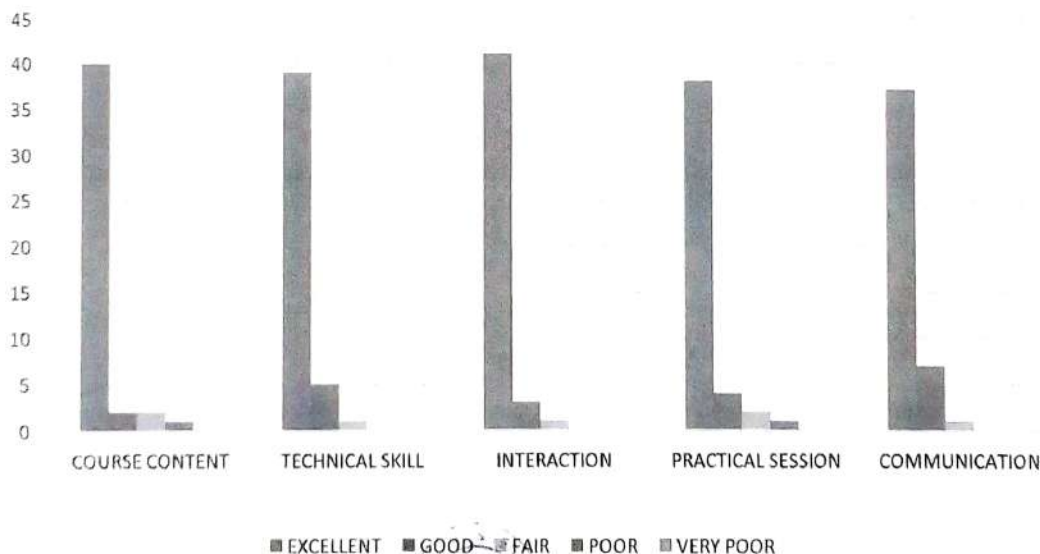
STUDENTS' FEEDBACK SUMMARY REPORT

REGISTERED STUDENTS: 45

DATE: 21.09.2021

CONTENT	EXCELLENT	GOOD	FAIR	POOR	VERY POOR
COURSE CONTENT	40	2	2	1	-
TECHNICAL SKILL	39	5	1	-	-
INTERACTION	41	3	1	-	-
PRACTICAL SESSION	38	4	2	1	-
COMMUNICATION	37	7	1	-	-
AVERAGE	39	4.2	1.4	0.4	0

STUDENT FEEDBACK SUMMARY REPORT



M. M. S.
PROGRAM
CO-ORDINATOR

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DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE COURSE ON ADVANCED CNC PART PROGRAMMING TECHNIQUES

SUMMARY REPORT



Department of Mechanical Engineering organized a Certificate Course on "Advanced CNC Part Programming Techniques" from 16.08.2022 to 05.09.2022 (18 Days / 35 Hours) at our College Premises. Mr. Manikandan.K. student of III-year Mechanical Engineering delivered the welcome address.

Dr.J.Sundararajan, Principal felicitated the programme. This certificate course gave the over view of Advanced CNC Part Programming Techniques. Mr.G.Karthikeyan, service Manager, HI-Tech CNC Training Centre, Madurai, had shared his knowledge about coding and programming in CNC machines and its various applications. Basically, certificate courses are the process of improving the skill set as well as the knowledge of the entrepreneurs. This can be done through various methods such as hand on sessions or training program specially designed to increase the entrepreneurial acumen. So that students enable to have skills that will help them to improve their knowledge in future.

The students learnt various existing and available sources to gain knowledge towards Programming in CNC lathe and milling during the course. Totally, 45 Students attended from III year Mechanical Engineering. Students those who participated and successfully completed the final test were awarded with certificates.

Mr.J.Kabilan student of III year Mechanical Engineering was delivered the Vote of thanks.


PROGRAM CO-ORDINATOR



HoD/MECH
Head of the Department
Department of Mechanical Engineering
NPR College of Engineering & Technology
Natham, Dindigul / D^{IN} - 624 401


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DEPARTMENT OF MECHANICAL ENGINEERING CERTIFICATE COURSE ON
ADVANCED CNC PART PROGRAMMING TECHNIQUES
COURSE MATERIAL

Material Link:

Chapter 1: <https://nptel.ac.in/content/storage2/courses/108105063>

Chapter 2: <https://nptel.ac.in/content/storage2/courses/112103174>

Chapter 3: <https://nptel.ac.in/courses/112/105/112105211/>

Chapter 4: <https://nptel.ac.in/courses/112/102/112102103/>

Chapter 5: <https://www.youtube.com/watch?v=NCEHRvFOqMo>

Further Study:

1. CNC Programming Handbook, Third Edition (Volume 1) by Peter Smid
2. Programming of CNC Machines Fourth Edition by Ken Evans
3. Basics of CNC (Computer Numerical Control) Programming: CNC by Mr. Jayesh S.




PROGRAM CO-ORDINATOR


HoD/MECH


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Department of Mechanical Engineering
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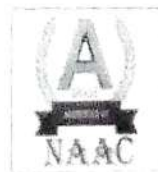
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Dr. J. SUNDARARAJAN
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Add on Course

Certificate of Completion

This is to certify that Mr./ ~~Ms.~~ RUBAN .V (III-Mech) has successfully completed the add on course on "22MEAO01-Advanced CNC Part Programming Techniques", organised by Department of Mechanical Engineering, NPR College of Engineering & Technology, Natham, for 35 hours duration from 16.08.2022 to 08.09.2022 during the academic year 2022-2023.

Mr. M. Mathan Raj
Course Coordinator



Dr. T. Saravana Kannan
HoD - Mech

Dr. J. Sundararajan
Principal





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DEPARTMENT OF MECHANICAL ENGINEERING

ADD ON COURSE ON INDUSTRIAL CONTROLS

INDEX

COURSE CODE & NAME: 22MEA002- INDUSTRIAL CONTROLS

ACADEMIC YEAR: 2022-2023

SEMESTER: EVEN

DURATION: 32 HOURS

S.NO	PARTICULARS	PAGE NO.
1	PERMISSION LETTER	02
2	RESOURCE PERSON PROFILE	03
3	CIRCULAR TO STUDENTS	04
4	INVITATION	05
5	COURSE CONTENT	07
6	REGISTERED STUDENTS NAME LIST	08
7	COURSE SCHEDULE	10
8	STUDENTS ATTENDANCE	12
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13	COURSE MATERIAL/MANUAL	18
14	SAMPLE CERTIFICATES OF THE PROGRAM	19


PROGRAM COORDINATOR

B. GOPI


HoD/MECH


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PERMISSION LETTER

From

Mr B.Gopi, AP/Mech,
Program Coordinator,
NPR College of Engineering & Technology,
Natham.

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Respected Sir,

Sub: Request for permission to conduct Add-on course program for Mech III & IV year students – Reg.

We have planned to conduct Add-on course program on “**Industrial Controls**” to our students from 13.02.2023 to 03.03.2023 (32 Hours) at 4.30 p.m. to 6.00 p.m. in our college premises. We are proposed **Mr. A. Ramesh**, Deputy Manager – Logistics and Materials Planning, J.K. Fenner Limited Madurai, **Mr. G. Santhosh**, Manager, Quality Assurances, Bnazrum Agro Exports (P) Ltd, Dindigul as resource persons for this Add-on course program. Kindly permit us to conduct the same.

Thanking you.



Yours faithfully,

Date: 04.01.2023

Place: Natham

[Signature]



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DEPARTMENT OF MECHANICAL ENGINEERING

ADD ON COURSE ON INDUSTRIAL CONTROLS

RESOURCE PERSONS PROFILE

Name : Mr. A. Ramesh

Designation : Deputy Manager

Company Name : J.K. Fenner Limited Madurai,

About Resource Person : Mr. A. Ramesh is currently working as Deputy Manager – Logistics and Materials Planning, J.K. Fenner Limited Madurai.

He has 04 years experience in Automation

Name : Mr. G. Santhosh

Designation : Manager, Quality Assurances

Company Name : Bnazrum Agro Exports (P) Ltd, Dindigul.

About Resource Person : Mr. G. Santhosh is currently working as Manager, Quality Assurances, Bnazrum Agro Exports (P) Ltd, Dindigul.

He has 06 years experience in Automation


PROGRAM COORDINATOR





HoD/MECH

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DEPARTMENT OF MECHANICAL ENGINEERING

NPRCET/OFF/MECH/AOC/2022-2023

DATE: 05.01.2023

CIRCULAR

This is to inform that Department of Mechanical Engineering is planned to conduct a Add-on course program on “**Industrial Controls**” for the students during this period of 13.02.2023 to 03.03.2023 (16 Days / 32 Hours) 2022-2023. Interested students can enroll their name to the program coordinator on or before 09.01.2023.

The details of the training program are given below.

Course Name	:	INDUSTRIAL CONTROLS
Resource Persons	:	1. Mr. A. Ramesh, Deputy Manager, J.K. Fenner Limited Madurai . 2. Mr. G. Santhosh, Manager, Quality Assurances, Bnazrum Agro Exports (P) Ltd, Dindigul.
Venue	:	Mechatronics Laboratory
Date & Duration	:	13.02.2023 to 03.03.2023 & 16 Day / 32 Hours
Time	:	4.30 p.m. to 6.30 p.m.
Program Coordinator	:	Mr.B.Gopi, AP/Mech,NPRCET



Copy to:

1. All the HoDs
2. IQAC
3. All the Class Rooms
4. Notice Board
5. File
6. Program Coordinator

PRINCIPAL

Dr. J.SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

NPR College of Engineering & Technology
Natham, Dindigul - 624 401.



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The Management, Principal, Staff and Students
Cordially invite you for the inauguration of
“Add-on Course on Industrial Controls”

Date And Time	13 th February, 2023 & 3.00 p.m.
Venue	NPRCET Auditorium

Chief Guest

***Mr. A. Ramesh, Deputy Manager,
J.K. Fenner Limited Madurai.***

&

***Mr. G. Santhosh, Manager & Quality Assurances,
Bnazrum Agro Exports (P) Ltd, Dindigul.***

Dr.J.Sundararajan

Principal,

NPR College of Engineering & Technology

Felicitates the function



Organized By

***Department of Mechanical Engineering,
NPR College of Engineering & Technology,
NPR Nagar, Natham.***



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DEPARTMENT OF MECHANICAL ENGINEERING

Agenda

1. Prayer Song
2. Welcome Address : Mr. S.Karthick, III MECH
3. Felicitation Address : Dr. J. Sundararajan,
Principal, NPRCET.
4. Presidential Address : Dr. K. K. Shyam Umasankar,
Executive Director, NPRGI.
5. Chief Guest Address : 1. Mr. A. Ramesh, Deputy Manager, J.K. Fenner
Limited Madurai.
2. Mr. G. Santhosh, Manager, Quality Assurances,
Bnazrum Agro Exports (P) Ltd, Dindigul.
6. Vote of Thanks : Mr.J.Kabilan, III MECH
7. National Anthem





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DEPARTMENT OF MECHANICAL ENGINEERING

ADD ON COURSE ON INDUSTRIAL CONTROLS

COURSE CONTENT

Chapter 1:

- Automation using hydraulic systems.
- Hydraulic fluid, fluid mechanics, design aspects of various elements of hydraulic systems such as pumps, valves, filters.
- Practical case studies on hydraulic circuit design and performance analysis.
- Servo valves, hydraulic servo actuators, electro hydraulic servo-valves, proportional valves and their applications.
- Modeling and Simulation of Electro-hydraulic Servo systems.

Chapter 2:

- Automation using pneumatic systems.
- Pneumatic fundamentals - control elements, position and pressure sensing -logic circuits - switching circuits.
- Fringe conditions modules and these integration - sequential circuits - cascade methods.
- Pneumatic equipments - selection of components – design calculations –application.
- Pneumatic circuits.

Chapter 3:

- Control technologies in automation.
- Continuous versus discrete Control.
- Computer based control process and its forms.
- Open and closed loop control system.

Chapter 4:

- Automated work piece handling.
- Transfer mechanisms.
- Automated feed cut of components, performance analysis.
- Automated handling systems including AGV and its various guiding technologies, applications.

Chapter 5:

- Introduction to robot technology.
- Robot classification, robot elements, Robot co-ordinate systems.
- Position, path and speed control systems,
- Robot programming for foundry.
- Collisions free motion planning.

Criteria to get Certificate:

- Students should register their names for this course
- Students must have 85% attendance.
- Student should secure 50% marks in the final Exam

Prepared By: Mr.B.Gopi, AP/MECH, NPRCET

Approved By,


HoD/MECH


IQAC


PRINCIPAL

Dr. J.SUNDARARAJAN,

BE., M.Tech., Ph.D.,

Principal

Head of the Department
Department of Mechanical Engineering
NPR College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401

Coordinator - IQAC
NPR College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401

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DEPARTMENT OF MECHANICAL ENGINEERING

ADD ON COURSE ON INDUSTRIAL CONTROLS

REGISTERED STUDENT'S NAME LIST

S. No.	Register Number	Name of the Student	Year
1	920820114002	Ajaykumar B	III - MECH
2	920820114004	Mohanraj S	III - MECH
3	920820114007	Sabarinathan S	III - MECH
4	920820114008	Sivabalan N	III - MECH
5	920820114010	Thangavimal V	III - MECH
6	920820114011	Venkadesan N	III - MECH
7	920820114309	Kabilan J	III - MECH
8	920820114310	Kamaleswaran V	III - MECH
9	920820114311	Karthick S	III - MECH
10	920820114312	Karthick Raj S	III - MECH
11	920819114001	Abilash A	IV - MECH
12	920819114003	Anbarasan V	IV - MECH
13	920819114004	Jegathgurunaatha Ashwin S	IV - MECH
14	920819114005	Ayyam Perumal P	IV - MECH
15	920819114006	Balakumaresan S	IV - MECH
16	920819114008	Dineshpandi B	IV - MECH
17	920819114010	Gowthaman M	IV - MECH
18	920819114012	Iman Mohammed T	IV - MECH
19	920819114013	Maha Lakshmi G	IV - MECH
20	920819114014	Manikandan N	IV - MECH
21	920819114015	Manikandan R	IV - MECH
22	920819114016	Meenakshi Sundaram G	IV - MECH
23	920819114018	Mohamed Siddiq A	IV - MECH
24	920819114019	Mohana Ragul P	IV - MECH
25	920819114020	Mugeshwaran N	IV - MECH
26	920819114021	Muthusamy P	IV - MECH
27	920819114022	Nagaraj S	IV - MECH
28	920819114023	Naveen Raj K	IV - MECH



29	920819114024	Nitheswar M	IV - MECH
30	920819114025	Payyavula Sai Prasad	IV - MECH
31	920819114026	Raghulpandian B	IV - MECH
32	920819114027	Rakesh M	IV - MECH
33	920819114028	Rakesh S	IV - MECH
34	920819114029	Ramakrishnan B	IV - MECH
35	920819114030	Ramanan M	IV - MECH
36	920819114031	Ramkumar A	IV - MECH
37	920819114032	Ruban P	IV - MECH
38	920819114033	Sangaran S	IV - MECH
39	920819114034	Sankar G	IV - MECH
40	920819114035	Saravanakumar M	IV - MECH
41	920819114036	Shaarif Ahamed S	IV - MECH
42	920819114037	Shobana K	IV - MECH
43	920819114038	Siva Kumar S	IV - MECH
44	920819114039	Velpackiyaraj M	IV - MECH
45	920819114701	Veeramanikandan M	IV - MECH

B. Gopi
PROGRAM COORDINATOR

B. Gopi



DCI
HoD/MECH

DCI
Head of the Department
Department of Mechanical Engineering
SPR College of Engineering & Technology
Nambur, Chennai (PIN - 604 001)



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DEPARTMENT OF MECHANICAL ENGINEERING

ADD ON COURSE ON INDUSTRIAL CONTROLS

COURSE SCHEDULE

Venue: Mechatronics Laboratory

Date: 25.01.2023

Time: 4.30.p.m to 6.30.p.m

External Resource Persons:

Mr. A. Ramesh, Deputy Manager, J.K. Fenner
Limited Madurai.

Internal Resource Persons:

Mr.B.Gopi, AP/MECH, NPRCET.

Mr. G. Santhosh, Manager, Quality Assurances,
Bnazrum Agro Exports (P) Ltd, Dindigul.

S. No.	Date	Syllabus	Resource Person	Hours
1	13.02.2023	Automation using hydraulic systems. Hydraulic fluid, fluid mechanics.	Mr. A. Ramesh, Deputy Manager, J.K. Fenner Limited Madurai.	2
2	14.02.2023	Design aspects of various elements of hydraulic systems such as pumps, valves, filters.	Mr. A. Ramesh, Deputy Manager, J.K. Fenner Limited Madurai.	2
3	15.02.2023	Practical case studies on hydraulic circuit design and performance analysis.	Mr. A. Ramesh, Deputy Manager, J.K. Fenner Limited Madurai.	2
4	16.02.2023	Servo valves, hydraulic servo actuators.	Mr. A. Ramesh, Deputy Manager, J.K. Fenner Limited Madurai.	2
5	17.02.2023	Electro hydraulic servo-valves, proportional valves and their applications.	Mr. A. Ramesh, Deputy Manager, J.K. Fenner Limited Madurai.	
6	20.02.2023	Modeling and Simulation of Electro-hydraulic and Servo systems.	Mr. A. Ramesh, Deputy Manager, J.K. Fenner Limited Madurai.	2
7	21.02.2023	Automation using pneumatic systems. Pneumatic fundamentals - control elements, position and pressure sensing logic circuits - switching circuits.	Mr. G. Santhosh, Manager, Quality Assurances, Bnazrum Agro Exports (P) Ltd, Dindigul.	2





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8	22.02.2023	Fringe conditions modules and these integration, sequential circuits - cascade methods. Case study: Circuit Design	Mr. G. Santhosh, Manager, Quality Assurances, Bnazrum Agro Exports (P) Ltd, Dindigul.	2
9	23.02.2023	Pneumatic equipment's selection of components, design calculations & application.	Mr. G. Santhosh, Manager, Quality Assurances, Bnazrum Agro Exports (P) Ltd, Dindigul.	2
10	24.02.2023	Pneumatic circuits and Control technologies in automation.	Mr. G. Santhosh, Manager, Quality Assurances, Bnazrum Agro Exports (P) Ltd, Dindigul.	2
11	25.02.2023	Continuous versus discrete Control. Computer based control process and its forms.	Dr. Paul Singarayar, AP/MECH, NPRCET.	2
12	27.02.2023	Open and closed loop control system. Automated work piece handling. Transfer mechanisms.	Dr. Paul Singarayar, AP/MECH, NPRCET.	2
13	28.02.2023	Automated feed cut of components. performance analysis.	Mr. A. Ramesh, Deputy Manager, J.K. Fenner Limited Madurai.	2
14	01.03.2023	Automated handling systems including AGV and its various guiding technologies, applications.	Mr. A. Ramesh, Deputy Manager, J.K. Fenner Limited Madurai.	2
15	02.03.2023	Introduction to robot technology. Robot classification, robot elements. Robot co-ordinate systems, Position, path and speed control systems.	Mr. A. Ramesh, Deputy Manager, J.K. Fenner Limited Madurai.	2
16	03.03.2023	Robot programming for foundry. Collisions free motion planning.	Mr. A. Ramesh, Deputy Manager, J.K. Fenner Limited Madurai.	2
Total Hours				32

B. Gupta
PROGRAM COORDINATOR

Ref
HoD/MECH

Ref
IQAC

Ref
PRINCIPAL

Head of the Department
Department of Mechanical Engineering
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Natham, Dindigul (D) - 624 401

Ref
Dr. J. SUNDARARAJAN,
B.E., M.Tech, Ph.D.
Principal

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DEPARTMENT OF MECHANICAL ENGINEERING ADD ON COURSE ON INDUSTRIAL CONTROLS ATTENDANCE SHEET

S.No	Reg.No	Name of the Student	Year	Days															
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	22MEAO01001	Ajaykumar B	III - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	22MEAO01002	Mohanraj S	III - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
3	22MEAO01003	Sabarinathan S	III - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
4	22MEAO01004	Sivabalan N	III - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
5	22MEAO01005	Thangavimal V	III - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
6	22MEAO01006	Venkadesan N	III - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
7	22MEAO01007	Kabilan J	III - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
8	22MEAO01008	Kamaleswaran V	III - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
9	22MEAO01009	Karthick S	III - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
10	22MEAO01010	Karthick Raj S	III - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
11	22MEAO01011	Abilash A	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	22MEAO01012	Anbarasan V	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
13	22MEAO01013	Jegathgurunaatha Ashwin S	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
14	22MEAO01014	Ayyam Perumal P	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
15	22MEAO01015	Balakumaresan S	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
16	22MEAO01016	Dineshpandi B	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
17	22MEAO01017	Gowthaman M	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
18	22MEAO01018	Iman Mohammed T	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
19	22MEAO01019	Maha Lakshmi G	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
20	22MEAO01020	Manikandan N	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
21	22MEAO01021	Manikandan R	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
22	22MEAO01022	Meenaksh Sundaram G	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
23	22MEAO01023	Mohamed Siddiq A	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
24	22MEAO01024	Mohana Ragul P	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
25	22MEAO01025	Mugeshwaran N	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
26	22MEAO01026	Muthusamy P	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
27	22MEAO01027	Nagaraj S	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
28	22MEAO01028	Naveen Raj K	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
29	22MEAO01029	Nitheswar M	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
30	22MEAO01030	Payyavula Sai Prasad	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
31	22MEAO01031	Raghulpandian B	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
32	22MEAO01032	Rakesh M	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
33	22MEAO01033	Rakesh S	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
34	22MEAO01034	Ramakrishnan B	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
35	22MEAO01035	Ramanan M	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
36	22MEAO01036	Ramkumar A	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
37	22MEAO01037	Ruban P	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
38	22MEAO01038	Sangaran S	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
39	22MEAO01039	Sankar G	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
40	22MEAO01040	Saravanakumar M	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
41	22MEAO01041	Shaarif Ahamed S	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
42	22MEAO01042	Shobana K	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
43	22MEAO01043	Siva Kumar S	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
44	22MEAO01044	Velpackiyaraj M	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
45	22MEAO01045	Veeramaniandam M	IV - MECH	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
PRESENT				45	44	45	45	44	45	44	44	44	45	45	43	45	44	45	45
ABSENT				-	01	-	-	01	-	01	01	01	-	-	02	-	01	-	-
SIGNATURE																			

B. Gopi
PROGRAM COORDINATOR

DCI
HoD/MECH

John
IQAC

sc
PRINCIPAL

Head of the Department
Department of Mechanical Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401

D. SUNDARARAJAN
Principal
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DEPARTMENT OF MECHANICAL ENGINEERING

ADD ON COURSE ON INDUSTRIAL CONTROLS

SAMPLE QUESTION PAPER & ANSWER

1. The pressure supplied to this circuit is 3 Bar. The same reading on a gauge calibrated in Mega Pascal (MPa) will read...
A. 300,000 MPa
B. 3,000,000 MPa
C. 30 MPa
D. **0.3 MPa**
2. The purpose of the reservoir in the pneumatic drawing is to...
A. Provide additional pressure to the 5-port valve
B. Allow the 5-port valve to operate even if mains air fails
C. **Allow for accurate time delay prior to cylinder extend**
D. Allow for the correct volume of air to operate the cylinder
3. This electro-pneumatic manifold bank contains...
A. Two mono-stable 3-port valves and two bi-stable 3-port valves
B. **Two mono-stable 5-port valves and two bi-stable 5-port valves**
C. Two bi-stable 3-port valves and two bi-stable 5-port valves
D. Two mono-stable 3-port valves and two mono-stable 5-port valves
4. These modern manifold arrangements use solenoid operated air-assist actuation instead of direct type actuation. Which statement is not true?
A. **They consume less air than the direct type**
B. They consume less power than the direct type
C. They dissipate less heat than the direct type
D. They use less space than the direct type
5. Which of following is not considered to be a Hydro-Pneumatic component



- A. **Pump**
- B. Intensifier
- C. Dashpot
- D. Air-oil reservoir



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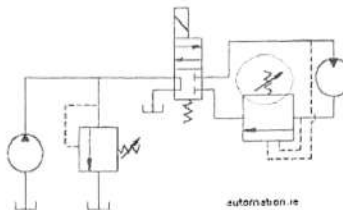
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6. Hydro-Pneumatics are generally not capable of...

- A. Smooth steady motion
- B. Rapid movements**
- C. Pressure intensification
- D. Mid-position cylinder locking

7. Hydraulic pressure in a system is generated by the.



- A. Pump
 - B. Pressure relief valve
 - C. Cylinder
 - D. Load**
8. The red circled component is to adjust the motor's...
- A. acceleration
 - B. speed
 - C. Pressure
 - D. Braking**
9. When connecting the wiring of a PLC output module you would not connect.
- A. a DC relay
 - B. a pneumatic solenoid
 - C. an electric switch**
 - D. an indicator lamp
10. Output Y will be at logic 1 when.
- A. inputs A and input B are at logic 1
 - B. input A or input B are at logic 1
 - C. input A is logic 1 and input B is logic 0
 - D. input A is logic 0 and input B is logic 1**



B. Gopi
PROGRAM COORDINATOR

B. Gopi

D. J. W
HoD/MECH
Head of the Department
Department of Mechanical Engineering
NPR College of Engineering & Technology
Natham, Dindigul (TN) - 624 401



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DEPARTMENT OF MECHANICAL ENGINEERING

ADD ON COURSE ON INDUSTRIAL CONTROLS

FEEDBACK FORM

Name of the Student: V. Anbarasan

Year / Semester: IV & VIII

Name of the Program: Industrial Controls

S. No.	CONTENT	EXCELLENT	GOOD	SATISFACTORY	POOR	VERY POOR
1.	Course Content	✓				
2.	Technical Skill		✓			
3.	Interaction	✓				
4.	Practical Session	✓				
5.	Communication		✓			

Any other Comments / Suggestions: —

V. Anbarasan
Signature of the Student

B. G. Gopi
PROGRAM COORDINATOR

B. G. Gopi



D. S. W.
HoD/MECH

Head of the Department
Department of Mechanical Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401



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DEPARTMENT OF MECHANICAL ENGINEERING

ADD ON COURSE ON INDUSTRIAL CONTROLS

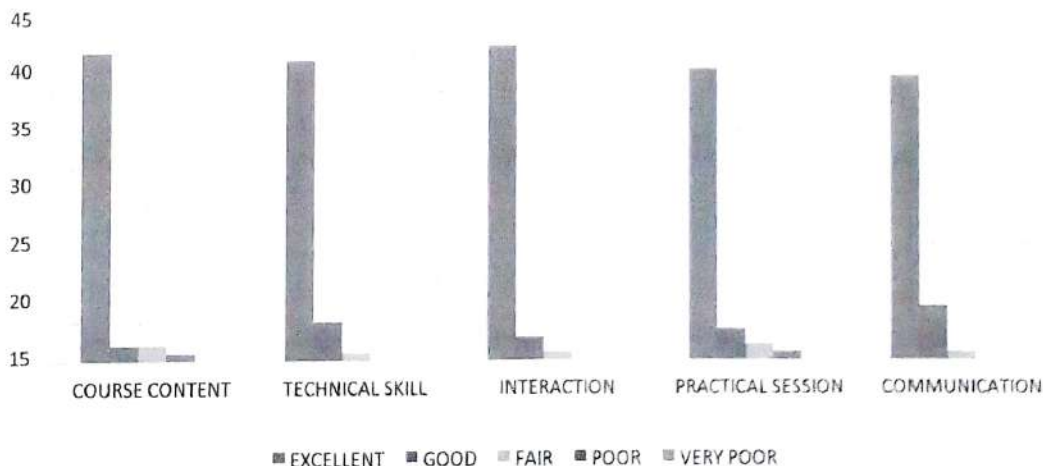
STUDENT FEEDBACK SUMMARY REPORT

REGISTERED STUDENTS:45

DATE:03.03.2023

CONTENT	EXCELLENT	GOOD	FAIR	POOR	VERY POOR
COURSE CONTENT	40	2	2	1	-
TECHNICAL SKILL	39	5	1	-	-
INTERACTION	41	3	1	-	-
PRACTICAL SESSION	38	4	2	1	-
COMMUNICATION	37	7	1	-	-
AVERAGE	39	4.2	1.4	0.4	0

STUDENT FEEDBACK SUMMARY



B. Gopi
PROGRAM COORDINATOR

B. Gopi



Dr. J. Sundararajan
HoD/MECH

Head of the Department
Department of Mechanical Engineering
NPR College of Engineering & Technology
Natham, Dindigul (Dt. 624 401)



Dr. J. Sundararajan
IQAC

Dr. J. Sundararajan
PRINCIPAL

Dr. J. SUNDARARAJAN

B.E., M.Tech., Ph.D.

Date: 03.03.2023

16

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Natham, Dindigul (Dt. 624 401)



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DEPARTMENT OF MECHANICAL ENGINEERING

ADD ON COURSE ON INDUSTRIAL CONTROLS

SUMMARY REPORT

Department of Mechanical Engineering, NPR College of Engineering & Technology, Natham, organized Add-On Course on "Industrial Controls" from 13.02.2023 to 03.03.2023 (16 Days / 32 Hours) at Mechatronics Laboratory.

Mr. S.Karthick, third year student of Mechanical Department addressed by his words of welcome. Dr. J. Sundararajan, Principal of our college inaugurated the program delivered the inaugural address. Resource persons Mr. A.Ramesh, Deputy Manager, J.K. Fenner Limited Madurai & Mr. G. Santhosh, Manager, Quality Assurances, Bnazrum Agro Exports (P) Ltd, Dindigul has shared their knowledge with our students. This thirty two hour course gave over view about Industrial Controls application and provides overview of an exciting growing of automation field. This program also taught the basic Industrial Controls. They also shared their knowledge of the fundamentals and principles in achieving automation. So that students enable to have skills that will help them to resolve complex real world problems in industrial field.

The students learnt various existing and emerging technologies of Industrial Controls, 45 Students were attended from Mech III and IV year. All the participated were completed the course as successfully. Course attended students were awarded with certificates. Mr.J.Kabilan, third year student of Mechanical Department delivered the vote of thanks.



B. Gopi
PROGRAM COORDINATOR

P. K. W.
HoD/MECH

[Signature]
IQAC

[Signature]
PRINCIPAL

B. Gopi

Head of the Department
Department of Mechanical Engineering
NPR College of Engineering & Technology
Natham, Dindigul (DT) - 624 401



[Signature]
J. SUNDARARAJAN
Principal



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DEPARTMENT OF MECHANICAL ENGINEERING

ADD ON COURSE ON INDUSTRIAL CONTROLS

COURSE MATERIAL

Material Link:

Chapter 1: <https://nptel.ac.in/courses/112/103/112103293/>

Chapter 2: <https://nptel.ac.in/courses/112/104/112104288/>

Chapter 3: <https://www.surecontrols.com/what-is-industrial-automation/>

Chapter 4: <https://nptel.ac.in/noc/courses/noc20/SEM2/noc20-me58/>

Chapter 5: https://onlinecourses.nptel.ac.in/noc20_me58/preview

Further Reference:

1. Industrial Instrumentation, Control and Automation, S. Mukhopadhyay, S. Sen and A. K. Deb, Jaico Publishing House, 2013
2. Chemical Process Control, An Introduction to Theory and Practice, George Stephanopoulos, Prentice Hall India, 2012
3. Electric Motor Drives, Modelling, Analysis and Control, R. Krishnan, Prentice Hall India, 2002
4. Hydraulic Control Systems, Herbert E. Merritt, Wiley, 1991



B. Lobi
PROGRAM COORDINATOR

B. GOPI

DCI
HoD/MECH

Head of the Department
Department of Mechanical Engineering
NPR College of Engineering & Technology
Natham, Dindigul (TN) - 624 401

IQAC

PRINCIPAL

Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.

Principal

NPR College of Engineering & Technology
Natham, Dindigul (TN) - 624 401



NPR



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Add on Course


Certificate of Completion

This is to certify that Mr./ ~~Ms./~~ KAMALEWARAN.V (III-Mech) has successfully completed the add-on course on "22MEAO02-INDUSTRIAL CONTROLS", organised by the Department of Mechanical Engineering, NPR College of Engineering & Technology, Natham, for 32 hours duration from 13.02.2023 to 03.03.2023 during the academic year 2022-2023.


Mr.B.Gopi

Course Coordinator


Dr.T.Saravana Kannan
HoD – Mech


Dr.J.Sundararajan
Principal



DEPARTMENT OF MANAGEMENT STUDIES

ADD - ON COURSE

INDEX

COURSE CODE & NAME: 22BAA001 & SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-IIR)

ACADEMIC YEAR: 2022 -2023

SEMESTER: ODD

DURATION: 40 HOURS

S.No	PARTICULARS	PAGE NO
1	PERMISSION LETTER	2
2	RESOURCE PERSON'S PROFILE	3
3	CIRCULAR	4
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5	REGISTERED STUDENT'S NAME LIST	6
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[Signature]
**PROGRAM
COORDINATOR**

[Signature]
HOD/MBA

[Signature]
**IQAC
COORDINATOR**

[Signature]
PRINCIPAL

Dr. J.SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

Coordinator - IQAC
NPR College of Engineering & Technology
Natham, Dindigul (Dt)-624 401.

N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.



ADD ON COURSE
SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-IIR)
PERMISSION LETTER

DATE: 04/10/2022

From

The Head of the Department,
Department of Management Studies,
NPR College of Engineering & Technology,
Natham.

To

The Principal,
NPR College of Engineering & Technology,
Natham.


Respected Sir,

Sub: Seeking permission to conduct an Add-on Course for MBA students - Regarding.

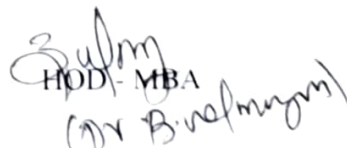
We have planned to conduct an Add-on Course on “**SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-IIR)**” to our MBA students on 10.10.2022, 11.10.2022, 13.10.2022, 14.10.2022, 15.10.2022 in our college premises. We have proposed SHIKSHAA SIMPLE LEARN-MADURAI as an authorized training center for this Add-on course program, kindly permit us to conduct the same.



Thanking you


Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt). 624 401.

Yours faithfully,


HOD - MBA
(Dr. B. Srinivasan)



DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-HR)

RESOURCE PERSON'S PROFILE

Name	:	Mrs. Ruby Clara
Designation	:	Senior Technical Trainer
Institution Name	:	<p align="center">SHIKSHAA SIMPLE LEARN-MADURAI</p> <p>SHIKSHAA ISO 21001: 2018 Started its updated technology and training activity in the year 2018. It is a pioneer in IT Education. With 3 consecutive successful years in this field, our highly experienced and extremely qualified faculties continuously offering world class processes and expertise in their training and application development. We have our corporate offices in Madurai and Bangalore.</p> <div align="center"> </div> <p align="center"><small>70, Newstar Nagar, 3rd Street, S.S Colony, Near Meenakshi Fan House, Bypass Road, Madurai</small></p>
About Resource Person	:	Mrs. Ruby Clara having 5+ Years' experience IT background course like SAP Functional technical modules, Full Stack, Android, Java

**PROGRAM
COORDINATOR**



**IQAC
COORDINATOR**

Coordinator - IQAC
 N.P.R. College of Engineering & Technology
 Natham, Dindigul (Dt)-624 401

PRINCIPAL

Dr. J.SUNDARARAJAN

B.E., M.Tech., Ph.D.

Principal

N.P.R. College of Engineering & Technology
 Natham, Dindigul (Dt) - 624 401.

DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-HR)

CIRCULAR

Date: 04/10/2022

This is to inform that Department of Management Studies has planned to conduct an Add-on Course program on "SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-HR)" for the students during 2022-2023. Interested students can enroll their name to the program coordinator on or before 07/10/2022. The details of the training program are given below

COURSE NAME	: SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-HR)
TRAINING CENTRE	: SHIKSHAA SIMPLE LEARN-MADURAI
VENUE	: NPRCET - English Communication - (MB 318)
DATE & DURATION	: 10/10/22,11/10/22,13/10/22,14/10/22,15/10/22. 40 Hrs.
PROGRAM COORDINATOR	: Mr.P.T.J.K.Lilian (AP/MBA)

Copy to:

- 1) All the HoDs
- 2) IQAC Coordinator
- 3) All the Class Rooms
- 4) Notice Board
- 5) File
- 6) Program Coordinator




PRINCIPAL
Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R College of Engineering & Technology
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DEPARTMENT OF MANAGEMENT STUDIES

INVITATION



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DEPARTMENT OF MANAGEMENT STUDIES

in association with



SHIKSHAA
Inauguration of
Add-on Course

(For Final year MBA)

Course Duration : One Week
Course Hours : 40 Hours

DATE : 10.10.2022 (Monday)
TIME : 9.30 AM to 4.00 PM



- SAP (HR & FICO)
- HR Analytics with Advanced Excel

Patron

Dr.J.Sundararajan
Principal

Convener

Dr.B.Velmurugan
HoD/MBA

Co-ordinators

Dr.K.Binith Muthukrishnan
ASP/MBA

Mr.P.T.J.K.Lilian
AP/MBA





DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-IIR)

REGISTERED STUDENT'S NAME LIST

S. No	Register Number	Student Name	Year
1.	920821631003	AJAYRAM.S	II MBA
2.	920821631004	AROCKIA SHAJIKA.A	II MBA
3.	920821631007	BHARATHI. K	II MBA
4.	920821631014	GOKUL.V	II MBA
5.	920821631016	HARI HARA SUDHAN G	II MBA
6.	920821631017	HEMALATHA S	II MBA
7.	920821631025	MAHA ATCHAYA.P	II MBA
8.	920821631030	NITHYA C	II MBA
9.	920821631032	PARTHIBAN.B	II MBA
10.	920821631036	RAJAPRIYA.D	II MBA
11.	920821631045	SANTHOSH KUMAR S	II MBA
12.	920821631046	SARAVANAN.M	II MBA
13.	920821631048	SENTHIL KUMAR. P	II MBA
14.	920821631050	SUBBU LAKSHMI M	II MBA
15.	920821631053	SWATHI SHREE.M	II MBA
16.	920821631057	VISHALAKSHI.S	II MBA

Program Coordinator



3.4.20m
HOD/MBA

DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-HR)

COURSE CONTENT

Day 1 –SAP Introduction, What is ERP,Business Process Integration, Types of SAP,Modules,Fucntional Area,Advantages,Disadvantages,SAP GUI installation,CREATE COMPANY IN SAP, How to Define Company in SAP, Assign Company Code,Define Personnel Area, Define Employee Group, Define Employee Subgroup

Day 2 –Assign Employee Subgroup to Employee Group, Assign Personnel Area to Company Code, Maintain User Parameters, Define Employee Attributes, Define Administrator Groups, DefineInfo groups, what is an Info type, what is an Info type Menu

Day 3 – What are Actions, – Set up Personnel Actions, Define Public Holiday Classes, Personnel Subarea groupings, Group Personnel Subareas for work schedules, Daily Work Schedules,

Day 4 - Define Period Work Schedules, Define Day Types, Special days, Selection rules, Define Absence Types,Define Counting Classes for Period Work Schedule, Settings group for time quotas

Day5 - Define Absence Quota Types, Define Attendance Quota Types, Define Counting Rules, Deduction rules for absence quotas, Dumps Exam Preparation

Criteria to get Certificate:

- Exam score = Pass score 50 % of the exam score out of 100

Prepared By: Mr.P.T.J.K.Lilian (AP/MBA)

Approved By:

**PROGRAM
COORDINATOR**

[Signature]
HOD/MBA

[Signature]
**IQAC
COORDINATOR**

Coordinator - IQAC

NPR College of Engineering & Technology
Natham, Dindigul (Dt)-624 401

[Signature]
**PRINCIPAL
Dr. J.SUNDARARAJ**

B.E., M.Tech., P.

Principal

N.P.R. College of Engineering & Tech
Natham, Dindigul (Dt) - 624 401





DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-IIR)

COURSE SCHEDULE

Venue

: English Communication Lab (MB – 318)

Date

: 10.10.2022, 11.10.2022, 13.10.2022, 14.10.2022, 15.10.2022.

Date	8.50 a.m. to 11.20 a.m.	11.20 a.m. to 11.30 a.m.	11.30 a.m. to 1.00 p.m.	1.00 p.m. to 1.20 p.m.	1.20 p.m. to 3.20 p.m.	3.20 p.m. to 3.30 p.m.	3.30 p.m. to 5.00 p.m.
	SESSION I		SESSION II		SESSION III		SESSION IV
Day 1 10.10.22	Inauguration & Introduction	Tea Break	Mrs.Ruby Clara SAP Introduction, What is ERP,Business Process Integration, Types of SAP,Modules,Fucntional Area,Advantages,Disadvantages,SAP GUI installation	Lunch	Mrs.Ruby Clara CREATE COMPANYIN SAP, How to Define Company in SAP,	Tea Break	Mrs.Ruby Clara Assign Company Code, Define Personnel Area, Define Employee Group, Define Employee Subgroup
Day 2 11.10.22	SESSION I Mrs. Ruby Clara Assign Personnel Area to Company Code, Maintain User Parameters		SESSION II Mrs. Ruby Clara Define Employee Attributes ,Define Administrator Groups		SESSION III Mrs.Ruby Clara Define Infogroups,What is an Info type		SESSION IV Mrs.Ruby Clara What is an Info type Menu
Day 3 13.10.22	SESSION I Mrs.Ruby Clara What are Actions, – Set up Personnel Actions		SESSION II Mrs.Ruby Clara Define Public Holiday Classes, Personnel Subarea		SESSION III Mrs.Ruby Clara Personnel Subareas for work schedules		SESSION IV Mrs.Ruby Clara Daily Work Schedules,
Day 4 14.10.22	SESSION I Mrs.Ruby Clara Define Period Work Schedules, Define Day Types		SESSION II Mrs.Ruby Clara Special days, Selection rules, Define Absence Types,		SESSION III Mrs.Ruby Clara Define Counting Classes for Period Work Schedule		SESSION IV Mrs.Ruby Clara Settings group for time quotas Depreciation to Company Code
Day 5 15.10.22	SESSION I Mrs.Ruby Clara Define Absence Quota Types,		SESSION II Mrs.Ruby Clara Define Attendance Quota Types, Deduction rules for absence quotas		SESSION III Mrs.Ruby Clara Define Counting Rules		SESSION IV Mrs.Ruby Clara Dumps Exam Preparation

**PROGRAM
COORDINATOR**

Ruby Clara
HOD/MBA

**IQAC
COORDINATOR**

Coordinator - IQAC

NPR College of Engineering & Technology
Natham, Dindigul (Dt)-624 401



PRINCIPAL
Dr. J. SUNDARARAJ

Principal

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Natham, Dindigul (Dt) - 624 401



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DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE - SAP-HR

II MBA - STUDENTS ATTENDANCE

Sl. No	Reg. No.	STUDENTS NAME	10.10.2022 FN & AN	11.10.2022 FN & AN	13.10.2022 FN & AN	14.10.2022 FN & AN	15.10.2022 FN & AN
1	920821631003	AJAYRAM.S					
2	920821631004	AROCKIA SHAJIK.A					
3	920821631007	BHARATHI.K					
4	920821631014	GROGUK.V Groguk.V					
5	920821631016	HARI HARA SUDHAN.G					
6	920821631017	HEMALATHA.S					
7	920821631025	MAHA ATCHAYA.P					
8	920821631030	NITHYA.C					
9	920821631032	PARTHIBAN.B					
10	920821631036	RAJAPRIYA.D					
11	920821631045	SANTHOSH KUMAR.S					
12	920821631046	SARAVANAN.M					
13	920821631048	SENTHIL KUMAR.P					
14	920821631050	SUBBU LAKSHMI.M					
15	920821631053	SWATHI SHREE.M					
16	920821631057	VISHALAKSHI.S					



PROGRAM COORDINATOR
(P.T.J.K. Kulian)

JMD/MBA

PRINCIPAL

Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (D) - 624 401.



DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-HR)

SAMPLE QUIZ QUESTION PAPER WITH ANSWER KEY

1. What is the purpose of recording an info type 2002 record?

- a) To record an employee's absence
- b) To record an employee's substitution
- c) To record an employee's leave entitlements
- d) To record an employee's attendances

2. What is the T Code for salary administration?

- a) PA96
- b) PA97
- c) PA98
- d) PA99

3. What elements make up the Enterprise Structure?

- a) Client
- b) Company code
- c) Personnel Area
- d) Personnel Subarea

4. Which includes capturing only the number of works hours.

- a) with clock time
- b) without clock time
- c) time evaluation
- d) time recording

5. Work Schedule Rule do not comprises of the following elements

- a) Public Holidays
- b) Daily Work Schedules
- c) Planned Working Time
- d) Break Schedules

Answers: 1.D 2.C 3.A 4.B 5. C



PROGRAM COORDINATOR

S. Jom
HOD/MBA



DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-HR)

STUDENT'S FEEDBACK

Name of the Student : <u>S. Heme lattu</u>	Year / Semester: <u>II/III</u>
Name of the Program: <u>SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-HR)</u>	

S. No	CONTENT	EXCELLENT	GOOD	FAIR	SATISFACTORY	NOT SATISFACTORY
1	Course Content	✓				
2	Way of exposed new knowledge and practices	✓				
3	Examples Provided during this course		✓			
4	Course delivered by Resource Person	✓				
5	Time Management		✓			
6	Overall rating of this course	✓				
7	Any Other Comments / Suggestions	Very useful Course				



S. Heme lattu
 Student Signature



DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-HR)

STUDENT'S FEEDBACK

Name of the Student : <i>M. Sathavahan</i>	Year / Semester: II/III
Name of the Program: SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-HR)	

S. No	CONTENT	EXCELLENT	GOOD	FAIR	SATISFACTORY	NOT SATISFACTORY
1	Course Content		✓			
2	Way of exposed new knowledge and practices	✓				
3	Examples Provided during this course	✓				
4	Course delivered by Resource Person		✓			
5	Time Management	✓				
6	Overall rating of this course		✓			
7	Any Other Comments / Suggestions	<i>Good</i>				



MST
 Student Signatur

DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-HR)

STUDENT'S FEEDBACK

Name of the Student : <u>Gogul V</u>	Year / Semester: <u>II/III</u>
Name of the Program: SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-HR)	

S. No	CONTENT	EXCELLENT	GOOD	FAIR	SATISFACTORY	NOT SATISFACTORY
1	Course Content	✓				
2	Way of exposed new knowledge and practices	✓				
3	Examples Provided during this course		✓			
4	Course delivered by Resource Person	✓				
5	Time Management		✓			
6	Overall rating of this course	✓				
7	Any Other Comments / Suggestions	Good				



V. Gogul
Student Signatur



DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-HR)

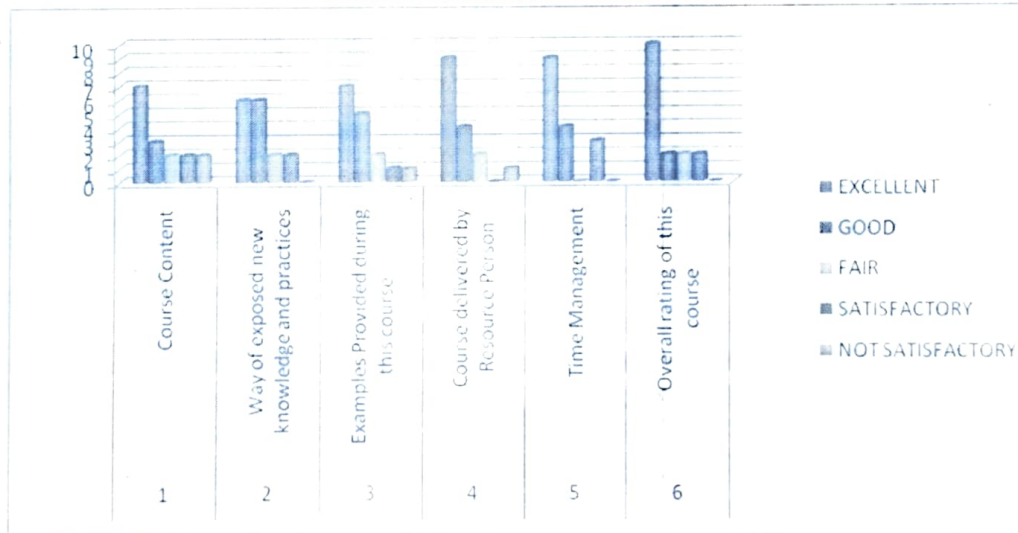
STUDENT FEEDBACK SUMMARY REPORT

REGISTERED STUDENTS: 16

DATE:

S. No	CONTENT	EXCELLENT	GOOD	FAIR	SATISFACTORY	NOT SATISFACTORY
1	Course Content	7	3	2	2	2
2	Way of exposed new knowledge and practices	6	6	2	2	0
3	Examples Provided during this course	7	5	2	1	1
4	Course delivered by Resource Person	9	4	2	0	1
5	Time Management	9	4	0	3	0
6	Overall rating of this course	10	2	2	2	0
Average						

STUDENT FEEDBACK SUMMARY REPORT



Prithika
**PROGRAM
 COORDINATOR**

Salim
HOD/MB



PRINCIPAL
Dr. J.SUNDARAJAN,
 B.E., M.Tech., Ph.D.

Page 13 of 17
Principal
N.P.R. College of Engineering & Technology,
Nathan, Dindigul (Dt) - 624 401.

DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-HR)

SUMMARY REPORT

Department of Management Studies organized an Add on Course on “SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-HR)” from 10.10.2022, 11.10.2022, 13.10.2022, 14.10.2022, 15.10.2022 at our College Premises. Ms.M.Swathi Shree II MBA has delivered welcome address.

Dr.J.SUNDARARAJAN, Principal felicitated the Students. This one week course gave over view about SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-HR). SHIKSHAA SIMPLE LEARN-MADURAI shared their knowledge about SAP - HR. SAP - HR is basically the process of improving the skill sets as well as the knowledge of the Human Resource Professionals. This can be done through various methods such as classroom sessions or training program specially designed to increase the HR acumen. So that students enable to have skills that will help them to apply in future.

The students learnt various techniques and coding for developing SAP HR .16 Students were attended from MBA II year. A student those participated and successfully completed the online exam has been awarded with certificates.

Vote of thanks was delivered by Mr.S. Ajay Ram- II MBA.


PROGRAM
COORDINATOR




HoD/MBA


PRINCIPAL

Dr. J.SUNDARARAJAN.
B.E., M.Tech., Ph.D.,
Principal

N.P.R. College of Engineering & Technology
Natham, Tirunelveli (Dt) - 624 401.
Page 14 of 17

DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-HR)

PHOTO GALLERY



J. J. Jithian
PROGRAM
COORDINATOR

Zulfi
HOD/MBA



J. Sundararajan
PRINCIPAL
Dr. J. SUNDARARAJAN
B.E., M.Tech., Ph.D.
Principal
N.F.R. College of Engineering & Techno
Natham, Dindigul (Dt) - 624 401.
Page 16 of 17

DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-HR)

COURSE MATERIAL


Material Link:

1. <https://training.sap.com/certification/>


PROGRAM
COORDINATOR


HoD/MBA




PRINCIPAL
Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Nathan, Dindigul (DT) - 624 401.

DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-HR)

SAMPLE CERTIFICATE OF THE PROGRAM

CERTIFICATE
OF COMPLETION

We hereby confirm that

Nithya C

has successfully completed the course SAP-HR Module

SAP HR - 10 Hrs
Personnel Structure (10 Hrs)
Time Management (10 Hrs)
Employee Movement (10 Hrs)
Payroll (10 Hrs)

DATE

17/10/2022



[Signature]

SIGNATURE



DEPARTMENT OF MANAGEMENT STUDIES

ADD - ON COURSE

INDEX

COURSE CODE & NAME: **22BAA002 & SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-FICO)**

ACADEMIC YEAR: **2022 -2023**

SEMESTER: **ODD**

DURATION: **40 HOURS**

S.N	PARTICULARS	PAGE NO
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**PROGRAM
COORDINATOR**


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**IQAC
COORDINATOR**
Coordinator - IQAC

NPR College of Engineering & Technology
Natham, Dindigul (Dt)-624 401.


PRINCIPAL
Dr. J.SUNDARARAJAN
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Natham, Dindigul (Dt) - 624 401.

DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-FICO)

PERMISSION LETTER

DATE: 04/10/2022

From

The Head of the Department,
Department of Management Studies,
NPR College of Engineering & Technology,
Natham.

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Respected Sir,

Sub: Seeking permission to conduct an Add-on Course for MBA students - Regarding.


We are planned to conduct an Add-on Course on **"SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-FICO)"** to our MBA students on 10.10.2022, 11.10.2022, 13.10.2022, 14.10.2022, 15.10.2022 in our college premises. We have proposed **SHIKSHA KAMPLE LEARN-MADURAI** as an authorized training center for this Add-on course program, kindly permit us to conduct the same.



Thanking you


Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

Yours faithfully,
































HOD - MBA
(Dr. B. Selvaraj)

DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEM APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-FICO)

RESOURCE PERSON'S PROFILE

Name	:	Ms.Meenakumari P										
Designation	:	Regional Head										
Institution Name	:	<div>SHIKSHAA SIMPLE LEARN-MADURAI</div> <div>SHIKSHAA ISO 21001: 2018 Started its updated technology and training activity in the year 2018. It is a pioneer in IT Education. With 3 consecutive successful years in this field , our highly experienced and extremely qualified faculties continuously offering world class processes and expertise in their training and application development. We have our corporate offices in Madurai and Bangalore.</div> <div><div>Authorised Certification Training Partners</div><table><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></table><div>70, Navalar Nagar 3rd Street, S.S Colony, Near Meenakshi Pan House, Bypass Road, Madurai</div></div>										
												
												
About Resource Person	:	Ms.Meenakumari having 8+years' experience in education field Handling Financial related course like Tally, SAP Fico/MM										

PROGRAM COORDINATOR

HOD/MBA



IQAC COORDINATOR

Coordinator - IQAC
 NPR College of Engineering & Technology
 Natham, Dindigul (Dt)-624 401

PRINCIPAL

Dr. J.SUNDARARAJA
 B.E., M.Tech., Ph.D.
 Principal
 NPR College of Engineering & Technology
 Natham, Dindigul (Dt) - 624 401



DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEMS APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-FICO) CIRCULAR

Date: 04/10/2022

This is to inform that Department of Management Studies is planned to conduct an Add-on Course program on "SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-FICO)" for the students during 2022-2023. Interested students can enroll their name to the program coordinator on or before 07/10/2022. The details of the training program are given below

COURSE NAME	: SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-FICO)
TRAINING CENTRE	: SHIKSHAA SIMPLE LEARN-MADURAI
VENUE	: NPRCET MBA LAB – (MB 303)
DATE & DURATION	: 10/10/22, 11/10/22, 13/10/22, 14/10/22, 15/10/22, 40 Hrs.
PROGRAM COORDINATOR	: Dr.K.Binith Muthu Krishnan (ASP/MBA)

Copy to:

- 1) All HoDs
- 2) IQA Coordinator
- 3) All Class Rooms
- 4) Notice Board
- 5) File
- 6) Program Coordinator



PRINCIPAL

Dr. J.SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology

Natham, Dindigul (Dt), 624 401.



DEPARTMENT OF MANAGEMENT STUDIES

INVITATION



NPR Nagar, Natham, Dindigul - 624401, Tamil Nadu | ☎ 04544-246500, 246501, 246502

DEPARTMENT OF MANAGEMENT STUDIES

in association with



SHIKSHAA

Inauguration of

Add-on Course

(For Final year MBA)

Co
Co

Duration : One Week
Hours : 40 Hours

DATE : 10.10.2022 (Monday)
TIME : 9.30 AM to 4.00 PM



- SAP (HR & FICO)
- HR Analytics with Advanced Excel



DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEM APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-FICO)

REGISTERED STUDENTS NAME LIST

S. NO	REGISTER NUMBER	STUDENT NAME	YEAR
1.	920821631001	Abinaya.M	II MBA
2.	920821631002	Abirami.K	II MBA
3.	920821631005	Ayyanar .P	II MBA
4.	920821631006	Bhagavathya.B	II MBA
5.	920821631008	Bhavithra.M	II MBA
6.	920821631009	Bhuvaneshwari.R	II MBA
7.	920821631010	Dhina thayalan H	II MBA
8.	920821631011	Dinesh kumar.K	II MBA
9.	920821631012	Divya bharathi. B	II MBA
10.	920821631013	Divya bharathi.K	II MBA
11.	920821631015	Gowri.P	II MBA
12.	920821631018	Jennath Birthose.A	II MBA
13.	920821631019	Joe Arun Raj S	II MBA
14.	920821631021	Karthikeyan M	II MBA
15.	920821631022	Kaviya.R	II MBA
16.	920821631027	Meenakumari.M	II MBA
17.	920821631028	Mohamed Azim S	II MBA
18.	920821631031	Palpandi K	II MBA
19.	920821631033	Pavithran.M	II MBA



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DEPARTMENT OF MANAGEMENT STUDIES

20	920821631034	Preethi sowmia S	II MBA
2	920821631035	Promod kumar.P	II MBA
2	920821631038	Rajkumar.P	II MBA
23	920821631040	Ramesh kumar.T	II MBA
2	920821631042	Sakthi balaji.N	II MBA
2	920821631043	Sabari nathan R	II MBA
20	920821631044	Sangeetha.M	II MBA
2	920821631047	Selvin.S	II MBA
28	920821631049	Sri jeya sundari S	II MBA
2	920821631054	Vashilabanu R	II MBA
30	920821631055	Vignesh S	II MBA
31	920821631058	Vithya.S	II MBA
3	920821631059	Viveka lakshmi.S	II MBA
3	920821631060	Yogalakshmi.S	II MBA

Program Coordinator



HOD/MBA

DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEM APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-FICO)

COURSE CONTENT

Day 1 –S Introduction, What is ERP,Business Process Integration, Types of SAP,Modules.Fuentional Area,Adva Disadvantages,SAP GUI installation,CREATE COMPANY IN SAP. How to Define Company in SAP | Assign Company Code, Assign Company Code to Company, Define Business Area in SAP | Create Validation Business Area, Maintain Consolidation Business Area, Assign Business Area to Consolidation Business Area in SAP, How to Define Credit Control Area in SAP, How to Assign Credit Control Area to Company Code in SAP, How to define functional area in SAP FICO

Day 2 – Financial Management Area - FM area -Assign Company Code to Financial Management Area in SAP,GLOBAL SETTING IN SAP, What is Fiscal Year in SAP | what is Financial Accounting | What is Fiscal Year Variant in SAP | How to Create Fiscal Year Variant, Assign Company Code to Fiscal Year Variant in SAP, Define Posting Period Variant in SAP | Variants for Open Posting Period | Assign Variants to Company Code in SAP, Define Open and Close Posting Periods Variant in SAP | Define Field Status Groups in SAP | Define Field Status Variants in SAP, Assign Field Status Variant to Company Code in SAP, Define Tolerance Groups for G/L Accounts in SAP, Define Tolerance Groups for Employees in SAP, Assign Tolerance Groups for Employees in SAP, How to Create COA in SAP, How to Assign Company code to Chart of Accounts

Day 3 – D Account Group, How to create Retained Earnings Account in SAP, Sample Account Rule Types | How to assign company code to Rule type, Create Sample Account, Create G/L General Ledger Account Master Record, bank accounting, How to Create Bank Key, what is Bank Key, How to Define House Bank, Define Customer Account Groups ,Create Number Ranges for Customer Account Groups, Assign Number Ranges to Customer Account Groups, How to Define Risk Categories, what is Risk Categories | Define Tolerance Group for Customers, How to Create Sundry Debtors,



DEPARTMENT OF MANAGEMENT STUDIES

Day 4 - V Accounts Payable, How to define vendor account groups with screen layout, How to create number ranges for vendor accounts, Assign Number Ranges to Vendor Account Groups. How to assign number ranges to vendor account groups, How to Maintain Terms of Payment, Create Sundry Creditor Accounts, Vendor Reconciliation Account, asset accounting, Copy Reference Chart of Depreciation Areas, Depreciation Areas, How to Assign Chart of Depreciation to Company Code

Day 5 - H Specify Account Determination, Create Number Range Intervals for Assets. How to Create Asset Classes, what is an Asset Class, tax configuration, Controlling theory, How to define tax procedure, Country to Calculation Procedure, Assign Tax Codes for Non Taxable Transactions, Procedure to Assign Tax Codes for Non-Taxable Transactions, Dumps Preparation

Criteria to be Certificate:

- Examination = Pass score 50 % of the exam score out of 100

Prepared by K.Binithmuthukrishnan, ASP/MBA

Approved




**PROJECT
COORDINATOR**


HoD/MBA


**IQAC
COORDINATOR**

Coordinator - IQAC
NPR College of Engineering & Technology
Natham, Dindigul, Dt-624 401

PRINCIPAL
Dr. J.SUNDARARAJ
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Natham, Dindigul (Dt) - 624 401

DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEM APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-FICO)

COURSE SCHEDULE

Venue
Date

: MBA Computer Lab (MB 303)

: 10.10.2022, 11.10.2022, 13.10.2022, 14.10.2022, 15.10.2022

Date	8.50 a.m. to 11.30 a.m.	11.30 a.m. to 1.00 p.m.	1.00 p.m. to 1.20 p.m.	1.20 p.m. to 3.20 p.m.	3.20 p.m. to 3.30 p.m.	3.30 p.m. to 5.00 p.m.
	SESSION I	SESSION II		SESSION III		SESSION IV
10.10.22	Inauguration & Introduction	Ms.Meenakumari P CREATE COMPANY IN SAP, How to Define Company in SAP, Assign Company Code, Assign Company Code to Company,		Ms.Meenakumari P Maintain Consolidation Business Area, Assign Business Area to Consolidation Business Area in SAP, How to Define Credit Control Area in SAP		Ms.Meenakumari P How to Assign Credit Control Area to Company Code in SAP, How to define functional area in SAP FICO
Day 2 11.10.22	Ms.Meenakumari P What is Financial Accounting in SAP, Financial Year, What is Fiscal Year, How to Create Fiscal Year	Ms.Meenakumari P Define Open and Close Posting Periods Variant in SAP, Field Status Groups in SAP Define Field Status Variants in SAP	Lunch	Ms.Meenakumari P Define Tolerance Groups for Employees in SAP, Assign Tolerance Groups for Employees in SAP	Tea Break	Ms.Meenakumari P How to Create COA in SAP, How to Assign Company code to Chart of Accounts
Day 3 13.10.22	Ms.Meenakumari P Define Group, How to Retain Account, Sample Account Type	Ms.Meenakumari P How to assign company code to Rule type, Create Sample Account, Create G/L General Ledger Account Master Record, bank accounting		Ms.Meenakumari P Create Number Ranges for Customer Account Groups, Assign Number Ranges to Customer Account Groups		Ms.Meenakumari P How to Define Risk Categories, what is Risk Category, Define Tolerance Group for Customers



DEPARTMENT OF MANAGEMENT STUDIES

Day 4 14.10.22	SESSION I	P	SESSION II	SESSION III	SESSION IV
	Ms.Meenakumari P				
What is Payable, define vendor groups, layout, the number vendor	Ms.Meenakumari P	Assign Number Ranges to Vendor Account Groups, How to assign number ranges to vendor account groups,	How to Create Bank Key, what is Bank Key, How to Define House Bank, Define Customer Account Groups	Ms.Meenakumari P	Asset accounting, Copy Reference Chart of Depreciation in SAP, Depreciation Areas, How to Assign Chart of Depreciation to Company Code
Day 5 15.10.22	SESSION I	P	SESSION II	SESSION III	SESSION IV
	Ms.Meenakumari P				
How to Assign Determined Number Intervals, How to C	Ms.Meenakumari P	what is an Asset Class, tax configuration, Controlling theory	How to define tax procedure, Assign Country to Calculation Procedure	Ms.Meenakumari P	Assign Tax Codes for Non Taxable Transactions, Procedure to Assign Tax Codes for Non-Taxable Transactions

**PROC
COORDINATOR**

HOD/MBA



**IQAC
COORDINATOR**

Coordinator - IQAC
 NPR College of Engineering & Technology
 Natham, Dindigul (Dt)-624 401

PRINCIPAL
Dr. J.SUNDARARAJAN
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 Principal
 N.P.R. College of Engineering & Technology
 Natham, Dindigul (Dt) - 624 401



DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE SAP-FICO

II MBA - STUDENTS ATTENDANCE

Sl. No	Reg. No.	STUDENTS NAME	10.10.2022 FN & AN	11.10.2022 FN & AN	13.10.2022 FN & AN	14.10.2022 FN & AN	15.10.2022 FN & AN
1	920821631001	ABINAYA.M	Abinaya	Hinaya	Hinaya	Hinaya	Hinaya
2	920821631002	ABIRAMI.K	Abirami	Abirami	Abirami	Abirami	Abirami
3	920821631005	AYYANAR .P	AYYANAR	AYYANAR	AYYANAR	AYYANAR	AYYANAR
4	920821631006	BHAGAVATHYA.B	Bhagavathya	Bhagavathya	Bhagavathya	Bhagavathya	Bhagavathya
5	920821631008	BHAVITHRA.M	Bhavithra	Bhavithra	Bhavithra	Bhavithra	Bhavithra
6	920821631009	BHUVANESHWAR.L	Bhuvaneshwar	Bhuvaneshwar	Bhuvaneshwar	Bhuvaneshwar	Bhuvaneshwar
7	920821631010	DHINA THAYALAN H	Dhina Thayan	Dhina Thayan	Dhina Thayan	Dhina Thayan	Dhina Thayan
8	920821631011	DINESH KUMAR.K	Dinesh Kumar	Dinesh Kumar	Dinesh Kumar	Dinesh Kumar	Dinesh Kumar
9	920821631012	DIVYA BHARATHI. B	Divya Bharathi	Divya Bharathi	Divya Bharathi	Divya Bharathi	Divya Bharathi
10	920821631013	DIVYA BHARATHI.K	Divya Bharathi	Divya Bharathi	Divya Bharathi	Divya Bharathi	Divya Bharathi
11	920821631015	GOWRI.P	Gowri	Gowri	Gowri	Gowri	Gowri
12	920821631018	JENNATH BIRTHOSE.A	Jennath	Jennath	Jennath	Jennath	Jennath
13	920821631019	JOE ARUN RAJ S	Joe Arun Raj	Joe Arun Raj	Joe Arun Raj	Joe Arun Raj	Joe Arun Raj
14	920821631021	KARTHIKEYAN M	Karthikeyan	Karthikeyan	Karthikeyan	Karthikeyan	Karthikeyan
15	920821631022	KAVIYA.R	Kaviya	Kaviya	Kaviya	Kaviya	Kaviya
16	920821631027	MEENAKUMARI.M	Meenakumari	Meenakumari	Meenakumari	Meenakumari	Meenakumari
17	920821631028	MOHAMED AZIM, S	Mohamed Azim	Mohamed Azim	Mohamed Azim	Mohamed Azim	Mohamed Azim
18	920821631031	PALPANDI K	Palpandi	Palpandi	Palpandi	Palpandi	Palpandi
19	920821631033	PAVITHRAN.M	Pavithran	Pavithran	Pavithran	Pavithran	Pavithran
20	920821631034	PREETHI SOWMIA S	Preethi Sowmia	Preethi Sowmia	Preethi Sowmia	Preethi Sowmia	Preethi Sowmia
21	920821631035	PROMOD KUMAR.P	Promod Kumar	Promod Kumar	Promod Kumar	Promod Kumar	Promod Kumar
22	920821631038	RAJKUMAR.P	Rajkumar	Rajkumar	Rajkumar	Rajkumar	Rajkumar
23	920821631040	RAMESH KUMAR.T	Ramesh Kumar	Ramesh Kumar	Ramesh Kumar	Ramesh Kumar	Ramesh Kumar
24	920821631042	SABARI NATHAN R	Sabari Nathan	Sabari Nathan	Sabari Nathan	Sabari Nathan	Sabari Nathan
25	920821631043	SAKTHI BALAJI.N	Sakthi Balaji	Sakthi Balaji	Sakthi Balaji	Sakthi Balaji	Sakthi Balaji





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26	920821631044	SANGEETHA.M ✓	M. Sangeetha	M. Sangeetha	M. Sangeetha	M. Sangeetha	M. Sangeetha
27	920821631047	SELVINS ✓	S. Selvin	S. Selvin	S. Selvin	S. Selvin	S. Selvin
28	920821631049	SRI JEYA SUNDARIS ✓	S. Jeysundari	S. Jeysundari	S. Jeysundari	S. Jeysundari	S. Jeysundari
29	920821631054	VASHILABANUR ✓	V. Ashish	V. Ashish	V. Ashish	V. Ashish	V. Ashish
30	920821631055	VIGNESH S ✓	V. Vignesh	V. Vignesh	V. Vignesh	V. Vignesh	V. Vignesh
31	920821631058	VITHYA.S ✓	S. Vithya	S. Vithya	S. Vithya	S. Vithya	S. Vithya
32	920821631059	VIVEKA LAKSHMIS ✓	S. Viveka	S. Viveka	S. Viveka	S. Viveka	S. Viveka
33	920821631060	YOGALAKSHMIS ✓	S. Yogalakshmi	S. Yogalakshmi	S. Yogalakshmi	S. Yogalakshmi	S. Yogalakshmi

PROGRAM COORDINATOR

HOD/MBA

PRINCIPAL

Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology,
Natham, Dindigul - 624 401



DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEM APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-FICO)

SAMPLE QUIZ QUESTION PAPER WITH ANSWER KEY

1. SAP Status is

- a) System Applications & Process
- b) System Applications & Products in Data Processing
- c) System Applied & Processing
- d) None of the above

2. Which of the following are the SAP AR tables?

- a) KN
- b) XL
- c) FL
- d) LI

3. Which of the following is used to determine Account types (A, D, K, M, and S) and also the type of posting?

- a) Posting Keys
- b) Financial Group
- c) Financial Variant
- d) Posting Methods.

4. ERP Status is

- a) Enterprise recycling planning
- b) Enterprise resource planning
- c) Enterprise resource product
- d) None of the above

Answers

- 1) B 2) A 3) B 4) B

PROF.



COORDINATOR



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ADD ON COURSE

SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-FICO)

STUDENT'S FEEDBACK

Name of Student :	Abeinaya . M	Year / Semester: II/III
Name of Program :	SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-FICO)	

S. No		EXCELLENT	GOOD	FAIR	SATISFACTORY	NOT SATISFACTORY
1	Course Content	✓				
2	Way of conveying knowledge / practices		✓			
3	Example used during this course	✓				
4	Course delivered by Resource	✓				
5	Time Management	✓				
6	Overall rating of this course		✓			
7	Any Other Comments / Suggestions	I have learnt Various existing and available sources to start up business opportunity in India.				



Student Signature

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DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEMS APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-FICO)

STUDENT'S FEEDBACK

Name of Student:	Rajkumar. P	Year / Semester:	II/III
Name of PROCES	Program: SYSTEMS, APPLICATIONS & PRODUCTS IN DATA (SAP-FICO)		

S. No		EXCELLENT	GOOD	FAIR	SATISFACTORY	NOT SATISFACTORY
1	Content	✓				
2	Used new knowledge and practices		✓			
3	Exam provided during course			✓		
4	Conducted by Reson	✓				
5	Time management				✓	
6	Overall rating of this course	✓				
7	Any Suggestions / Comments /					



Rajkumar. P
Student Signature

DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-FICO)

STUDENT'S FEEDBACK

Name of Student:	Pavithran . M	Year / Semester:	II/III
Name of Course:	SAP: SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-FICO)		

S. No	Comments	EXCELLENT	GOOD	FAIR	SATISFACTORY	NOT SATISFACTORY
1	Content	✓	✓			
2	Way of teaching / known practices			✓		
3	Exercises / provided during					✓
4	Course material / provided by	✓				
5	Time / management	✓				
6	Overall / of this course	✓				
7	Any Suggestions /	NIL				



Pavithran
Student Signature

DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEM APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-FICO)

STUDENT FEEDBACK SUMMARY REPORT

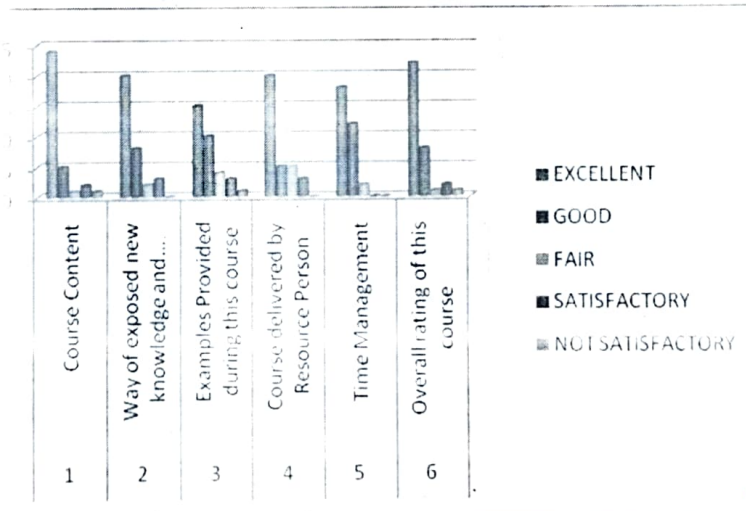
REGISTERED

STUDENTS: 33

DATE:

S. No	ST	EXCELLENT	GOOD	FAIR	SATISFACTORY	NOT SATISFACTORY
1	Course Content	24	5	1	2	1
2	Way of exposing new knowledge and practices	20	8	2	3	0
3	Examples provided during this course	15	10	4	3	1
4	Course Resource Person	20	5	5	3	0
5	Time Management	18	12	2	0	0
6	Overall rating of this course	22	8	1	2	1
Average						

STUDENT FEEDBACK SUMMARY REPORT



PROG. COORDINATOR

HOD/MBA



Dr. J. SUNDARARAJAN

B.E., M.Tech., Ph.D.

Principal

**N.P.R. College of Engineering & Technology
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DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYSTEMS APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-FICO)

SUMMARY REPORT

The Department of Management Studies organized an Add on Course on "SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-FICO)" from 10.10.2022, 11.10.2022, 14.10.2022, 15.10.2022 at our College Premises. PROMOD KUMAR.P II MBA has given a welcome address.

Dr. SUNDARARAJAN, Principal felicitated the course. This one week course gives an overview of SYSTEMS, APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-FICO). KSHIAA SIMPLE LEARN-MADURAI shared their knowledge about SAP - FICO. SAP FICO is basically the process of improving the skill sets as well as the knowledge of the Finance professionals. This can be done through various methods such as classroom sessions and a program specially designed to increase the Finance acumen. So that students are enabled to apply the knowledge that will help them to apply in future.

The students learnt various techniques and coding for developing SAP HR. 33 Students were attended in MBA II year. A student those participated and successfully completed the online examination awarded with certificates.

Vote of thanks was delivered by Ms.YOGALAKSHMI.S - II MBA.

PROG
COORD.

HoD/MBA



PRINCIPAL
Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

SYST

PLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-FICO)

COURSE MATERIAL

Material

1. <http://www.sap.com/certification/>

**PROG
COORDI**

HOD/MBA

PRINCIPAL

Dr. J.SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology

Natham, Dindigul (Dt) - 624 401.



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DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

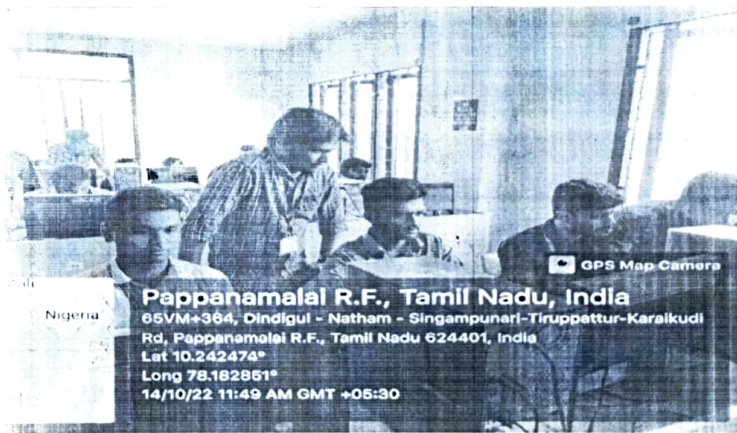
SYS

APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP-HR)

PHOTO GALLERY



Pappanamalai R.F., Tamil Nadu, India
65VM+364, Dindigul - Natham - Singampunari-Tiruppettur-Karalkudi
Rd, Pappanamalai R.F., Tamil Nadu 624401, India
Lat 10.242474°
Long 78.182851°
14/10/22 11:48 AM GMT +05:30



Pappanamalai R.F., Tamil Nadu, India
65VM+364, Dindigul - Natham - Singampunari-Tiruppettur-Karalkudi
Rd, Pappanamalai R.F., Tamil Nadu 624401, India
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PROGRA
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DEPARTMENT OF MANAGEMENT STUDIES

ADD - ON COURSE

HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL

INDEX

COURSE CODE & NAME: 22BAA003 & HR Analytics, Payroll with advanced Excel

ACADEMIC YEAR: 2022 -2023

SEMESTER: ODD

DURATION: 40 HOURS

S.NO	PARTICULARS	PAGE NO
1	PERMISSION LETTER	2
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5	REGISTERED STUDENTS NAME LIST	6
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P.T.J.K. Lilian
PROGRAM
COORDINATOR
(P.T.J.K. Lilian)
AP/MBA

[Signature]
HOD/MBA



[Signature]
IQAC
COORDINATOR

Coordinator - IQAC
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DEPARTMENT OF MANAGEMENT STUDIES
ADD ON COURSE
HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL
PERMISSION LETTER

DATE: 04/10/2022

From

The Head of the Department,
Department of Management Studies,
NPR College of Engineering & Technology,
Natham.

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Respected Sir,

Sub: Seeking permission to conduct an Add-on Course for MBA students - Regarding.


We have planned to conduct an Add-on Course on **"HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL"** to our MBA students on 10.10.2022, 11.10.2022, 13.10.2022, 14.10.2022, 15.10.2022 in our college premises. We have proposed SHIKSHAA SIMPLE LEARN-MADURAI as an authorized training center for this Add-on course program, kindly permit us to conduct the same.

Thanking you




Dr. J.SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

Yours faithfully,


HOD - MBA
(Dr. B. V. Srinivasan)



DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

HR ANALYTICS WITH PAYROLL WITH ADVANCED EXCEL

RESOURCE PERSON PROFILE

Name	:	Ms.SathiyaPriya										
Designation	:	Technical Trainer										
Institution Name	:	<div><p>SHIKSHAA SIMPLE LEARN-MADURAI</p><p>SHIKSHAA ISO 21001: 2018 Started its updated technology and training activity in the year 2018. It is a pioneer in IT Education. With 3 consecutive successful years in this field , our highly experienced and extremely qualified faculties continuously offering world class processes and expertise in their training and application development. We have our corporate offices in Madurai and Bangalore.</p><div><p>Authorised Certification Training Partners</p><table><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></table><p>70, Navalar Nagar 3rd Street, S.S Colony, Near Meenakshi Fan House, Bypass Road , Madurai</p></div></div>										
												
												
About Resource Person	:	Ms.SathyaPriya having 1.5+years' experience in Technical trainer										

Prithvian
PROGRAM
COORDINATOR
(P.T.J.K.hilcan)
AP/MPA

Zupam
HEAD/MBA



hmn
IQAC
COORDINATOR
Coordinator - IQAC

[Signature]
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DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL

CIRCULAR

Date: 04/10/2022

This is to inform that Department of Management Studies is planned to conduct an Add-on Course program on “HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL” for the students during 2022-2023. Interested students can enroll their name to the program coordinator on or before 07/10/2022. The details of the training program are given below

COURSE NAME : **HR ANALYTICS WITH PAYROLL WITH ADVANCED EXCEL**

TRAINING CENTRE : **SHIKSHAA SIMPLE LEARN-MADURAI**

VENUE : **MBA LAB – (MB 303)**
10/10/22,11/10/22,13/10/22,14/10/22,15/10/22,

DATE & DURATION : **40 Hrs.**

PROGRAM COORDINATOR : **Mr.P.T.J.K.Lilian (AP/MBA)**

Copy to:

- 1) All the HoDs
- 2) IQAC Coordinator
- 3) All the Class Rooms
- 4) Notice Board
- 5) File
- 6) Program Coordinator



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INVITATION



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NPR Nagar, Natham, Dindigul - 624401, Tamil Nadu | ☎ 04544-246500, 246501, 246502



DEPARTMENT OF MANAGEMENT STUDIES

in association with



SHIKSHAA

Inauguration of

Add-on Course

(For Final year MBA)

Course Duration : One Week

Course Hours : 40 Hours

DATE : 10.10.2022 (Monday)

TIME : 9.30 AM to 4.00 PM



- SAP (HR & FICO)
- HR Analytics with Advanced Excel

Patron

Dr.J.Sundararajan
Principal

Convener

Dr.B.Velmurugan
HoD/MBA

Program Coordinators

Dr.K.Binith Muthukrishnan
ASP/MBA

Mr.P.T.J.K.Lillian
AP/MBA





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DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL

REGISTERED STUDENTS NAME LIST

S. No	Register Number	Student Name	Year
1.	920821631020	KARTHIGAIPRIYA. J	II MBA
2.	920821631022	KAVIYA.R	II MBA
3.	920821631024	MADHANAGOPU. P	II MBA
4.	920821631029	MUTHU KRISHNAN. M	II MBA
5.	920821631041	REEMAN WALTER J	II MBA



DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL

COURSE CONTENT

Day 1 -What is MS Excel, How to open MS Excel, What is a cell, Page Layout, Insert, entering data in excel, insert row & column, Delete row & Column, Wrap Text, Merge contents, Adding borders, formatting, tables & Charts

Day 2 -Create chart to excel, Layouts transformation, filtering, Pivot table, Flowchart, Excel Formulas

Day 3 -Calculation formulas

Day 4 -Statistics formula, Vlookup, Hlookup, HR Payroll Introduction, statutory deductions

Day 5 -Payroll formulas, ESI, PF, Dumps Preparation

Criteria to get Certificate:

- Exam score = Pass score 50 % of the exam score out of 100

Prepared By: Mr.P.T.J.K.Lilian (AP/MBA)

Approved By:



P.T.J.K. Lilian
**PROGRAM
COORDINATOR**
(P.T.J.K. Lilian)
AP/MBA

3/10/2022
HOD/MBA

[Signature]
**IQAC
COORDINATOR**

Coordinator - IQAC
NPR College of Engineering & Technology
Natham, Dindigul (Dt)-624 401

[Signature]
PRINCIPAL
Dr. J.SUNDARARAJAN
B.E., M.Tech., Ph.D.,
Principal
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Natham, Dindigul (Dt) - 624 401.



DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL

COURSE SCHEDULE

Venue : MBA Computer Lab (MB-303)

Date : 10.10.2022, 11.10.2022, 13.10.2022, 14.10.2022, 15.10.2022

Date	8.50 a.m. to 11.20 a.m.	11.20 a.m. to 11.30 a.m.	11.30 a.m. to 1.00 p.m.	1.00 p.m. to 1.20 p.m.	1.20 p.m. to 3.20 p.m.	3.20 p.m. to 3.30 p.m.	3.30 p.m. to 5.00 p.m.
Day 1 10.10.22	SESSION I	Tea Break	SESSION II	Lunch	SESSION III	Tea Break	SESSION IV
	Inauguration & Introduction		Ms.Sathiyapriya		Ms.Sathiyapriya		Ms.Sathiyapriya
Day 2 11.10.22	SESSION I		What is MS Excel, How to open MS Excel, What is a cell, Page Layout, Formatting, tables & Charts		Insert, entering data in excel, insert row & column, Adding borders		Delete row & Column, WrapT ext, Merge contents
	Ms.Sathiyapriya		SESSION II		SESSION III		SESSION IV
Day 3 13.10.22	Ms.Sathiyapriya		Ms.Sathiyapriya		Ms.Sathiyapriya		Ms.Sathiyapriya
	Create chart to excel,		Layouts transformation,		flittering, Pivottable, Flowchart		Excel Formulas
Day 4 14.10.22	SESSION I		SESSION II		SESSION III		SESSION IV
	Ms.Sathiyapriya		Ms.Sathiyapriya		Ms.Sathiyapriya		Ms.Sathiyapriya
Day 5 15.10.22	Calculation formulas		Calculation formulas		Calculation formulas		Calculation formulas
	SESSION I		SESSION II		SESSION III		SESSION IV
	Ms.Sathiyapriya		Ms.Sathiyapriya		Ms.Sathiyapriya		Ms.Sathiyapriya
	Statistics formula		Vlookup, Hlookup		,HR Payroll Introduction,		statutory deductions
	SESSION I		SESSION II		SESSION III		SESSION IV
	Ms.Sathiyapriya		Ms.Meenakumari		Ms.Meenakumari		Ms.Meenakumari
	Payroll formulas		ESI, PF		Dumps Preparation		Dumps Exam Preparation

P.T.J.K. Kilian
PROGRAM COORDINATOR
(P.T.J.K. Kilian)
AP/mba

HoD/MBA

IQAC COORDINATOR



Coordinator - IQAC
NPR College of Engineering & Technology
Natham, Dindigul (Dt)-624 401

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Principal
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DEPARTMENT OF MANAGEMENT STUDIES
ADD ON COURSE - HR ANALYTICS & ADVANCE EXCEL
II MBA - STUDENTS ATTENDANCE

Sl. No	Reg. No.	STUDENTS NAME	10.10.2022 FN & AN	11.10.2022 FN & AN	13.10.2022 FN & AN	14.10.2022 FN & AN	15.10.2022 FN & AN
1	920821631020	KARTHIGAIPRIYA, J	KPS	KPS	KPS	KPS	KPS
2	920821631023	KAVIYA, V	KPS	KPS	KPS	KPS	KPS
3	920821631024	MADHANAGOPU, P	P.MG	P.MG	P.MG	P.MG	P.MG
4	920821631029	MUTHU KRISHNAN, M	m.muthu	m.muthu	AB	m.muthu	m.muthu
5	920821631041	REEMAN WALTER, J	J.Mt	J.Mt	J.Mt	J.Mt	J.Mt

G.T.K. Kiliian
PROGRAM COORDINATOR
(G.T.J.K. Kiliian)

3rd Oct
I/O MBA



J. Sundararajan
PRINCIPAL
Dr. J.SUNDARARAJAN,
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Principal
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Natham, Dindigul (Dt) - 624 401.



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DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL

SAMPLE QUIZ QUESTION PAPER WITH ANSWER KEY

1. Pay Slip contains details of

- a) Employee Details
- b) Salary
- c) PF Details
- d) None of the above

2. The short cut key of employee

- a) Ctrl + E
- b) Ctrl + P
- c) Ctrl + L
- d) None of the above

3. The possible options for running payroll can be

- a) Excel based payroll management
- b) Payroll outsourcing
- c) Using payroll software
- d) All of the above

4. EMI stands for

- a) Equal Mutual Installment
- b) Every Month Installment
- c) Equal Monthly Installment
- d) None of the above

5. The calculation of per day rate is ____.

- a) $(\text{Basic} + \text{DA})/30$
- b) $(\text{Basic} + \text{DA})/\text{Actual month days}$
- c) $(\text{Basic} + \text{DA})/\text{Actual pay day}$
- d) None of them

Answers:

1. B 2. A 3. D 4. C 5. D



P.T.J.K. Kiliyan
PROGRAM COORDINATOR

(P.T.J.K. Kiliyan)

AP/mba

3.4.2024
HOD/MBA



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DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL

STUDENT'S FEEDBACK

Name of the Student : J. Reeman Walter	Year / Semester: II/III
Name of the Program: HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL	

S. No	CONTENT	EXCELLENT	GOOD	FAIR	SATISFACTORY	NOT SATISFACTORY
1	Course Content	✓				
2	Way of exposed new knowledge and practices		✓			
3	Examples Provided during this course					✓
4	Course delivered by Resource Person			✓		
5	Time Management		✓			
6	Overall rating of this course	✓				
7	Any Other Comments / Suggestions	During the Add-on course it is useful to apply formula in the excel.				



J. Reeman Walter
Student Signature



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ADD ON COURSE

HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL

STUDENT'S FEEDBACK

Name of the Student : <i>Mathan Cupra</i>	Year / Semester: II/III
Name of the Program: HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL	

S. No	CONTENT	EXCELLENT	GOOD	FAIR	SATISFACTORY	NOT SATISFACTORY
1	Course Content	✓				
2	Way of exposed new knowledge and practices		✓			
3	Examples Provided during this course			✓		
4	Course delivered by Resource Person		✓			
5	Time Management	✓				
6	Overall rating of this course		✓			
7	Any Other Comments / Suggestions	<i>Nil</i>				



Mathan Cupra
Student Signature



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DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL

STUDENT'S FEEDBACK

Name of the Student : <u>V. KANYA</u>	Year / Semester: <u>II/III</u>
Name of the Program: <u>HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL</u>	

S. No	CONTENT	EXCELLENT	GOOD	FAIR	SATISFACTORY	NOT SATISFACTORY
1	Course Content	✓				
2	Way of exposed new knowledge and practices	✓				
3	Examples Provided during this course	✓				
4	Course delivered by Resource Person	✓				
5	Time Management	✓				
6	Overall rating of this course		✓			
7	Any Other Comments / Suggestions	M/				



V. Kanya
Student Signature

DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

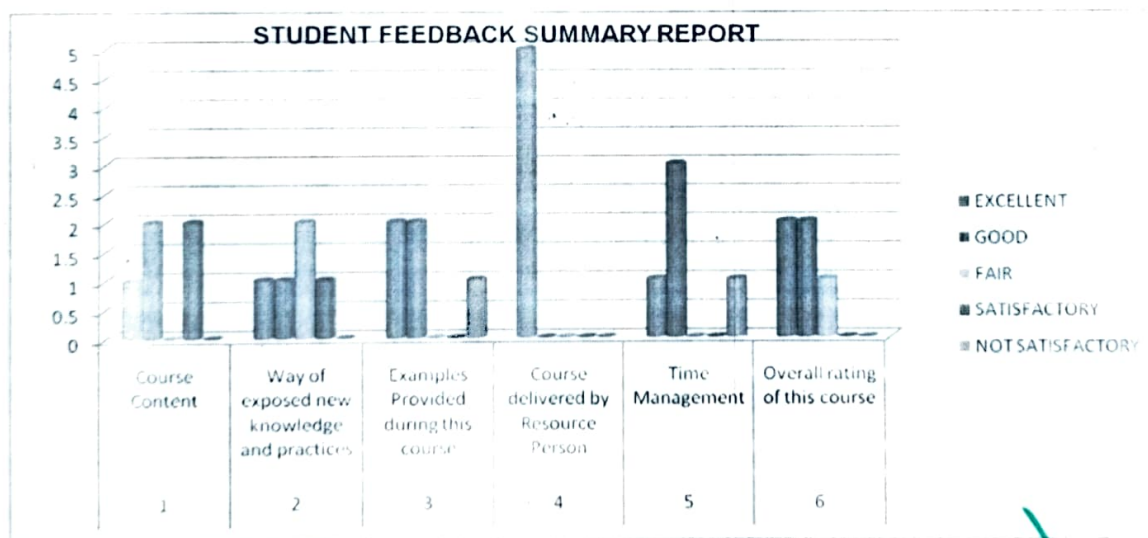
HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL

STUDENT FEEDBACK SUMMARY REPORT

REGISTERED STUDENTS: 5

DATE: 17/10/2022

S. No	CONTENT	EXCELLENT	GOOD	FAIR	SATISFACTORY	NOT SATISFACTORY
1	Course Content	1	2	0	2	0
2	Way of exposed new knowledge and practices	1	1	2	1	0
3	Examples Provided during this course	2	2	0	0	1
4	Course delivered by Resource Person	5	0	0	0	0
5	Time Management	1	3	0	0	1
6	Overall rating of this course	2	2	1	0	0
Average						



P.T.J.K. Kilean
PROGRAM
COORDINATOR
(P.T.J.K. Kilean)
AP/mba

J. Sundarajan
HOD/MBA



J. Sundarajan
PRINCIPAL
Dr. J.SUNDARAJAN,
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Natham, Dindigul (Dt) - 624 401.



DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL

SUMMARY REPORT

Department of Management Studies organized Add on Course on “**HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL**” from 10.10.2022, 11.10.2022, 13.10.2022, 14.10.2022, 15.10.2022 at our College Premises. Ms.V.Kaviya II MBA has delivered welcome address.

Dr.J.SUNDARARAJAN, Principal felicitated the Students. This one week course gave over view about **HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL**. **SHIKSHAA SIMPLE LEARN-MADURAI** shared their knowledge about **HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL**. **HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL** is basically the process of improving the skill sets as well as the knowledge of the Human Resource Professionals. This can be done through various methods such as classroom sessions or training program specially designed to increase the HR acumen. So that students enable to have skills that will help them to apply in future.

The students learnt various techniques and coding for developing **HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL**. 05 Students were attended from MBA II year. A student those participated and successfully completed the online exam has been awarded with certificates.

Vote of thanks delivered by J.Reeman Walter- II MBA.


PROGRAM
COORDINATOR
(P.T.J.K. Hilian)
AP/MBA


HoD/MBA




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DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL

COURSE MATERIAL

Material Link:

1. <https://support.microsoft.com/en-us/office/overview-of-formulas-in-excel-ecfdc708-9162-49e8-b993-c311f47ca173>



P.T.J.K. Hilcom
PROGRAM
COORDINATOR

(P.T.J.K. hilcom)

AP/mbr

3rdm
HpD/MBA

[Signature]
PRINCIPAL

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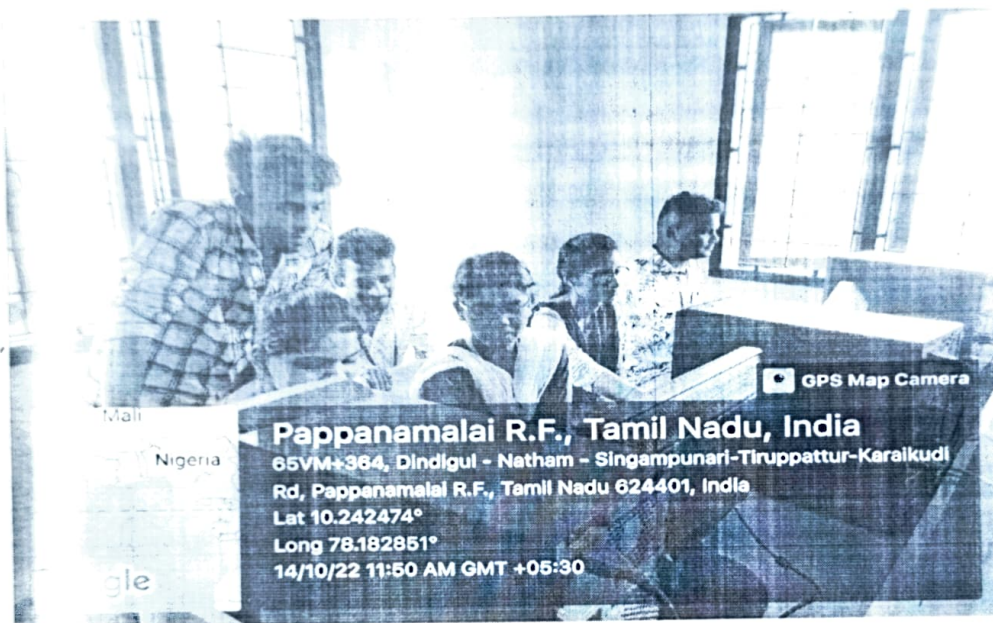


DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE

HR ANALYTICS, PAYROLL WITH ADVANCED EXCEL

PHOTO GALLERY



P.T.J.K. Kilian
PROGRAM
COORDINATOR
(P.T.J.K. Kilian)
AP/mba

J. Sundararajan
HoD/MBA



J. Sundararajan
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DEPARTMENT OF MANAGEMENT STUDIES

CERTIFICATE



Certificate of Merit

This Certificate is awarded to

REEMAN WALTER J

for successfully completing

HR ANALYTICS & ADVANCE EXCEL

and securing Grade A

Place of Issue: Madurai
Date: 17-10-2022

Authorized signatory
Shiksha Simple learn





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DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE - LINGUASKILL - CAMBRIDGE ENGLISH

INDEX


COURSE CODE & NAME: 23BAA001 & Linguaskill - Cambridge English

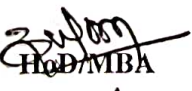
ACADEMIC YEAR: 2022 -2023

SEMESTER: ODD

DURATION: 42 Hours


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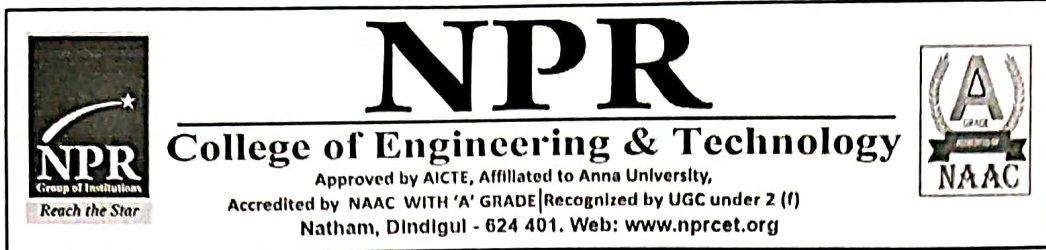

PROGRAM
COORDINATOR
(C.P.T.J.K. Hilian)
AP/mba


HOD/MBA
(Dr. B. Velumangan)


IQAC




PRINCIPAL
Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.



DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE - LINGUASKILL - CAMBRIDGE ENGLISH

PERMISSION LETTER

Date: 10.04.2023

From

Dr.B.Velmurugan,
Head of the Department,
Department of Management studies,
NPR College of Engineering & Technology,
Natham.

To

The Principal,
NPR College of Engineering & Technology,
Natham.

Respected Sir,

Sub: Seeking permission to conduct Add-on Course for I Year MBA students -
Regarding.

We have planned to conduct an Add-on Course on “**Linguaskill - Cambridge English**” to our I Year MBA students between 24.04.2023 and 29.04.2023 in our college premises. We proposed Kalvi Higher Education and Research Institute, Madurai as a resource person for this Add-on course. kindly permit us to conduct the same.

Thanking you,

Yours faithfully,




HOD - MBA
(Dr.B.Velmurugan)



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DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE - LINGUASKILL - CAMBRIDGE ENGLISH

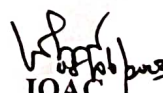
RESOURCE PERSON'S PROFILE

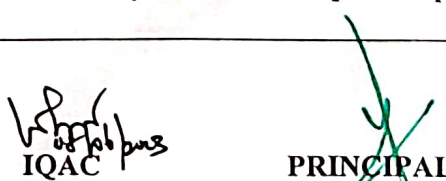
Name	:	Mrs. Sangeetha Murugan
Designation	:	Technical & Communication English Trainer / Education Counselor
Details of Institution	:	<p>Kalvi Higher Education and Research Institute is a global training provider. Started its training activity in the year 2001 having a wide spectrum of study centres all over India.</p> 
About Resource Person	:	<p>Mrs. Sangeetha Murugan is Knowledgeable Soft Skills Trainer has a sound understanding of needed traits for workplace success and a strong ability to train employees in improving those characteristics. Has extensive experience with making presentations, giving assessments, and identifying soft skills training needs. Have a Master's Degree in Industrial and Organizational Psychology and 10 years of experience working as a soft skills trainer.</p> <p>Highlights:</p> <ul style="list-style-type: none">• Strong knowledge of soft skills affecting the overall functioning of various industries• Excellent evaluative assessment and training skills• Good verbal and written communication skills• Good interpersonal abilities• In-depth knowledge of Emotional Quotient as related to organizations• Sound knowledge of appropriate soft skills• Good understanding of industrial and organizational psychology principles• Excellent ability to help workers in many industries improve upon skills

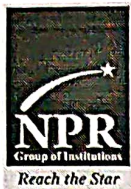

PROGRAM
COORDINATOR
(P.T.J.K. Hilian)
AP/MBA


HOD/MBA




IQAC


PRINCIPAL
Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.
Principal
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DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE - LINGUASKILL - CAMBRIDGE ENGLISH

CIRCULAR

Date: 16/04/2023

This is to inform that Department of Management Studies has planned to conduct an Add on Course on “Linguaskill - Cambridge English” for I Year MBA Students during the Academic year 2022-2023. Interested students can enroll their name to the program coordinator on or before 20/04/2023. The details of the training program are given below

COURSE NAME : ADD ON COURSE - LINGUASKILL - CAMBRIDGE ENGLISH

TRAINING CENTRE : Kalvi Higher Education and Research Institute

VENUE : Training & Placement Cell, NPRCET

DATE & DURATION : 24/04/2023 to 29/04/2023 & 42 Hrs.

PROGRAM COORDINATOR : Mr.P.T.J.K.Lilian, AP/MBA

Copy to:

1. All HoDs
2. All Class Rooms
3. College Notice Board
4. IQAC



PRINCIPAL
Dr. J. SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul - 624 401.



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DEPARTMENT OF MANAGEMENT STUDIES

INVITATION

The Management, Principal, Faculty and Students of Department of Management Studies cordially invite you for

ADD ON COURSE
On
LINGUASKILL - CAMBRIDGE ENGLISH

Date : 24/04/2023

VENUE:

Training & Placement Cell , NPRCET

Resource Person

*Mrs. Sangeetha Murugan, Language Trainer,
Kalvi Higher Education and Research Institute, Madurai*

Dr.J.Sundararajan

Principal

NPR College of Engineering and Technology

Will felicitate the function



Organized by
Department of Management Studies
NPR College of Engineering & Technology





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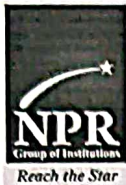


DEPARTMENT OF MANAGEMENT STUDIES

AGENDA

1. Prayer Song : Tamilthai Vazhthu
2. Welcome Address : Ms.S.Aasma, I Year MBA
3. Felicitation Address : Dr. J.Sundararajan,
Principal
4. Chief Guest Introduction : Ms. A.Janani, I Year MBA
5. Resource Person : Mrs.Sangeetha Murugan ,Language Trainer
Kalvi Higher Education and Research
Institute,Madurai
6. Vote of thanks : Mr.R.Saleth Prathap, I Year MBA
7. National Anthem





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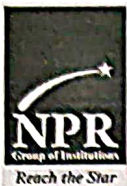
DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE - LINGUASKILL - CAMBRIDGE ENGLISH

REGISTERED STUDENTS NAME LIST

Sl. No	Register Number	Name of the Students	YEAR
1	920822631001	ABDUL WAHEETH P M	I MBA
2	920822631002	ABINAYA K	I MBA
3	920822631003	AFRINBANU J	I MBA
4	920822631004	AISHWARYA T	I MBA
5	920822631005	AJITH KUMAR M	I MBA
6	920822631006	AKIL JOE J	I MBA
7	920822631007	ARAVIND KUMAR S	I MBA
8	920822631008	ARNUOLDJASON A	I MBA
9	920822631009	ARUNPRASATH R	I MBA
10	920822631010	ASMA S	I MBA
11	920822631011	BHARATHI R	I MBA
12	920822631012	DEVI MANONMANI K	I MBA
13	920822631013	DHANAMALA T	I MBA
14	920822631014	DHARSON J	I MBA
15	920822631015	DHEIVENTHIRAN M	I MBA
16	920822631016	DIVAGAR M	I MBA
17	920822631017	GARGIN PRABHU M	I MBA
18	920822631018	GAYATHRI DEVI S	I MBA
19	920822631019	GOPIKANNAN B	I MBA
20	920822631020	GOWSALYA S (05.04.99)	I MBA
21	920822631021	GOWSALYA S (17.06.02)	I MBA
22	920822631022	GUNASEKARAPANDIAN	I MBA
23	920822631023	HEMANATHAN M	I MBA
24	920822631024	JANANI A	I MBA
25	920822631025	JEYAVINITHA R	I MBA
26	920822631026	KAILASH S	I MBA
27	920822631027	KALAI SELVAM Y	I MBA
28	920822631028	KALAIVANAN A	I MBA
29	920822631029	KANAGARAJ N	I MBA
30	920822631030	KARTHIKA S	I MBA
31	920822631031	KAVILAYA S	I MBA
32	920822631032	KIRAN N	I MBA
33	920822631033	MANA N	I MBA
34	920822631034	MANGAYARKARASI AL	I MBA





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Sl. No	Register Number	Name of the Students	YEAR
35	920822631035	MANOJ KUMAR M	I MBA
36	920822631036	MARUTHUPANDIAN P	I MBA
37	920822631037	MATHIMEENAKSHI S	I MBA
38	920822631038	MEGANATHAN S	I MBA
39	920822631039	MOHAMMED AATHIL K	I MBA
40	920822631040	MOHAMMED AFZALKHAN	I MBA
41	920822631041	NATCHATRA T	I MBA
42	920822631042	NAVIN RAJ R	I MBA
43	920822631043	NEERAJA M	I MBA
44	920822631044	NIVETHA R	I MBA
45	920822631045	PADMANATHAN T	I MBA
46	920822631046	PRATIBHA M	I MBA
47	920822631047	PRIYA DHARSHINI S	I MBA
48	920822631048	SALETH PRATHAP R	I MBA
49	920822631049	SANTHOSH T	I MBA
50	920822631050	SARANI A S	I MBA
51	920822631051	SARATHA PREETHA T	I MBA
52	920822631052	SENTHAMILARASAN A	I MBA
53	920822631053	SHALINI KATHRIN VIJAYA	I MBA
54	920822631054	SHAMEEM FATHIMA A	I MBA
55	920822631055	SIVAHARIMATHAVAN B	I MBA
56	920822631056	SOWMYA M	I MBA
57	920822631057	SRINIVASAN P	I MBA
58	920822631058	SUBATHRA V	I MBA
59	920822631059	SUSILA K	I MBA
60	920822631060	TAMILARASAN K	I MBA
61	920822631061	UDHAYA KUMAR A	I MBA
62	920822631062	VIGNESH C	I MBA
63	920822631063	VIGNESH R	I MBA

P. J. K. Kiliyan
PROGRAM
COORDINATOR
(P.T.J.K. Kiliyan)
AP/men



S. Subramanian
HOD/MBA



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DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE - LINGUASKILL - CAMBRIDGE ENGLISH

STUDENTS ATTENDANCE

Sl. No	Register Number	Name of the Students	24.04.23 FN & AN	25.04.23 FN & AN	26.04.23 FN & AN	27.04.23 FN & AN	28.04.23 FN & AN	29.04.23 FN & AN
1	920822631001	ABDUL WAHEETH P M	P.M. A	P.M. A	P.M. A	P.M. A	P.M. A	P.M. A
2	920822631002	ABINAYA K	AB	K. Abinaya	K. Abinaya	K. Abinaya	K. Abinaya	K. Abinaya
3	920822631003	AFRINBANU J	Afrin	Afrin	Afrin	Afrin	Afrin	Afrin
4	920822631004	AISHWARYA T	Aishwarya	Aishwarya	Aishwarya	Aishwarya	Aishwarya	Aishwarya
5	920822631005	AJITH KUMAR M	Ajith	Ajith	Ajith	Ajith	Ajith	Ajith
6	920822631006	AKIL JOE J	Akil	Akil	Akil	Akil	Akil	Akil
7	920822631007	ARAVIND KUMAR S	Aravind	Aravind	Aravind	Aravind	Aravind	Aravind
8	920822631008	ARNUOLDJASON A	Arnold	Arnold	Arnold	Arnold	Arnold	Arnold
9	920822631009	ARUNPRASATH R	Arun	Arun	Arun	Arun	AB	Arun
10	920822631010	ASMA S	S. Asma	S. Asma	S. Asma	S. Asma	S. Asma	S. Asma
11	920822631011	BHARATHI R	R. Bharathi	R. Bharathi	R. Bharathi	R. Bharathi	R. Bharathi	R. Bharathi
12	920822631012	DEVI MANONMANI K	Devi	Devi	Devi	Devi	Devi	Devi
13	920822631013	DHANAMALA T	T. Dhana	T. Dhana	T. Dhana	T. Dhana	T. Dhana	T. Dhana
14	920822631014	DHARSON J	J. Dharon	J. Dharon	J. Dharon	J. Dharon	J. Dharon	J. Dharon
15	920822631015	DHEIVENTHIRAN M	Dheiv	Dheiv	Dheiv	Dheiv	M. Dheiv	M. Dheiv
16	920822631016	DIVAGAR M	M. Divag	M. Divag	M. Divag	M. Divag	M. Divag	M. Divag
17	920822631017	GARGIN PRABHU M	M. Garg	M. Garg	M. Garg	M. Garg	M. Garg	M. Garg
18	920822631018	GAYATHRI DEVI S	S. Gayath	S. Gayath	S. Gayath	S. Gayath	S. Gayath	S. Gayath
19	920822631019	GOPIKANNAN B	B. Gopin	B. Gopin	B. Gopin	B. Gopin	B. Gopin	B. Gopin
20	920822631020	GOWSALYA S (05.04.99)	S. Gowsa	S. Gowsa	S. Gowsa	S. Gowsa	S. Gowsa	S. Gowsa
21	920822631021	GOWSALYA S (17.06.02)	S. Gowsa	S. Gowsa	S. Gowsa	S. Gowsa	S. Gowsa	S. Gowsa





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Sl. No	Register Number	Name of the Students	24.04.23 FN & AN	25.04.23 FN & AN	26.04.23 FN & AN	27.04.23 FN & AN	28.04.23 FN & AN	29.04.23 FN & AN
22	920822631022	GUNASEKARAPANDIAN	S. Guna	S. Guna	S. Guna	S. Guna	S. Guna	S. Guna
23	920822631023	HEMANATHAN M	M. Heman	M. Heman	M. Heman	M. Heman	M. Heman	M. Heman
24	920822631024	JANANI A	A. Jani	A. Jani	A. Jani	A. Jani	A. Jani	A. Jani
25	920822631025	JEYAVINITHA R	R. Jeyavinitha	R. Jeyavinitha	R. Jeyavinitha	R. Jeyavinitha	R. Jeyavinitha	R. Jeyavinitha
26	920822631026	KAILASH S	S. Kailash	S. Kailash	S. Kailash	S. Kailash	S. Kailash	S. Kailash
27	920822631027	KALAI SELVAM Y	Y. K. S.	Y. K. S.	Y. K. S.	Y. K. S.	Y. K. S.	Y. K. S.
28	920822631028	KALAIVANAN A	A. Kalai	A. Kalai	A. Kalai	A. Kalai	A. Kalai	A. Kalai
29	920822631029	KANAGARAJ N	N. Kanagaraj	N. Kanagaraj	N. Kanagaraj	N. Kanagaraj	N. Kanagaraj	N. Kanagaraj
30	920822631030	KARTHIKA S	S. Kartika	S. Kartika	S. Kartika	S. Kartika	AB	S. Kartika
31	920822631031	KAVILAYA S	S. Kavilaya	S. Kavilaya	S. Kavilaya	S. Kavilaya	S. Kavilaya	S. Kavilaya
32	920822631032	KIRAN N	N. Kiran	N. Kiran	N. Kiran	N. Kiran	N. Kiran	N. Kiran
33	920822631033	MANA N	N. Mani	N. Mani	N. Mani	N. Mani	N. Mani	N. Mani
34	920822631034	MANGAYARKARASI AL	Al. Mangayarkarasi	Al. Mangayarkarasi	Al. Mangayarkarasi	Al. Mangayarkarasi	Al. Mangayarkarasi	Al. Mangayarkarasi
35	920822631035	MANOJ KUMAR M	M. Manoj Kumar	M. Manoj Kumar	M. Manoj Kumar	M. Manoj Kumar	M. Manoj Kumar	M. Manoj Kumar
36	920822631036	MARUTHUPANDIAN P	P. Maruthupandian	P. Maruthupandian	P. Maruthupandian	P. Maruthupandian	P. Maruthupandian	P. Maruthupandian
37	920822631037	MATHIMEENAKSHI S	S. Mathimeenakshi	S. Mathimeenakshi	S. Mathimeenakshi	S. Mathimeenakshi	S. Mathimeenakshi	S. Mathimeenakshi
38	920822631038	MEGANATHAN S	S. Meganathan	S. Meganathan	S. Meganathan	S. Meganathan	S. Meganathan	S. Meganathan
39	920822631039	MOHAMMED AATHIL K	K. Aathil	K. Aathil	K. Aathil	K. Aathil	K. Aathil	K. Aathil
40	920822631040	MOHAMMED AFZALKHAN	A. Afzal	A. Afzal	A. Afzal	A. Afzal	A. Afzal	A. Afzal
41	920822631041	NATCHATRA T	T. Natchatra	T. Natchatra	T. Natchatra	T. Natchatra	T. Natchatra	T. Natchatra
42	920822631042	NAVIN RAJ R	R. Navin	R. Navin	R. Navin	R. Navin	R. Navin	R. Navin
43	920822631043	NEERAJA M	M. Neeraj	M. Neeraj	M. Neeraj	M. Neeraj	M. Neeraj	M. Neeraj
44	920822631044	NIVETHA R	R. Nivetha	R. Nivetha	R. Nivetha	R. Nivetha	R. Nivetha	R. Nivetha
45	920822631045	PADMANATHAN T	T. Padmanathan	T. Padmanathan	T. Padmanathan	T. Padmanathan	T. Padmanathan	T. Padmanathan





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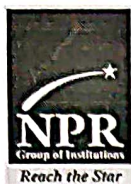
Sl. No	Register Number	Name of the Students	24.04.23 FN & AN	25.04.23 FN & AN	26.04.23 FN & AN	27.04.23 FN & AN	28.04.23 FN & AN	29.04.23 FN & AN
46	920822631046	PRATIBHA M	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
47	920822631047	PRIYA DHARSHINI S	<i>S. Priyadharshini</i>	<i>S. Priyadharshini</i>	<i>P. Priyadharshini</i>	<i>P. Priyadharshini</i>	<i>P. Priyadharshini</i>	<i>P. Priyadharshini</i>
48	920822631048	SALETH PRATHAP R	<i>Prathap R</i>	<i>Prathap R</i>	<i>Prathap R</i>	<i>Prathap R</i>	<i>Prathap R</i>	<i>Prathap R</i>
49	920822631049	SANTHOSH T	<i>T. Santhosh</i>	<i>T. Santhosh</i>	<i>T. Santhosh</i>	<i>T. Santhosh</i>	<i>T. Santhosh</i>	<i>T. Santhosh</i>
50	920822631050	SARANI A S	<i>A.S. Sarani</i>	<i>A.S. Sarani</i>	<i>A.S. Sarani</i>	<i>A.S. Sarani</i>	<i>A.S. Sarani</i>	<i>A.S. Sarani</i>
51	920822631051	SARATHA PREETHA T	<i>T. Saratha</i>	<i>T. Saratha</i>	AB	<i>T. Saratha</i>	<i>T. Saratha</i>	<i>T. Saratha</i>
52	920822631052	SENTHAMILARASAN A	<i>A. Senthil</i>	<i>A. Senthil</i>	AB	<i>A. Senthil</i>	<i>A. Senthil</i>	<i>A. Senthil</i>
53	920822631053	SHALINI KATHRIN VIJAYA	<i>M. Shalini Kathrin Vijaya</i>	<i>M. Shalini Kathrin Vijaya</i>	<i>M. Shalini Kathrin Vijaya</i>	<i>M. Shalini Kathrin Vijaya</i>	<i>M. Shalini Kathrin Vijaya</i>	<i>M. Shalini Kathrin Vijaya</i>
54	920822631054	SHAMEEM FATHIMA A	<i>A. Shameem Fathima</i>	<i>A. Shameem Fathima</i>	<i>A. Shameem Fathima</i>	<i>A. Shameem Fathima</i>	<i>A. Shameem Fathima</i>	<i>A. Shameem Fathima</i>
55	920822631055	SIVAHARIMATHAVAN B	<i>B. Sivaharimathavan</i>	<i>B. Sivaharimathavan</i>	<i>B. Sivaharimathavan</i>	<i>B. Sivaharimathavan</i>	<i>B. Sivaharimathavan</i>	<i>B. Sivaharimathavan</i>
56	920822631056	SOWMYA M	<i>M. Sowmya</i>	<i>M. Sowmya</i>	<i>M. Sowmya</i>	<i>M. Sowmya</i>	<i>M. Sowmya</i>	<i>M. Sowmya</i>
57	920822631057	SRINIVASAN P	<i>P. Srinivasan</i>	<i>P. Srinivasan</i>	<i>P. Srinivasan</i>	<i>P. Srinivasan</i>	<i>P. Srinivasan</i>	<i>P. Srinivasan</i>
58	920822631058	SUBATHRA V	<i>V. Subathra</i>	<i>V. Subathra</i>	<i>V. Subathra</i>	<i>V. Subathra</i>	<i>V. Subathra</i>	<i>V. Subathra</i>
59	920822631059	SUSILA K	<i>K. Susila</i>	<i>K. Susila</i>	<i>K. Susila</i>	<i>K. Susila</i>	<i>K. Susila</i>	<i>K. Susila</i>
60	920822631060	TAMILARASAN K	<i>K. Tamilarasan</i>	<i>K. Tamilarasan</i>	<i>K. Tamilarasan</i>	<i>K. Tamilarasan</i>	<i>K. Tamilarasan</i>	<i>K. Tamilarasan</i>
61	920822631061	UDHAYA KUMAR A	<i>A. Udhaya Kumar</i>	<i>A. Udhaya Kumar</i>	<i>A. Udhaya Kumar</i>	<i>A. Udhaya Kumar</i>	<i>A. Udhaya Kumar</i>	<i>A. Udhaya Kumar</i>
62	920822631062	VIGNESH C	<i>C. Vignesh</i>	<i>C. Vignesh</i>	<i>C. Vignesh</i>	<i>C. Vignesh</i>	<i>C. Vignesh</i>	<i>C. Vignesh</i>
63	920822631063	VIGNESH R	<i>R. Vignesh</i>	<i>R. Vignesh</i>	<i>R. Vignesh</i>	<i>R. Vignesh</i>	<i>R. Vignesh</i>	<i>R. Vignesh</i>

[Signature]
PROGRAM
COORDINATOR
(P.T.J.K. hillan)
AP/mba

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HOD/MBA
(Dr. B. Srinivasan)



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DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE - LINGUASKILL - CAMBRIDGE ENGLISH

COURSE CONTENT

Day 1 - Introduction

Linguaskill assesses candidates at any level of language ability, from below A1 to C2 level on the Common European Framework of Reference (CEFR), the internationally accepted standard for describing language ability.

Reading tasks

- Read and select: Candidates read a notice, diagram, label, memo or letter containing a short text and choose the sentence or phrase that most closely matches the meaning of the text. There are three possible answers.
- Gapped sentences: Candidates read a sentence with a missing word (gap) and choose the correct word to fill the gap. There are four choices for each gap
- Multiple-choice gap-fill: Candidates choose the right word or phrase to fill the gaps in a text. There are four choices for each gap.
- Open gap-fill: Candidates read a short text in which there are some missing words (gaps) and write the missing word in each gap.
- Extended reading: Candidates read a longer text and answer a series of multiple-choice questions. The questions are in the same order as the information in the text.
- How to teach reading skills - Activities: Another alternatives word, Reading task, Introduction about a stranger, Ice breaker questions

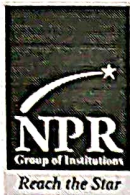
Day 2

- Organization of text-reading for linguaskill
- Reading comprehension with quiz questions
- Practiced A1 & A2 listening task
- Activities: Word building with the relevant words list, descriptions words and sentences, Example sentences by sharing their opinions.

Day 3

- Complete sentence or fragment
- Choose the best response for each one
- Search for the answer
- Main Idea and Supporting details





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DEPARTMENT OF MANAGEMENT STUDIES

- Activities: Quiz on Basic Grammar, Practice test, verified their CEFR level through Test your English source, JAM.

Day 4

- Identifying the Main Idea, topic and supporting details
- Testing tips for main idea questions
- Meaning from Context
- Activities: Cloud of words, Storytelling with the highlighted vocabulary [A1 to B1], Narration, Think - pair - Share.

Day 5

- Practiced B1 & B2 listening task
- Conducted Quiz on listening component comprehension
- Taught phrases and phrasal verbs
- Questionnaires on the important list of Idioms and phrases
- Taken Linguaskill Sample Test

Day 6 -


- Short Presentations
- Wall of Words activity [B1 & B2 level]
- Highlighted Vocabulary, Phrases, Idioms
- Completion of Gapped sentences as a Team quiz
- Mock Test on Reading and Listening [A1 to B2 level]

Criteria to get Certificate:

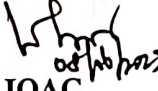
- Exam score = Pass score 50 % of the exam score out of 100


Prepared By: Mr.P.T.J.K.Lilian (AP/MBA)

Approved By,

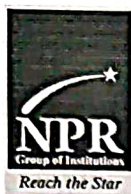

PROGRAM
COORDINATOR
(P.T.J.K. Lilian)
AP / MBA


HOD/MBA


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DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE - LINGUASKILL - CAMBRIDGE ENGLISH

COURSE SCHEDULE

Venue : Training & Placement Cell, NPRCET

Date : 24.04.2023 to 29.04.2023

Date	09.00 a.m. to 10.05 a.m.	10.05 a.m. to 10.30 a.m.	10.30 a.m. to 12.50 p.m.	12.50 p.m. to 1.35 p.m.	1.35 p.m. to 4.00 p.m.
Day 1 24.04.23	SESSION I	Tea Break	SESSION II	Lunch	SESSION III
	Inauguration & Introduction Read and select: Candidates read a notice, diagram, label, memo or letter containing a short text and choose the sentence or phrase that most closely matches the meaning of the text. There are three possible answers.		Mrs.Sangeetha Murugan Gapped sentences: Candidates read a sentence with a missing word (gap) and choose the correct word to fill the gap. There are four choices for each gap. Multiple-choice gap-fill: Candidates choose the right word or phrase to fill the gaps in a text. There are four choices for each gap. Open gap-fill: Candidates read a short text in which there are some missing words (gaps) and write the missing word in each gap.		Mrs.Sangeetha Murugan Extended reading: Candidates read a longer text and answer a series of multiple-choice questions. The questions are in the same order as the information in the text. How to teach reading skills Activities: Another alternatives words, Reading task, Introduction about a stranger, Ice breaker questions
Day 2 25.04.23	SESSION I		SESSION II		SESSION III
	Mrs.Sangeetha Murugan Organization of text-reading for linguaskill		Mrs.Sangeetha Murugan Reading comprehension with quiz questions Practiced A1 & A2 listening task		Mrs.Sangeetha Murugan Activities: Word building with the relevant words list, descriptions words and sentences, Example sentences by sharing their opinions.
Day 3 26.04.23	SESSION I		SESSION II		SESSION III
	Mrs.Sangeetha Murugan Complete sentence or fragment Choose the best response for each one		Mrs.Sangeetha Murugan Search for the answer Main Idea and Supporting details		Mrs.Sangeetha Murugan Activities: Quiz on Basic Grammar, Practice test, Verified their CEFR level through Test your English source, JAM.
Day 4 27.04.23	SESSION I		SESSION II		SESSION III
	Mrs.Sangeetha Murugan Identifying the Main Idea, topic and supporting details		Mrs.Sangeetha Murugan Testing tips for main idea questions		Mrs.Sangeetha Murugan Meaning from Context Activities: Cloud of words, Storytelling with the highlighted vocabulary [A1 to B1, Narration, Think - pair - Share.





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DEPARTMENT OF MANAGEMENT STUDIES

Day 5 28.04.23	SESSION I		SESSION II		SESSION III
	Mrs.Sangeetha Murugan		Mrs.Sangeetha Murugan		Mrs.Sangeetha Murugan
	Practiced B1 & B2 listening task		Conducted Quiz on listening component comprehension Taught phrases and phrasal verbs		Questionnaires on the important list of Idioms and phrases Taken Linguaskill Sample Test
Day 6 29.04.23	SESSION I		SESSION II		SESSION III
	Mrs.Sangeetha Murugan		Mrs.Sangeetha Murugan		Mrs.Sangeetha Murugan
	Short Presentations Wall of Words activity [B1 & B2 level]		Highlighted Vocabulary, Phrases, Idioms		Completion of Gapped sentences as a Team quiz Mock Test on Reading and Listening [A1 to B2 level]

P.T.J.K. Hilian
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AP/MBA

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ADD ON COURSE

ADD ON COURSE - LINGUASKILL - CAMBRIDGE ENGLISH

STUDENT FEEDBACK

Name of the Student : <i>V. Subathra</i>	Year / Semester: I/II
Name of the Program: Linguaskill - Cambridge English	

S. No	CONTENT	EXCELLENT	GOOD	FAIR	SATIS FACTORY	NOT SATIS FACTORY
1	Course Content	✓				
2	Way of exposed new knowledge & practices	✓				
3	Examples Provided during this course		✓			
4	Course delivered by Resource Person	✓				
5	Time Management	✓				
6	Overall rating of this course	✓				
7	Any Other Comments / Suggestions	<i>We would like to communicate in English Everyday</i>				

P. J. K. Hilian
**PROGRAM
COORDINATOR**
(P.T.J.K. Hilian)
 AP/MBA



Zufon
 HOD/MBA


ADD ON COURSE

ADD ON COURSE - LINGUASKILL - CAMBRIDGE ENGLISH


STUDENT FEEDBACK

Name of the Student : PRATIBHA.M	Year / Semester: I/II
Name of the Program: Linguaskill - Cambridge English	

S. No	CONTENT	EXCELLENT	GOOD	FAIR	SATIS FACTORY	NOT SATIS FACTORY
1	Course Content	✓				
2	Way of exposed new knowledge & practices	✓				
3	Examples Provided during this course	✓				
4	Course delivered by Resource Person	✓				
5	Time Management		✓			
6	Overall rating of this course	✓				
7	Any Other Comments / Suggestions	We would like to have speaking & Writing skill class too.				


**PROGRAM
COORDINATOR**
 (P.T.J.K. Hilian)
 AP/mba




HOD/MBA


ADD ON COURSE

ADD ON COURSE - LINGUASKILL - CAMBRIDGE ENGLISH

STUDENT FEEDBACK

Name of the Student : <u>SALETH PRATHAP.R.</u>	Year / Semester: <u>I/II</u>
Name of the Program: <u>Linguaskill - Cambridge English</u>	

S. No	CONTENT	EXCELLENT	GOOD	FAIR	SATIS FACTORY	NOT SATIS FACTORY
1	Course Content	✓				
2	Way of exposed new knowledge & practices	✓				
3	Examples Provided during this course	✓				
4	Course delivered by Resource Person		✓			
5	Time Management	✓				
6	Overall rating of this course	✓				
7	Any Other Comments / Suggestions	We would like to have outdoor class and communication activities.				


 PROGRAM
 COORDINATOR
 (P. P. J. K. Kilean)
 AP/MBA




 HOD/MBA


ADD ON COURSE

ADD ON COURSE - LINGUASKILL - CAMBRIDGE ENGLISH

STUDENT FEEDBACK

Name of the Student : MEGANATHAN - S	Year / Semester: I/II
Name of the Program: Linguaskill - Cambridge English	

S. No	CONTENT	EXCELLENT	GOOD	FAIR	SATIS FACTORY	NOT SATIS FACTORY
1	Course Content	✓				
2	Way of exposed new knowledge & practices	✓				
3	Examples Provided during this course	✓				
4	Course delivered by Resource Person	✓				
5	Time Management		✓			
6	Overall rating of this course	✓				
7	Any Other Comments / Suggestions	We could like have Communication Skill to this classes				


**PROGRAM
COORDINATOR**
 (P.T.J.K. Hilian)
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HbD/MBA



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DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE - LINGUASKILL - CAMBRIDGE ENGLISH

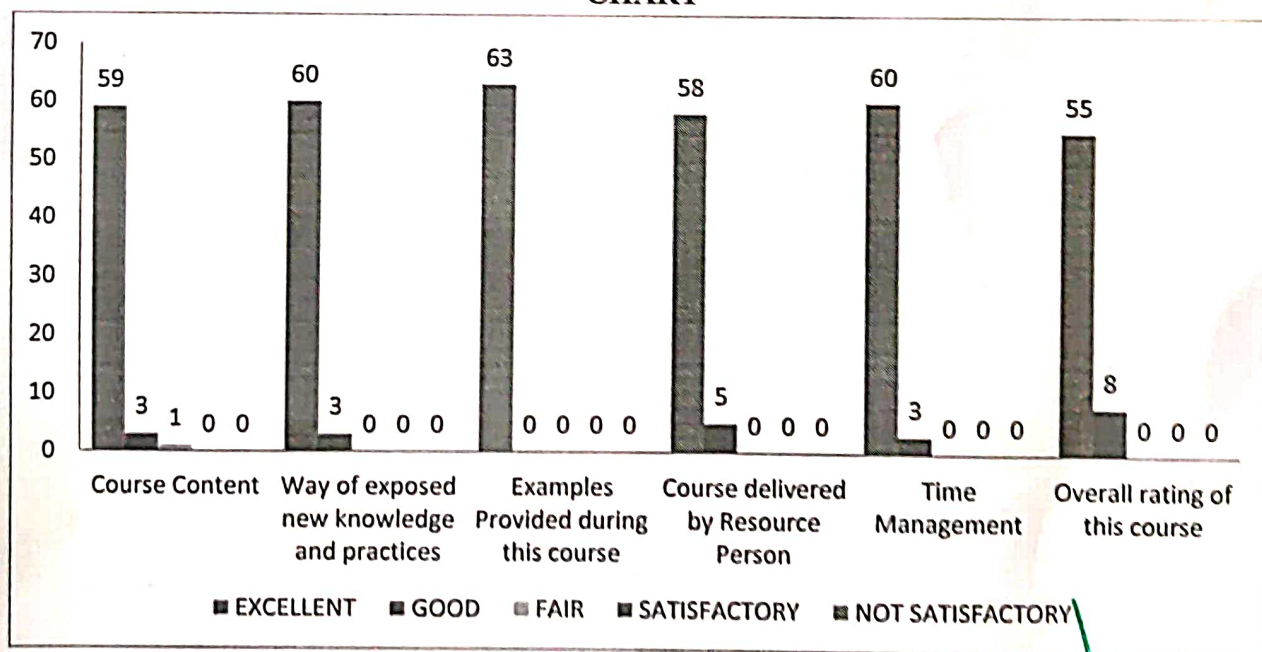
STUDENT FEEDBACK SUMMARY REPORT

Registered Students: 63

Date: 01.05.2023

S. No	CONTENT	EXCELLENT	GOOD	FAIR	SATISFACTORY	NOT SATISFACTORY
1	Course Content	59	3	1	0	0
2	Way of exposed new knowledge and practices	60	3	0	0	0
3	Examples Provided during this course	63	0	0	0	0
4	Course delivered by Resource Person	58	5	0	0	0
5	Time Management	60	3	0	0	0
6	Overall rating of this course	55	8	0	0	0

CHART



P. J. Kilian
PROGRAM
COORDINATOR
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AP/MBA

[Signature]
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DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE - LINGUASKILL - CAMBRIDGE ENGLISH

PHOTO GALLERY



MBA Students during Add on Course



Short Presentations
Wall of Words activity [B1 & B2 level]

P. J. Khiliani
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DEPARTMENT OF MANAGEMENT STUDIES
ADD ON COURSE - LINGUASKILL - CAMBRIDGE ENGLISH

SUMMARY REPORT

Department of Management Studies organized Add on Course on “Linguaskill - Cambridge English” from 24.05.2023 to 29.05.2023 at our College Premises. Ms.S.Aasma I MBA has delivered welcome address.

Dr.J.Sundararajan, Principal felicitated the course; this one week course gives over view by **Mrs. Sangeetha Murugan**, Communication Trainer, and Linguaskill - Cambridge English. Kalvi Higher Education and Research Institute Madurai had shared their knowledge about Linguaskill; it is a quick and convenient online test to help organizations check the English levels of individuals and groups of candidates.

This one week training program designed to enhance the reading and listening skills of the students, for this the students have given with the practices in the aspects of story writing and telling, questioning, finding new vocabularies, new ideas and phrases; end of the day online test given to the students to test their ability

Vote of thanks delivered by R. Saleth Prathap - I MBA.

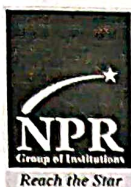
P.T.J.K. hiliam
PROGRAM
COORDINATOR
(P.T.J.K. hiliam)
AP/mba

R. Saleth Prathap
I MBA

[Signature]
IQAC



[Signature]
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DEPARTMENT OF MANAGEMENT STUDIES

ADD ON COURSE - LINGUASKILL - CAMBRIDGE ENGLISH CERTIFICATE

Linguaskill

Test Report

Institution: IN249
Username: josefhajesus7@gmail.com
Ref. No.: IN249josefhajesus7@gmail.com

Linguaskill General

Candidate name

Roselien Josepha Edward

Candidate number


Date of birth


27 July 1993

Organisation

Voice Training & Research Institute



Skill	Test Date	Score	CEFR Level		
Listening	19 November 2019	149	B1		
					
Below A1	A1	A2	B1	B2	C1 or above

Skill	Test Date	Score	CEFR Level		
Reading	19 November 2019	130	A2		
					
Below A1	A1	A2	B1	B2	C1 or above

Can understand the main ideas of spoken language about familiar subjects regularly encountered in daily life and work, provided the speech is clear and delivered in a standard dialect. May need to rely heavily on repetition, paraphrasing, and contextual or visual clues to understand the message.

Can understand and find specific, predictable information in simple everyday material, such as notices and instructions. May need to rely on pictures, diagrams or borrowed words from their first language to understand longer texts.

CAMBRIDGE
English





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DEPARTMENT OF SCIENCE & HUMANITIES

ADD ON COURSE (2022-2023)

INDEX

COURSE CODE : 22SHAO01

COURSE NAME : SET THEORY AND MATHEMATICAL LOGIC

ACADEMIC YEAR : 2022 -2023

SEMESTER: ODD

DURATION: 32 HOURS

S.NO.	PARTICULARS	PAGE. NO.
1	PERMISSION LETTER	2
2	CIRCULAR TO STUDENTS	3
3	COURSE CONTENT	4
4	REGISTERED STUDENT'S NAME LIST	5
5	COURSE SCHEDULE	11
6	ATTENDANCE OF STUDENTS	13
7	SAMPLE QUESTION PAPER WITH ANSWER KEY	18
8	STUDENT'S FEEDBACK	20
9	FEEDBACK ANALYSIS	23
10	SUMMARY REPORT	24
11	COURSE MATERIAL/MANUAL	25
12	CERTIFICATES OF THE PROGRAM	26

PROGRAM CO-ORDINATOR

HoD/S&H

IQAC

PRINCIPAL

(K. YOUNATH
ap/maths)

Dr. P. S. Sathesh Kumar

Coordinator - IQAC

College of Engineering & Technology
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Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal

N.P.R. College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

Permission letter for conducting Add on Course

From

Dr. P. S. Sathesh Kumar,
Prof and Head,
Department of Science and Humanities,
NPR College of Engineering and Technology,
Natham.

To

The Principal,
NPR College of Engineering and Technology,
Natham

Respected Sir,


Sub: Requisition ~~for~~ to conduct add on course for
I year students - reg.

We have planned to conduct add on course in the title of
"Set theory and mathematical logic" to our students on the
following days 03.12.2022, 21.01.2023, 04.02.2023, 04.03.2023
and 11.03.2023 (5 days) in our college campus. We have
proposed Dr. T. Priya, Dr. A. Kenimozhi and Dr. P. Rami as
resource persons for this add on course. kindly permit us
to conduct the same.

Thanking you

28.11.2022
Natham

yours sincerely,


Dr. P. S. Sathesh Kumar



N.P.R. College of Eng
Natham, Tiruvallur (TN) - 624 501.



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NPRCET/OFF/S&H/VAC/2022-2023

DATE: 29/11/2022

CIRCULAR

This is to inform that Department of Science and Humanities has planned to conduct an Add on Course on "SET THEORY AND MATHEMATICAL LOGIC" for I year students. Interested students can enroll their name to the program co-ordinator on or before 01/12/2022.

The details of the training program are given below:

COURSE NAME : SET THEORY AND MATHEMATICAL LOGIC

RESOURCE PERSONS : **Dr.T.Priya,**
Professor - Mathematics.

Dr.A.Kanimozhi,
Associate Professor-Mathematics.

Dr.P.Rani,
Associate Professor-Mathematics.

VENUE : NPRCET Rear Block Seminar Hall (Second Floor)

DATE & DURATION : 03/12/2022, 21/01/2023, 04/02/2023, 04/03/2023
and 11/03/2023 & 9.00 a.m. to 4.20 p.m.

PROGRAM CO-ORDINATOR : Mr. K.Yogunath, AP/Mathematics.

Copy to:

1. IQAC
2. All the HODs
3. Notice Board
4. File
5. All the Class Room

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DEPARTMENT OF SCIENCE & HUMANITIES

22SHAO01- ADD ON COURSE ON SET THEORY AND MATHEMATICAL LOGIC

COURSE CONTENT

Chapter 1 Sets, Functions and Relations

- Some Basic Notations and Definitions
- Subsets, Equality of Sets, Empty Set
- Algebra of Sets
- Special Sets
- Ordered Pairs
- Cartesian Products, Relations
- Functions (or Mappings)
- Equivalence Relations and Partitions

Chapter 2: . Finite and Infinite Sets

- Definition of Natural Numbers
- Ordering of the Natural Numbers
- Mathematical Induction
- Finite Sets Infinite Sets
- Countable Sets
- Cardinal Numbers Standard number systems:

Chapter 3: Partially Ordered Sets

- Partially Ordered Sets (Posets)
- Types of Ordering
- Order Preserving Functions and Isomorphisms
- Lower Bound, Least Upper Bound
- Lattices
- Boolean Algebra

Chapter 4: . Review of the Fundamentals and Algebra of Logic

- Propositions
- Logical Operators
- Tautology, Contradiction and Contingencies
- Tautological Implication and Equivalence

Chapter 5: Arguments

- Valid and Invalid Arguments
- Rules of Inference
- Rule of Conditional Proof
- Rule of Indirect Proof

Criteria to get Certificate

- Students should register their names for this course
- Students must have 85% attendance
- Students should secure 50% marks in the exam

Prepared by: Mr.K.Yogunath AP/Mathematics

Approved by:

HoD/S&H

(Dr. P. S. Sathesh Kumar)



IOAC
Coordinator - IOAC
NPR College of Engineering & Technology
Natham, Dindigul (Dt)-624 401

Page 4 of 26

PRINCIPAL

Dr. J. SUNDARARAJAN,

B.E., M.Tech., Ph.D

Principal

NPR College of Engineering & Technology
Natham, Dindigul (Dt)- 624 401.



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DEPARTMENT OF SCIENCE & HUMANITIES

ADD ON COURSE ON SET THEORY AND MATHEMATICAL LOGIC

REGISTERED STUDENT'S NAME LIST

S. No.	Register Number	Student Name	Class
1.	920822103001	Adhieshvar R	I -Civil
2.	920822103002	Chithiraipandi P	I -Civil
3.	920822103003	Deepika S	I -Civil
4.	920822103004	Dinesh Babu P	I -Civil
5.	920822103008	Madhukanth P	I -Civil
6.	920822103009	Mani R	I -Civil
7.	920822103010	Natrayan S	I -Civil
8.	920822103011	Sanmuganathan P	I -Civil
9.	920822103012	Santhosh Kumar R	I -Civil
10.	920822103014	Vignesh C	I -Civil
11.	920822104004	Afzal Khan M	I-CSE-A
12.	920822104005	Ahilesh V	I-CSE-A
13.	920822104006	Ajay Prajan S	I-CSE-A
14.	920822104010	Akshaya Pa	I-CSE-A
15.	920822104011	Alwin Kirubakaran Y	I-CSE-A
16.	920822104015	Ashima Nishara D	I-CSE-A
17.	920822104019	Bharath Kumar V	I-CSE-A
18.	920822104020	Bismi Farhana A	I-CSE-A
19.	920822104021	Cibi Raj C	I-CSE-A
20.	920822104022	Deepadharshini G	I-CSE-A
21.	920822104025	Gokula Kannan T	I-CSE-A
22.	920822104026	Gokula Praveen N	I-CSE-A
23.	920822104033	Jawahar S	I-CSE-A
24.	920822104034	Jeeviha S	I-CSE-A
25.	920822104037	Jeyadeva M	I-CSE-A
26.	920822104042	Kishore P	I-CSE-A
27.	920822104043	Kowsalya S	I-CSE-A
28.	920822104044	Kumaresan S	I-CSE-A
29.	920822104045	Leo Aandrew G	I-CSE-A
30.	920822104046	Madhan P	I-CSE-A
31.	920822104061	Naveen J	I-CSE-A
32.	920822104062	Naveena V	I-CSE-A
33.	920822104063	Nevin Nehal R S	I-CSE-A
34.	920822104067	Nithish Manickam S	I-CSE-B
35.	920822104068	Nivetha P	I-CSE-B
36.	920822104069	Palanimurugan V	I-CSE-B
37.	920822104070	Partheeban A	I-CSE-B





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DEPARTMENT OF SCIENCE & HUMANITIES

ADD ON COURSE ON SET THEORY AND MATHEMATICAL LOGIC

REGISTERED STUDENT'S NAME LIST

S. No.	Register Number	Student Name	Class
38	920822104072	Perumal Kumar V	I-CSE-B
39	920822104073	Ponnalagar V	I-CSE-B
40	920822104075	Pooja Shri M	I-CSE-B
41	920822104078	Pragatheeswaran A	I-CSE-B
42	920822104079	Praveenkumar S	I-CSE-B
43	920822104080	Priyadharshini G	I-CSE-B
44	920822104081	Priyadharshini R	I-CSE-B
45	920822104084	Ravikrishnan R	I-CSE-B
46	920822104085	Rexton George R	I-CSE-B
47	920822104090	Sakthivel P	I-CSE-B
48	920822104091	Sanjay T	I-CSE-B
49	920822104093	Santhiya S	I-CSE-B
50	920822104099	Sivaraj Kumar M	I-CSE-B
51	920822104100	Sofiga R	I-CSE-B
52	920822104102	Sree Yogeswari S	I-CSE-B
53	920822104106	Subha Sri R	I-CSE-B
54	920822104108	Sulaika P	I-CSE-B
55	920822104113	Tharini Priya J	I-CSE-B
56	920822104114	Veera Ramana M	I-CSE-B
57	920822104115	Vibin Dipak K	I-CSE-B
58	920822104116	Vignesh M	I-CSE-B
59	920822104120	Vimal Sanjay A	I-CSE-B
60	920822104121	Visali S	I-CSE-B
61	920822104124	Yagavarman S	I-CSE-B
62	920822104126	Yohith Kumar Nagarajan	I-CSE-B
63	920822105002	Abirami P	I-EEE
64	920822105003	Ajay S	I-EEE
65	920822105004	Ariyadharshini B	I-EEE
66	920822105008	Dhanushkumar K	I-EEE
67	920822105010	Dharani Daran M	I-EEE
68	920822105011	Dhinesh Prasad S	I-EEE
69	920822105012	Eswara Pandi R	I-EEE
70	920822105013	Hari Haran G	I-EEE
71	920822105023	Sakthi Vignesh S	I-EEE
72	920822105024	Sanjay R	I-EEE
73	920822105020	Premkumar K	I-EEE
74	920822105021	Raghul Kanna S	I-EEE





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REGISTERED STUDENT'S NAME LIST

S. No.	Register Number	Student Name	Class
75	920822105026	Sivasangeetha A	I-EEE
76	920822105029	Vasanthakumar B	I-EEE
77	920822105031	Vimalleshwaran S	I-EEE
78	920822106001	Aajip S	I-ECE
79	920822106002	Archana A R	I-ECE
80	920822106003	Arunachalam R	I-ECE
81	920822106004	Arun Kumar S	I-ECE
82	920822106008	Balamurugan P	I-ECE
83	920822106009	Bala Sowndharya M	I-ECE
84	920822106012	Dharshan V	I-ECE
85	920822106015	Geerthana T	I-ECE
86	920822106018	Gokul Krishnan R	I-ECE
87	920822106020	Harimadesh S	I-ECE
88	920822106022	Janagan A	I-ECE
89	920822106023	Janarthanan A S	I-ECE
90	920822106024	Jeeva T	I-ECE
91	920822106027	Jeyan James Raj A	I-ECE
92	920822106028	Jeyasri P	I-ECE
93	920822106029	Kevin Agath A	I-ECE
94	920822106030	Kohila K	I-ECE
95	920822106035	Mahesh Karthick M	I-ECE
96	920822106036	Maheswaran S	I-ECE
97	920822106037	Mani N	I-ECE
98	920822106040	Muraliprasanth A	I-ECE
99	920822106044	Ruthramoorthy M	I-ECE
100	920822106045	Sadhaa Sivam S	I-ECE
101	920822106046	Sakthivel N K	I-ECE
102	920822106049	Sarvesh T	I-ECE
103	920822106050	Sathan B	I-ECE
104	920822106041	Preeetha S	I-ECE
105	920822106049	Sarvesh T	I-ECE
106	920822106056	Tamilkodi K	I-ECE
107	920822106034	Loganath S	I-ECE
108	920822106061	Vimalkumar K	I-ECE
109	920822106062	Vinoth P	I-ECE
110	920822106063	Viswanathan V	I-ECE
111	920822106042	Priya Dharshini S V	I-ECE





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REGISTERED STUDENT'S NAME LIST

S. No.	Register Number	Student Name	Class
112	920822114001	Abdul Ajees A	I-MECH
113	920822114002	Alaguraja V	I-MECH
114	920822114003	Arvinth Nagarathinam B J	I-MECH
115	920822114006	Balamurugan K	I-MECH
116	920822114009	Kishan Kannan R	I-MECH
117	920822114010	Kishore Kumar P	I-MECH
118	920822114015	Muthuvel S	I-MECH
119	920822114012	Michael Stanley S	I-MECH
120	920822114013	Mohamed Asik K	I-MECH
121	920822114018	Riswanth S	I-MECH
122	920822114020	Sameer Ahamed J	I-MECH
123	920822114021	Sarabeshwaran R	I-MECH
124	920822114023	Shanmuga Priyan K	I-MECH
125	920822114024	Sriravankumar N	I-MECH
126	920822114025	Suriya S	I-MECH
127	920822114028	Veerasiva M	I-MECH
128	920822114029	Venkadeshwaran M	I-MECH
129	920822114030	Vidhyasagar M	I-MECH
130	920822205001	Aadharsh R D	I-IT
131	920822205002	Bhuvaneshwari S	I-IT
132	920822205003	Deepadharshini D	I-IT
133	920822205004	Divya D	I-IT
134	920822205001	Aadharsh R D	I-IT
135	920822205012	Kishore K	I-IT
136	920822205018	Nithish S	I-IT
137	920822205019	Nivasrahuman A	I-IT
138	920822205021	Parthiban S	I-IT
139	920822205022	Paveenraj P	I-IT
140	920822205025	Santhosh Kumar R	I-IT
141	920822205026	Shivaprasad K	I-IT
142	920822205027	Siddharth S	I-IT
143	920822205028	Sudalai Muthu A	I-IT
144	920822205030	Vishwaa N S U	I-IT
145	920822205031	Yaswanth Sanjay S	I-IT
146	920822205009	Harshavarthan B	I-IT
147	920822205011	Karan P	I-IT
148	920822205010	Joe Makdaniya D	I-IT





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ADD ON COURSE ON SET THEORY AND MATHEMATICAL LOGIC

REGISTERED STUDENT'S NAME LIST

S. No.	Register Number	Student Name	Class
149	920822243001	Aaron S	I-AI&DS
150	920822243002	Abinaya Sree A	I-AI&DS
151	920822243003	Aishuwaya Dharshini V	I-AI&DS
152	920822243004	Akash S	I-AI&DS
153	920822243005	Alen Thomas	I-AI&DS
154	920822243006	Anandhapranesh P	I-AI&DS
155	920822243010	Balaguru B	I-AI&DS
156	920822243011	Balavijay M	I-AI&DS
157	920822243012	Bavatharani K	I-AI&DS
158	920822243013	Bharath Bagavathi R	I-AI&DS
159	920822243016	Gokulprasanna V	I-AI&DS
160	920822243019	Issac Sunil	I-AI&DS
161	920822243021	Janani S	I-AI&DS
162	920822243022	Jegatheesh M	I-AI&DS
163	920822243023	Jeyasurya S	I-AI&DS
164	920822243025	Karthick J P	I-AI&DS
165	920822243026	Krishna C R	I-AI&DS
166	920822243027	Krithick P	I-AI&DS
167	920822243028	Lakshmana Perumal S	I-AI&DS
168	920822243031	Logeshwaran S	I-AI&DS
169	920822243032	Mayil Vaganan R	I-AI&DS
170	920822243033	Mohamed Bisail M	I-AI&DS
171	920822243035	Nagarajan M	I-AI&DS
172	920822243036	Nantha Gobalakrishnan M	I-AI&DS
173	920822243038	Padmesh M	I-AI&DS
174	920822243039	Prasanth J	I-AI&DS
175	920822243040	Prithiviraj R	I-AI&DS
176	920822243044	Sanjay P	I-AI&DS
177	920822243047	Siddharth M	I-AI&DS
178	920822243048	Siva S	I-AI&DS
179	920822243051	Sruthi P	I-AI&DS
180	920822243052	Subash P R	I-AI&DS
181	920822243055	Uthira Nagavel S	I-AI&DS
182	920822243056	Vignesh Kumar B	I-AI&DS





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DEPARTMENT OF SCIENCE & HUMANITIES

ADD ON COURSE ON SET THEORY AND MATHEMATICAL LOGIC

SUMMARY – CLASSWISE

S.NO.	DEPARTMENT	NO. OF STUDENTS
1	CIVIL	10
2	CSE - A	23
3	CSE – B	29
4	EEE	15
5	ECE	34
6	MECH	18
7	IT	19
8	AI&DS	34
TOTAL		182


PROGRAM CO-ORDINATOR

(K. Yohannan
Ap / Maths)


HoD/S&H

(Dr. P.S. Sathesh Kumar)


IQAC

Coordinator - IQAC
NPR College of Engineering & Technology
Natham, Dindigul (Dt)-624 401


PRINCIPAL

Dr. J. SUNDARARAJAN,
B.E., M.Tech., Ph.D.,
Principal
N.P.R. College of Engineering & Technology
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DEPARTMENT OF SCIENCE & HUMANITIES

22SHAO01- ADD ON COURSE ON SET THEORY AND MATHEMATICAL LOGIC

COURSE SCHEDULE

Venue: NPRCET Rear Block Seminar Hall (Second Floor)

Date :29/11/2022

Date	TIME	SESSIONS
03/12/2022	9.30 to 11.10 a.m.	Some Basic Notations and Definitions. Subsets, Equality of Sets, Empty Set - Dr.T.Priya
	11.10 to 11.30 a.m.	BREAK
	11.30 a.m. to 1.10 p.m.	Algebra of Sets, Special Sets - Dr.A.Kanomozhi
	1.10 to 2.00 p.m.	LUNCH
	2.00 to 3.40 p.m.	Ordered Pairs Cartesian Products, Relations - Dr.P.Rani
	3.40 to 3.50 p.m.	BREAK
	3.50 to 4.30 p.m.	Functions (or Mappings) Equivalence Relations and Partitions - Dr.T.Priya

Date	TIME	SESSIONS
21/01/2023	9.30 to 11.10 a.m.	Definition of Natural Numbers Ordering of the Natural Numbers - Dr.A.Kanomozhi
	11.10 to 11.30 a.m.	BREAK
	11.30 a.m. to 1.10 p.m.	Mathematical Induction Finite Sets Infinite Sets - Dr.T.Priya
	1.10 to 2.00 p.m.	LUNCH
	2.00 to 3.40 p.m.	Countable Sets - Dr.A.Kanomozhi
	3.40 to 3.50 p.m.	BREAK
	3.50 to 4.30 p.m.	Cardinal Numbers Standard number systems - Dr.P.Rani

Date	TIME	SESSIONS
04/02/2023	9.30 to 11.10 a.m.	Partially Ordered Sets Posets Types of Ordering - Dr.P.Rani
	11.10 to 11.30 a.m.	BREAK
	11.30 a.m. to 1.10 p.m.	Order Preserving Functions and Isomorphisms - Dr.T.Priya
	1.10 to 2.00 p.m.	LUNCH
	2.00 to 3.40 p.m.	Lower Bound, Least Upper Bound Lattices - Dr.A.Kanomozhi
	3.40 to 3.50 p.m.	BREAK
	3.50 to 4.30 p.m.	Boolean Algebra - Dr.P.Rani







DEPARTMENT OF SCIENCE & HUMANITIES

22SHAO01- ADD ON COURSE ON SET THEORY AND MATHEMATICAL LOGIC

ATTENDANCE OF STUDENTS

S. No.	Register Number	Student Name	Class	03/12/22		21/01/23		04/02/23		04/03/23		11/03/23	
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1	920822103001	Adhieshvar R	I-Civil	/	/	/	/	/	/	/	/	/	/
2	920822103002	Chithiraipandi P	I-Civil	/	/	/	/	/	/	/	/	/	/
3	920822103003	Deepika S	I-Civil	/	/	/	/	/	/	/	/	/	/
4	920822103004	Dinesh Babu P	I-Civil	/	/	/	/	/	/	/	/	/	/
5	920822103008	Madhukanth P	I-Civil	/	/	/	/	/	/	/	/	/	/
6	920822103009	Mani R	I-Civil	/	/	/	/	/	/	/	/	/	/
7	920822103010	Natrayan S	I-Civil	/	/	/	/	/	/	/	/	/	/
8	920822103011	Sanmuganathan P	I-Civil	/	/	/	/	/	/	/	/	/	/
9	920822103012	Santhosh Kumar R	I-Civil	/	/	/	/	/	/	/	/	/	/
10	920822103014	Vignesh C	I-Civil	/	/	/	/	/	/	/	/	/	/
11	920822104004	Afzal Khan M	I-CSE-A	/	/	/	/	/	/	/	/	/	/
12	920822104005	Ahilesh V	I-CSE-A	/	/	/	/	/	/	/	/	/	/
13	920822104006	Ajay Prajan S	I-CSE-A	/	/	/	/	/	/	/	/	/	/
14	920822104010	Akshaya Pa	I-CSE-A	/	/	/	/	/	/	/	/	/	/
15	920822104011	Alwin Kirubakaran	I-CSE-A	/	/	/	/	/	/	/	/	/	/
16	920822104015	Ashima Nishara D	I-CSE-A	/	/	/	/	/	/	/	/	/	/
17	920822104019	Bharath Kumar V	I-CSE-A	/	/	/	/	a	a	/	/	/	/
18	920822104020	Bismi Farhana A	I-CSE-A	/	/	/	/	/	/	/	/	/	/
19	920822104021	Cibi Raj C	I-CSE-A	/	/	/	/	/	/	/	/	/	/
20	920822104022	Deepadharshini G	I-CSE-A	/	/	/	/	/	/	/	/	/	/
21	920822104025	Gokula Kannan T	I-CSE-A	/	/	/	/	/	/	/	/	/	/
22	920822104026	Gokula Praveen N	I-CSE-A	/	/	/	/	/	/	/	/	/	/
23	920822104033	Jawahar S	I-CSE-A	/	/	/	/	/	/	/	/	/	/
24	920822104034	Jeeviha S	I-CSE-A	/	/	/	/	/	/	/	/	/	/
25	920822104037	Jeyadeva M	I-CSE-A	/	/	/	/	/	/	/	/	/	/
26	920822104042	Kishore P	I-CSE-A	/	/	/	/	/	/	/	/	/	/
27	920822104043	Kowsalya S	I-CSE-A	/	/	/	/	/	/	a	a	/	/
28	920822104044	Kumaresan S	I-CSE-A	/	/	/	/	/	/	/	/	/	/
29	920822104045	Leo Andrew G	I-CSE-A	/	/	/	/	/	/	/	/	/	/
30	920822104046	Madhan P	I-CSE-A	/	/	/	/	/	/	/	/	/	/
31	920822104061	Naveen J	I-CSE-A	/	/	/	/	/	/	/	/	/	/
32	920822104062	Naveena V	I-CSE-A	/	/	/	/	/	/	/	/	/	/
33	920822104063	Nevin Nehal R S	I-CSE-A	/	/	/	/	/	/	/	/	/	/
34	920822104067	Nithish Manickams	I-CSE-B	/	/	/	/	/	/	/	/	/	/
35	920822104068	Nivetha P	I-CSE-B	/	/	/	/	/	/	/	/	/	/
36	920822104069	Palanimurugan V	I-CSE-B	/	/	/	/	/	/	/	/	/	/
37	920822104070	Partheeban A	I-CSE-B	/	/	/	/	/	/	/	/	/	/
38	920822104072	Perumal Kumar V	I-CSE-B	/	/	/	/	/	/	/	/	/	/
39	920822104073	Ponnalagar V	I-CSE-B	/	/	/	/	/	/	/	/	/	/
40	920822104075	Pooja Shri M	I-CSE-B	/	/	/	/	/	/	/	/	/	/
41	920822104078	Pragatheeswaran A	I-CSE-B	/	/	/	/	/	/	/	/	/	/
42	920822104079	Praveenkumar S	I-CSE-B	/	/	/	/	/	/	/	/	/	/





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DEPARTMENT OF SCIENCE & HUMANITIES

22SHAO01- ADD ON COURSE ON SET THEORY AND MATHEMATICAL LOGIC

ATTENDANCE OF STUDENTS

S. No.	Register Number	Student Name	Class	03/12/22		21/01/23		04/02/23		04/03/23		11/03/23	
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
43	920822104080	Priyadharshini G	I-CSE-B	/	/	/	/	/	/	/	/	/	/
44	920822104081	Priyadharshini R	I-CSE-B	/	/	/	/	/	/	/	/	/	/
45	920822104084	Ravikrishnan R	I-CSE-B	/	/	/	/	/	/	/	/	/	/
46	920822104085	Rexton George R	I-CSE-B	/	/	/	/	/	/	/	/	/	/
47	920822104090	Sakthivel P	I-CSE-B	/	/	/	/	/	/	/	/	/	/
48	920822104091	Sanjay T	I-CSE-B	/	/	/	/	/	/	/	/	/	/
49	920822104093	Santhiya S	I-CSE-B	/	/	/	/	/	/	/	/	/	/
50	920822104099	Sivaraj Kumar M	I-CSE-B	/	/	/	/	/	/	/	/	/	/
51	920822104100	Sofiga R	I-CSE-B	/	/	/	/	/	/	/	/	/	/
52	920822104102	Sree Yogeswari S	I-CSE-B	/	/	/	/	/	/	/	/	/	/
53	920822104106	Subha Sri R	I-CSE-B	/	/	/	/	/	/	/	/	/	/
54	920822104108	Sulaika P	I-CSE-B	/	/	/	/	/	/	/	/	/	/
55	920822104113	Tharini Priya J	I-CSE-B	/	/	/	/	/	/	/	/	/	/
56	920822104114	Veera Ramana M	I-CSE-B	/	/	/	/	/	/	/	/	/	/
57	920822104115	Vibin Dipak K	I-CSE-B	/	/	/	/	/	/	/	/	/	/
58	920822104116	Vignesh M	I-CSE-B	/	/	/	/	/	/	/	/	/	/
59	920822104120	Vimal Sanjay A	I-CSE-B	/	/	/	/	/	/	/	/	/	/
60	920822104121	Visali S	I-CSE-B	/	/	/	/	/	/	/	/	/	/
61	920822104124	Yagavarman S	I-CSE-B	/	/	/	/	/	/	/	/	/	/
62	920822104126	Yohith Kumar Nagarajan	I-CSE-B	/	/	/	/	/	/	/	/	/	/
63	920822105002	Abirami P	I-EEE	/	/	/	/	/	/	/	/	/	/
64	920822105003	Ajay S	I-EEE	/	/	/	/	/	/	/	/	/	/
65	920822105004	Ariyadharshini B	I-EEE	/	/	/	/	/	/	/	/	/	/
66	920822105008	Dhanushkumar K	I-EEE	/	/	/	/	/	/	/	/	/	/
67	920822105010	Dharani Daran M	I-EEE	/	/	/	/	/	/	/	/	/	/
68	920822105011	Dhinesh Prasad S	I-EEE	/	/	/	/	/	/	/	/	/	/
69	920822105012	Eswara Pandi R	I-EEE	/	/	/	/	/	/	/	/	/	/
70	920822105013	Hari Haran G	I-EEE	/	/	/	/	/	/	/	/	/	/
71	920822105023	Sakthi Vignesh S	I-EEE	/	/	/	/	/	/	/	/	/	/
72	920822105024	Sanjay R	I-EEE	/	/	/	/	/	/	/	/	/	/
73	920822105020	Premkumar K	I-EEE	/	/	/	/	/	/	/	/	/	/
74	920822105021	Raghul Kanna S	I-EEE	/	/	/	/	/	/	/	/	/	/
75	920822105026	Sivasangeetha A	I-EEE	/	/	/	/	/	/	/	/	/	/
76	920822105029	Vasanthakumar B	I-EEE	/	/	/	/	/	/	/	/	/	/
77	920822105031	Vimalleshwaran S	I-EEE	/	/	/	/	/	/	/	/	/	/
78	920822106001	Aajip S	I-ECE	/	/	/	/	/	/	/	/	/	/
79	920822106002	Archana A R	I-ECE	/	/	/	/	/	/	/	/	/	/
80	920822106003	Arunachalam R	I-ECE	/	/	/	/	/	/	/	/	/	/
81	920822106004	Arun Kumar S	I-ECE	/	/	/	/	/	/	/	/	/	/
82	920822106008	Balamurugan P	I-ECE	/	/	/	/	/	/	/	/	/	/





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DEPARTMENT OF SCIENCE & HUMANITIES

22SHAO01- ADD ON COURSE ON SET THEORY AND MATHEMATICAL LOGIC

ATTENDANCE OF STUDENTS

S. No.	Register Number	Student Name	Class	03/12/22		21/01/23		04/02/23		04/03/23		11/03/23	
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
83	920822106009	Bala Sowndharya M	I-ECE	/	/	/	/	/	/	/	/	/	/
84	920822106012	Dharshan V	I-ECE	/	/	/	/	/	/	/	/	/	/
85	920822106015	Geerthana T	I-ECE	/	/	/	/	/	/	/	/	/	/
86	920822106018	Gokul Krishnan R	I-ECE	/	/	/	/	/	/	/	/	/	/
87	920822106020	Harimadesh S	I-ECE	/	/	/	/	/	/	/	/	/	/
88	920822106022	Janagan A	I-ECE	/	/	/	/	/	/	/	/	/	/
89	920822106023	Janarthanan A S	I-ECE	/	/	/	/	/	/	/	/	/	/
90	920822106024	Jeeva T	I-ECE	/	/	/	/	/	/	/	/	/	/
91	920822106027	Jeyan James Raj A	I-ECE	/	/	/	/	/	/	/	/	/	/
92	920822106028	Jeyasri P	I-ECE	/	/	/	/	/	/	/	/	/	/
93	920822106029	Kevin Agath A	I-ECE	/	/	/	/	/	/	/	/	/	/
94	920822106030	Kohila K	I-ECE	/	/	/	/	/	/	/	/	/	/
95	920822106035	Mahesh Karthick M	I-ECE	/	/	/	/	/	/	/	/	/	/
96	920822106036	Maheswaran S	I-ECE	/	/	/	/	/	/	/	/	/	/
97	920822106037	Mani N	I-ECE	/	/	/	/	/	/	/	/	/	/
98	920822106040	Muraliprasanth A	I-ECE	/	/	/	/	/	/	/	/	/	/
99	920822106044	Ruthramoorthy M	I-ECE	/	/	/	/	/	/	/	/	/	/
100	920822106045	Sadhaa Sivam S	I-ECE	/	/	/	/	/	/	/	/	/	/
101	920822106046	Sakthivel N K	I-ECE	/	/	/	/	/	/	/	/	/	/
102	920822106049	Sarvesh T	I-ECE	/	/	/	/	/	/	/	/	/	/
103	920822106050	Sathan B	I-ECE	/	/	/	/	/	/	/	/	/	/
104	920822106041	Preetha S	I-ECE	/	/	/	/	/	/	/	/	/	/
105	920822106049	Sarvesh T	I-ECE	/	/	/	/	/	/	/	/	/	/
106	920822106056	Tamilkodi K	I-ECE	/	/	/	/	/	/	/	/	/	/
107	920822106034	Loganath S	I-ECE	/	/	/	/	/	/	/	/	/	/
108	920822106061	Vimalkumar K	I-ECE	/	/	/	/	/	/	/	/	/	/
109	920822106062	Vinoth P	I-ECE	/	/	/	/	/	/	/	/	/	/
110	920822106063	Viswanathan V	I-ECE	/	/	/	/	/	/	/	/	/	/
111	920822106042	Priya Dharshini S V	I-ECE	/	/	/	/	/	/	/	/	/	/
112	920822114001	Abdul Ajees A	I-MECH	/	/	/	/	/	/	/	/	/	/
113	920822114002	Alaguraja V	I-MECH	/	/	/	/	/	/	/	/	/	/
114	920822114003	Arvinth Nagarathinam B J	I-MECH	/	/	/	/	/	/	/	/	/	/
115	920822114006	Balamurugan K	I-MECH	/	/	/	/	/	/	/	/	/	/
116	920822114009	Kishan Kannan R	I-MECH	/	/	/	/	/	/	/	/	/	/
117	920822114010	Kishore Kumar P	I-MECH	/	/	/	/	/	/	/	/	/	/
118	920822114015	Muthuvel S	I-MECH	/	/	/	/	/	/	/	/	/	/
119	920822114012	Michael Stanley S	I-MECH	/	/	/	/	/	/	/	/	/	/
120	920822114013	Mohamed Asik K	I-MECH	/	/	/	/	/	/	/	/	/	/
121	920822114018	Riswanth S	I-MECH	/	/	/	/	/	/	/	/	/	/
122	920822114020	Sameer Ahamed J	I-MECH	/	/	/	/	/	/	/	/	/	/





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DEPARTMENT OF SCIENCE & HUMANITIES

22SHAO01- ADD ON COURSE ON SET THEORY AND MATHEMATICAL LOGIC

ATTENDANCE OF STUDENTS

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				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
123	920822114021	Sarabeshwaran R	I-MECH	/	/	/	/	/	/	/	/	/	/
124	920822114023	Shanmuga Priyan K	I-MECH	/	/	a	a	/	/	/	/	/	/
125	920822114024	Sriravankumar N	I-MECH	/	/	/	/	/	/	/	/	/	/
126	920822114025	Suriya S	I-MECH	/	/	/	/	/	/	/	/	/	/
127	920822114028	Veerasiva M	I-MECH	/	/	/	/	/	/	/	/	/	/
128	920822114029	Venkadeshwaran M	I-MECH	/	/	/	/	/	/	/	/	/	/
129	920822114030	Vidhyasagar M	I-MECH	/	/	/	/	/	/	/	/	/	/
130	920822205001	Aadharsh R D	I-IT	/	/	/	/	/	/	/	/	/	/
131	920822205002	Bhuvaneshwari S	I-IT	/	/	/	/	/	/	/	/	/	/
132	920822205003	Deepadharshini D	I-IT	/	/	/	/	/	/	/	/	/	/
133	920822205004	Divya D	I-IT	/	/	/	/	/	/	/	/	/	/
134	920822205001	Aadharsh R D	I-IT	/	/	/	/	/	/	/	/	/	/
135	920822205012	Kishore K	I-IT	/	/	/	/	/	/	/	/	/	/
136	920822205018	Nithish S	I-IT	/	/	/	/	/	/	/	/	/	/
137	920822205019	Nivasrahuman A	I-IT	/	/	/	/	/	/	/	/	/	/
138	920822205021	Parthiban S	I-IT	/	/	/	/	/	/	/	/	/	/
139	920822205022	Paveenraj P	I-IT	/	/	/	/	/	/	/	/	/	/
140	920822205025	Santhosh Kumar R	I-IT	/	/	/	/	/	/	/	/	/	/
141	920822205026	Shivaprasad K	I-IT	/	/	a	a	/	/	/	/	/	/
142	920822205027	Siddharth S	I-IT	/	/	/	/	/	/	/	/	/	/
143	920822205028	Sudalai Muthu A	I-IT	/	/	/	/	/	/	/	/	/	/
144	920822205030	Vishwaa N S U	I-IT	/	/	/	/	/	/	/	/	/	/
145	920822205031	Yaswanth Sanjay S	I-IT	/	/	/	/	/	/	/	/	/	/
146	920822205009	Harshavarthan B	I-IT	/	/	/	/	/	/	/	/	/	/
147	920822205011	Karan P	I-IT	/	/	/	/	/	/	/	/	/	/
148	920822205010	Joe Makdaniya D	I-IT	/	/	/	/	/	/	/	/	/	/
149	920822243001	Aaron S	I-AI&DS	/	/	/	/	/	/	/	/	/	/
150	920822243002	Abinaya Sree A	I-AI&DS	/	/	/	/	/	/	/	/	/	/
151	920822243003	Aishwarya Dharshini V	I-AI&DS	/	/	/	/	/	/	/	/	/	/
152	920822243004	Akash S	I-AI&DS	/	/	/	/	/	/	/	/	/	/
153	920822243005	Alen Thomas	I-AI&DS	/	/	/	/	/	/	/	/	/	/
154	920822243006	Anandhapranesh P	I-AI&DS	/	/	/	/	/	/	/	/	/	/
155	920822243010	Balaguru B	I-AI&DS	/	/	/	/	/	/	/	/	/	/
156	920822243011	Balavijay M	I-AI&DS	/	/	/	/	/	/	/	/	/	/
157	920822243012	Bavatharani K	I-AI&DS	/	/	/	/	/	/	/	/	/	/
158	920822243013	Bharath Bagavathi R	I-AI&DS	/	/	/	/	/	/	/	/	/	/
159	920822243016	Gokulprasanna V	I-AI&DS	/	/	/	/	/	/	/	/	/	/
160	920822243019	Issac Sunil	I-AI&DS	/	/	/	/	/	/	/	/	/	/
161	920822243021	Janani S	I-AI&DS	/	/	/	/	/	/	/	/	/	/
162	920822243022	Jegatheesh M	I-AI&DS	/	/	/	/	/	/	/	/	/	/
163	920822243023	Jeyasurya S	I-AI&DS	/	/	/	/	/	/	/	/	/	/
164	920822243025	Karthick J P	I-AI&DS	/	/	/	/	/	/	/	/	/	/
165	920822243026	Krishna C R	I-AI&DS	/	/	/	/	/	/	/	/	/	/
166	920822243027	Krithick P	I-AI&DS	/	/	/	/	/	/	/	/	/	/
167	920822243028	Lakshmana Perumal S	I-AI&DS	/	/	/	/	/	/	/	/	/	/
168	920822243031	Logeshwaran S	I-AI&DS	/	/	/	/	/	/	/	/	/	/
169	920822243032	Mayil Vaganan R	I-AI&DS	/	/	/	/	/	/	/	/	/	/





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DEPARTMENT OF SCIENCE & HUMANITIES

22SHAO01- ADD ON COURSE ON SET THEORY AND MATHEMATICAL LOGIC

ATTENDANCE OF STUDENTS

S. No.	Register Number	Student Name	Class	03/12/22		21/01/23		04/02/23		04/03/23		11/03/23	
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
170	920822243033	Mohamed Bisail M	I-AI&DS	/	/	/	/	/	/	/	/	/	/
171	920822243035	Nagarajan M	I-AI&DS	/	/	/	/	/	/	/	/	/	/
172	920822243036	Nanthagobalakrishnan M	I-AI&DS	/	/	/	/	/	/	/	/	/	/
173	920822243038	Padmesh M	I-AI&DS	/	/	/	/	/	/	/	/	/	/
174	920822243039	Prasanth J	I-AI&DS	/	/	/	/	/	/	/	/	/	/
175	920822243040	Prithiviraj R	I-AI&DS	/	/	/	/	/	/	/	/	/	/
176	920822243044	Sanjay P	I-AI&DS	/	/	/	/	/	/	/	/	/	/
177	920822243047	Siddharth M	I-AI&DS	/	/	/	/	/	/	/	/	/	/
178	920822243048	Siva S	I-AI&DS	/	/	/	/	/	/	/	/	/	/
179	920822243051	Sruthi P	I-AI&DS	/	/	/	/	/	/	/	/	/	/
180	920822243052	Subash P R	I-AI&DS	/	/	/	/	/	/	/	/	/	/
181	920822243055	Uthira Nagavel S	I-AI&DS	/	/	/	/	/	/	/	/	/	/
182	920822243056	Vigneshkumar B	I-AI&DS	/	/	/	/	/	/	/	/	/	/
PRESENT				182	182	180	180	181	181	181	181	182	182
ABSENT				-	-	2	2	1	1	1	1	-	-
PROGRAMME CO-ORDINATOR				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

HoD/S&H

Dr. P. S. Sathesh Kumar



PRINCIPAL

Dr. J. SUNDARARAJAN,

B.E., M.Tech., Ph.D.,

Principal

NPR College of Engineering & Technology
Natham, Dindigul (Dt) - 624 401.

DEPARTMENT OF SCIENCE & HUMANITIES

ADD ON COURSE ON SET THEORY AND MATHEMATICAL LOGIC

SAMPLE QUESTION PAPER WITH ANSWER KEY

1. Let A and B be two finite sets such that $n(A) = 20$, $n(B) = 28$ and $n(A \cup B) = 36$, then $n(A \cap B)$ is -----
 A. 12
 B. 21
 C. 25
 D. 43

2. A random variable is a real valued function whose domain in the form of a sample space and the range is -----
 A. $[0, 1]$
 B. $[0, \infty]$
 C. $(-\infty, \infty)$
 D. $(0, 1)$

3. If $\tan \theta = 1$ then the solution set of the equation is a/an -----
 A. Empty set
 B. Finite set
 C. Infinite set
 D. None of the above

3. $P(n) = 7^n - 3^n$ is divisible by ----- for every positive integer n.
 A. 7
 B. 5
 C. 3
 D. 4

4. Relationships are referred to as R.
 A. Ordered
 B. Partially ordered
 C. Un ordered
 D. Partially unordered

5. Let $L = \{1, 2, 3, 4, 6, 9, 36\}$ is the lattice find the number of complements of 9 is having in the below given Hasse diagram?



A. 2

B. 3

C. 4

D. 6



- Answer key: 1 A, 2 C, 3 C, 4 D, 5 A, 6 A, 7 D, 8 D, 9 B, 10 C.

(K. Y. h v r a t h
ap / m a t h s)

HOD/S&H
(Dr. P. S. Sathesh Kumar)





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DEPARTMENT OF SCIENCE & HUMANITIES

ADD ON COURSE ON SET THEORY AND MATHEMATICAL LOGIC

STUDENT'S FEEDBACK FORM

Name of the Student: <u>T. Sanjay</u>	Year / Semester: <u>I - CSE-B</u>
Name of the Program: <u>Set theory and Mathematical logic</u>	

CONTENT	EXCELLENT	GOOD	SATISFACTORY	POOR	VERY POOR
COURSE CONTENT	✓				
TECHNICAL SKILL		✓			
INTERACTION	✓				
PRACTICAL SESSION		✓			
COMMUNICATION	✓				

Any Other Comments / Suggestions:

It is very useful session for me. We learnt the basic concepts of set theory and mathematical logic.

T. Sanjay
STUDENT'S SIGNATURE





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DEPARTMENT OF SCIENCE & HUMANITIES

ADD ON COURSE ON SET THEORY AND MATHEMATICAL LOGIC

STUDENT'S FEEDBACK FORM

Name of the Student: <i>v. Alagu Raja</i>	Year / Semester: <i>I year Mech</i>
Name of the Program: <i>Set theory and mathematical logic</i>	

CONTENT	EXCELLENT	GOOD	SATISFACTORY	POOR	VERY POOR
COURSE CONTENT	✓				
TECHNICAL SKILL		✓			
INTERACTION	✓				
PRACTICAL SESSION	✓				
COMMUNICATION		✓			

Any Other Comments / Suggestions:

We study the fundamental concept of set theory. This course is helpful to me.



[Signature]
STUDENT'S SIGNATURE



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DEPARTMENT OF SCIENCE & HUMANITIES

ADD ON COURSE ON SET THEORY AND MATHEMATICAL LOGIC

STUDENT'S FEEDBACK FORM

Name of the Student: <u>P. Mani</u>	Year / Semester: <u>I - Civil</u>
Name of the Program: <u>Set Theory and Mathematical Logic</u>	

CONTENT	EXCELLENT	GOOD	SATISFACTORY	POOR	VERY POOR
COURSE CONTENT	✓				
TECHNICAL SKILL		✓			
INTERACTION	✓				
PRACTICAL SESSION		✓			
COMMUNICATION	✓				

Any Other Comments / Suggestions:

Conduct practical session more. In this course was very useful to me.



P. Mani
STUDENT'S SIGNATURE

DEPARTMENT OF SCIENCE & HUMANITIES

ADD ON COURSE ON SET THEORY AND MATHEMATICAL LOGIC

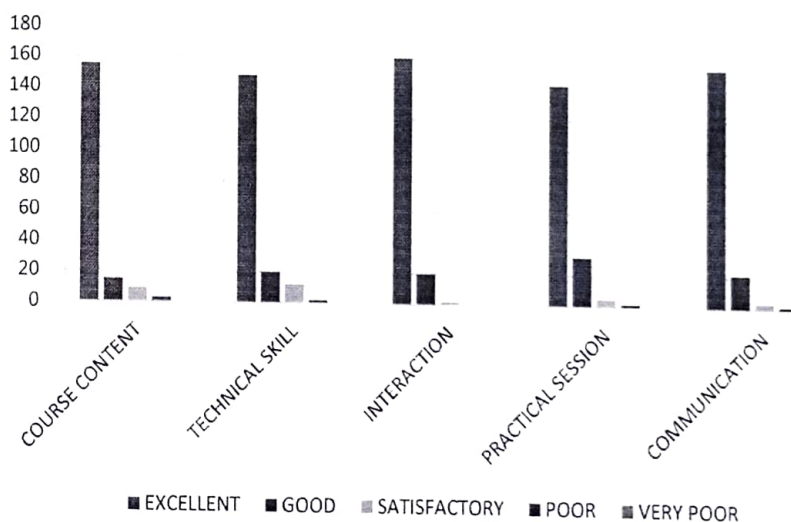
FEEDBACK ANALYSIS

TOTAL STRENGTH: 182

DATE : 11/03/2023

CONTENT	EXCELLENT	GOOD	SATISFACTORY	POOR	VERY POOR
COURSE CONTENT	155	15	9	3	0
TECHNICAL SKILL	148	20	12	2	0
INTERACTION	160	20	2	0	0
PRACTICAL SESSION	143	32	5	2	0
COMMUNICATION	154	22	4	2	0
AVERAGE	152	21.8	6.4	1.8	0

Number of Students successfully completed: 182



PROGRAM CO-ORDINATOR

HoD/S&H

IQAC

PRINCIPAL





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DEPARTMENT OF SCIENCE & HUMANITIES

ADD ON COURSE ON SET THEORY AND MATHEMATICAL LOGIC

SUMMARY REPORT

Department of Science & Humanities organized an add on course on "Set Theory and Mathematical Logic" which was conducted dated on 03/12/2022, 21/01/2023, 04/02/2023, 04/03/2023 & 11/03/2023 at NPRCET Rear Block Seminar Hall (Second Floor). Ms.S.Janani, I-year AI&DS delivered the welcome address during the inauguration session on 3/12/2022.


Dr. J. Sundararajan, Principal felicitated the students. He gave over view about Set Theory and Mathematical Logic and its role in Engineering and Technology.

Dr.T.Priya, Professor, Dr.A.Kanimozhi, Associate Professor and Dr.P.Rani, Associate Professor of Mathematics Department shared their knowledge about set theory with our students. This session helped our students to improve their basic mathematical knowledge.

Moreover, the resource persons shared their knowledge about the fundamental concepts of set theory and mathematical logic. 182 students from I-year B.E.and B.Tech attended this course and certificates were awarded to the students those who successfully completed this course and attended the Quiz.

Mr.R.S.Aadharsh, I year IT delivered the vote of thanks during the valedictory session conducted on 11/3/2023.

PROGRAM CO-ORDINATOR


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DEPARTMENT OF SCIENCE & HUMANITIES

ADD ON COURSE ON SET THEORY AND MATHEMATICAL LOGIC

COURSE MATERIAL

Chapter 1: <https://www.youtube.com/@nptel-nociitm9240>

Chapter 2 : <https://www.youtube.com/@iit>

Chapter 3 : <https://www.youtube.com/@nesoacademy>

Chapter 4: <https://www.youtube.com/@UnacademyComputerScience>

Chapter 5: <https://www.youtube.com/@maths.explained>


FURTHER STUDY:

1. Bloch, Ethan. Proofs and Fundamentals A First Course in Abstract Mathematics, Springer London, 2011.
2. Dowek, Gilles. Proofs and Algorithms: An Introduction to Logic and Computability, Springer London, 2011.
3. Hamilton, N. and J. Landin, Set Theory and the Structure of Arithmetic, Literary Licensing, LLC, 2012
4. Cupillari, Antonella. The nuts and bolts of proofs: an introduction to mathematical proofs, Waltham, MA : Academic Press, 2013.
5. Dowek, Gilles. Proofs and Algorithms: An Introduction to Logic and Computability, Springer London, 2011.


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DEPARTMENT OF SCIENCE & HUMANITIES

Certificate of Completion

This is to certify that Mr./Ms. J.Naveen I - CSE has successfully completed the five day Add on course entitled "Set Theory and Mathematical Logic" organized by Department of Science & Humanities, NPR College of Engineering & Technology. The course was conducted on 03/12/2022, 21/01/2023, 04/02/2023, 04/03/2023 and 11/03/2023.

CONGRATULATIONS ON YOUR ACHIEVEMENT!


PROGRAMME CO-ORDINATOR
[MR.K.YOGUNATH]


HOD/S&H
[DR.P.S.SATHEESH KUMAR]


PRINCIPAL
[DR.J.SUNDARARAJAN]

