

SYLLABUS/
CURRICULUM



PANDIAN SARASWATHI YADAV ENGINEERING COLLEGE

(Approved by AICTE & Affiliated to Anna University, Chennai)

Madurai - Sivagangai Highway, Arasanoor, Thirumansolai Post, Sivagangai Dt. - 630 561, Tamilnadu
Mobile : 9842102628, 7373002628 Email: info@psyec.edu.in Website : www.psyec.edu.in

City Office : 10, Pandian Saraswathi St, Sivagami Nagar, Narayanapuram, Madurai - 625 014, Telefax- 0452 2682338, Mobile : 98423-02628

Department of Electrical And Electronics Engineering

Academic Year 2022-2023

VACEE2223SPVD-Solar PV Systems Design

OBJECTIVE OF THE COURSE

- Understand the basic principles of solar energy and photovoltaic technology.
- Learn how to design, size, and optimize solar PV systems.
- Gain knowledge of the components and configurations of PV systems.
- Perform technical and economic analyses of PV systems.
- Ensure compliance with standards and regulations.
- Develop practical skills through hands-on projects and laboratory work.

CHAPTER 1:

Types of Solar Power Plant: Grid connected solar Power Plant-Grid interactive solar power plant -Net Metering Solar Power Plant-Off-Grid / Hybrid solar power plant-Schemes of solar power plant

CHAPTER 2:

Selection of site and shadow analysis: PV module structure inter row spacing calculation-Pitch analysis--Selection of PV module tilt angle-Near shading object calculation-Site survey and plant assessment-Type of solar radiation-Irradiance assessment and comparison-Solar Radiation Data-Sun path Diagram-Defining the Position of the Sun-Solar Altitude-Geometric Effects-Tilting Solar Modules-Magnetic North & True North

CHAPTER 3:

Selection of PV module technology: Introduction-Crystalline technology-Thin film technology-Bi-facial technology-Comparison between PV module technology-Comparison between solar power plant energy out put

CHAPTER 4:

Selection of PV module (cells and BOM) and' sizing: Types Crystalline module cells-Manufacturing process of PV cells-Comparison between mono crystalline-Selection of PV cells-Selection of front and rear sheet-Selection of PV module glass-Selection of EVA sheet , Bus bar and frame-Characteristics of a Solar Cell- Power Characteristics of a Solar Cell-Fill factor and Equivalent Solar cell Circuit-STC and NOCT

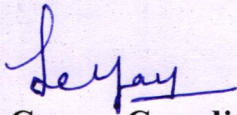
CHAPTER 5:

Inverters Selection and Sizing (Grid Connection and Off Grid):Types of solar inverter-Selection of string /central / off grid inverter-Selection of power conditioning unit (PCU)-Sizing of solar inverter for roof top and grid connected projects-Selection and sizing of string inverter-Selection and sizing of central inverter-AC/DC overloading calculation and losses-Protection requirement of solar inverter-Passive and active protection-Anti- islanding protection-Mounting arrangement of string inverter-IEC/IEEE /Grid Compliance of inverters-Grid-Connected Inverters vs. Stand-Alone Inverters-Inverter Communication and remote monitoring-Inverter Products For Use In India

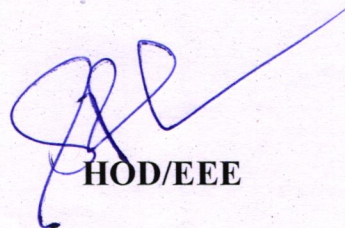
OUTCOMES:

- To pursue careers in the solar energy industry, equipped with the knowledge and skills necessary to design, implement, and manage solar PV systems effectively.
- Evaluate the potential of new technologies and their integration into existing systems.

Total: 35 hours



Course Coordinator



HOD/EEE


PRINCIPAL



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Department of Electrical And Electronics Engineering

Academic Year 2022-2023

VACEE2223SPVD-Solar PV Systems Design

Course Schedule

Date	Time	TOPICS
06/02/ 2023	9.00 am to 12.30 pm	Types of Solar Power Plant: Grid connected solar Power Plant-Grid interactive solar power plant -Net Metering Solar Power Plant-Off-Grid / Hybrid solar power plant-Schemes of solar power plant
	1.00 pm to 5.00 pm	
07/02/ 2023	9.00 am to 12.30 pm	Selection of site and shadow analysis: PV module structure inter row spacing calculation-Pitch analysis--Selection of PV module tilt angle-Near shading object calculation-Site survey and plant assessment-Type of solar radiation-Irradiance assessment and comparison-Solar Radiation Data-Sun path Diagram-Defining the Position of the Sun-Solar Altitude-Geometric Effects-Tilting Solar Modules-Magnetic North & True North
	1.00 pm to 5.00 pm	
08/02/ 2023	9.00 am to 12.30 pm	Selection of PV module technology: Introduction-Crystalline technology-Thin film technology-Bi-facial technology-Comparison between PV module technology-Comparison between solar power plant energy out put
	1.00 pm to 5.00 pm	
09/02/ 2023	9.00 am to 12.30 pm	Selection of PV module (cells and BOM) and sizing: Types Crystalline module cells-Manufacturing process of PV cells-Comparison between mono crystalline-Selection of PV cells-Selection of front and rear sheet-Selection of PV module glass-Selection of EVA sheet , Bus bar and frame-Characteristics of a Solar Cell- Power Characteristics of a Solar Cell-Fill factor and Equivalent Solar cell Circuit-STC and NOCT
	1.00 pm to 5.00 pm	
10/02/ 2023	9.00 am to 12.30 pm	Inverters Selection and Sizing (Grid Connection and Off Grid): Types of solar inverter-Selection of string /central / off grid inverter-Selection of power conditioning unit (PCU)-Sizing of solar inverter for roof top and grid connected projects-Selection and sizing of string inverter-Selection and sizing of central inverter-AC/DC overloading calculation and losses-Protection requirement of solar inverter-Passive and active protection-Anti- islanding protection-Mounting arrangement of string inverter-IEC/IEEE /Grid Compliance of inverters-Grid-Connected Inverters vs. Stand-Alone Inverters-Inverter Communication and remote monitoring-Inverter Products For Use In India
	1.00 pm to 5.00 pm	

Total Hours 35

Tea Break : 10:40 am to 10:55am & 02:45 pm to 15:00 pm

Lunch Break : 12:30pm to 01:00pm

Course Coordinator

HOD/EEE

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Academic Year 2022 – 2023

One page Report

Name of the course : Solar PV Systems Design
Development Course Code : VACEE2223SPVD
Course Coordinator : Mrs.K.JeyaPriya
Date/Duration : 06.02.2023-10.02.2023 — 35 hours

I here affirm that the Third and Final Year students of strength 27 have been taught the value-added course title “Solar PV Systems Design” as per the syllabus and completed within the stipulated time duration.

I confirm that the value-added course titled “Solar PV Systems Design” has been conducted in the beginning of the semester and course delivery along with the attendance of the students was recorded.

I confirmed that all the students were actively participated in the course and the eligible students were certified for the course.

Mr.K.JeyaPriya,

AP/EEE

Course Co-Ordinator

Mrs.S.Pandimeena,

AP/EEE

Head of the Department

Dr.R.RAJA,

Principal

Dr. R. RAJA M.E., Ph.D.,
PRINCIPAL
PANDIAN SARASWATHI YADAV
ENGINEERING COLLEGE
Arasanoor, Thirumansolai P.O-630 56
Sivagangai Dist. Tamil Nadu

ASSESSMENT PROCEDURE



PANDIAN SARASWATHI YADAV ENGINEERING COLLEGE

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Department of Electrical And Electronics Engineering

Academic Year 2022-2023

VACEE2223SPVD-Solar PV Systems Design

Assessment Questions with Answer

1. A solar cell converts light energy into _____

- a) Electrical energy
- b) Thermal energy
- c) Sound energy
- d) Heat energy

Answer: a

2. There are three types of the solar cells.

- a) True
- b) False

Answer: a

3. Series and parallel combination of the solar cell is known as _____

- a) Solar array
- b) Solar light
- c) Solar sight
- d) Solar eye

Answer: a

4. Full form of FF in the solar field is _____

- a) Form factor
- b) Fill factor
- c) Face factor
- d) Fire factor

Answer: b

5. Calculate Fill factor using the data: $P_{max}=15$ W, $V_{oc}=18$ V, $I_{sc}=4$ A.

- a) .65
- b) .59
- c) .20
- d) .98

Answer: c

6. Material used for making solar cell is _____

- a) Silicon
- b) Carbon
- c) Sodium
- d) Magnesium

Answer: a

7. The term photo voltaic comes from _____

- a) Spanish
- b) Greek
- c) German
- d) English

Answer: b

8. A typical output of a solar cell is

- A. 0.1 V
- B. 0.26 V
- C. 1.1 V
- D. 2 V

Answer: B

9. The efficiency of a solar cell may be in the range

- A. 2 to 5%
- B. 10 to 15%
- C. 30 to 40%
- D. 70 to 80%

Answer: B

10. A module in a solar panel refers to

- a. Series arrangement of solar cells.
- b. Parallel arrangement of solar cells.
- c. Series and parallel arrangement of solar cells.
- d. None of the above.

Answer: C

11. The current density of a photo voltaic cell ranges from

- a. 10 – 20 mA/cm²
- b. 40 – 50 mA/cm²
- c. 20 – 40 mA/cm²
- d. 60 – 100 mA/cm²

Answer: b

12. The function of a solar collector is to convert.....

- A. Solar Energy into Electricity
- B. Solar Energy radiation
- C. Solar Energy thermal energy
- D. Solar Energy mechanical energy

Answer: C

13. What is the rate of solar energy reaching the earth surface?

- a) 1016W
- b) 865W
- c) 2854W
- d) 1912W

Answer: a

14. What is total amount of solar energy received by earth and atmosphere?

- a) 3.8×10^{24} J/year
- b) 9.2×10^{24} J/year
- c) 5.4×10^{24} J/year
- d) 2.1×10^{24} J/year

Answer: a

15. The process of converting light (photons) to electricity (voltage) is called:

- a) PV effect.
- b) solar cell.
- c) radiation.

Answer: a



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Department of Electrical And Electronics Engineering

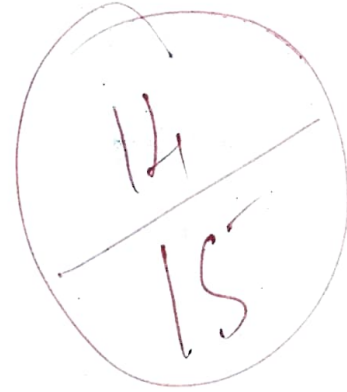
Academic Year 2022-2023

VACEE2223SPVD-Solar PV Systems Design

Assessment Test Paper

REGISTER NUMBER: 912020105011

NAME OF THE STUDENT: P. Supathi



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- a) Electrical energy
- b) Thermal energy
- c) Sound energy
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- b) False

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- b) Carbon
- c) Sodium
- d) Magnesium

7. The term photo voltaic comes from _____

- a) Spanish
- b) Greek
- c) German
- d) English

8. A typical output of a solar cell is

~~1 V~~
~~2 V~~

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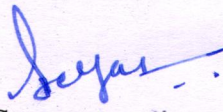
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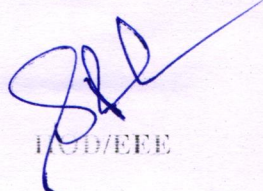
Department of Electrical and Electronics Engineering


Student Performance Sheet

Academic Year : 2022-2023
Course Code : VACEE2223SPVD
Course Name : Solar PV Systems Design
Duration of hours : 35
Period of Course : 06.02.2023-10.2.2023

Assessment Mark			Marks
Sl. No	Register Number	Student Name	
1	912020105001	S.BOSE	76
2	912020105002	M.DHANAPRAKASH	75
3	912020105003	D.DHARINISHRI	85
4	912020105005	L.DINESHKUMAR	86
5	912020105006	P.GOBZ	89
6	912020105007	P.GURUPRASATH	90
7	912020105008	M.PRIYADHARSHINI	93
8	912020105009	S.SANJAY	95
9	912020105010	BSANTHOSHINI	94
10	912020105011	P.SWATHI	90
11	912020105012	A.THANVEER AHAMED	94
12	912020105013	SAJAYSETHUPATHI	93
13	912020105022	K.MOHANASUNDARAM	92
14	912020105024	A.FRAGALATHAN	91
15	912020105025	RSATHYA	90
16	912019105001	T.BABU	88
17	912019105002	K.DINESH	86
18	912019105003	J.GODSON	85
19	912019105004	M.KAVIYARASU	84
20	912019105005	MPMADHANAGOPALAN	83
21	912019105006	K.MOORTHY	82
22	912019105007	M.PANTHEESWARAN	81
23	912019105008	A.SANJEEVKUMAR	75
24	912019105009	SSANTHOSH KUMAR	78
25	912019105010	RSIVANESAN	77
26	912019105012	M.SRINALAYIKA	80
27	912019105013	M.VALLARASU.	81


Course coordinator


In-charge of Department


PRINCIPAL

STUDENTS ATTENDANCE

Pandian Saraswathi yadav Engineering College, Arasanoor -630561
Department of Electrical and Electronics Engineering
Student Attendance Sheet

Academic Year : 2022-2023
 Course Code : VACEE2223SPVD
 Course Name : Solar PV Systems Design
 Duration of hours : 35
 Period of Course : 06.02.2023-10.2.2023

Attendance Sheet			Date:					
Sl. No	Register Number	Student Name	09.00 am - 10.00 am	10.00 am - 11.00 am	11.15 am - 12.15pm	01.00 pm - 02.00 pm	02.00 pm - 03.00 pm	03.15 pm - 04.15 pm
1	912020105001	S.BOSE	S. Bose	S. Bose	S. Bose	S. Bose	S. Bose	S. Bose
2	912020105002	M.DHANAPRAKASH	M.Dhp	M.Dhp	M.Dhp	M.Dhp	M.Dhp	M.Dhp
3	912020105003	D.DHARINISHRI	D.Dhp	D.Dhp	D.Dhp	D.Dhp	D.Dhp	D.Dhp
4	912020105005	L.DINESHKUMAR	L.Dhp	L.Dhp	L.Dhp	L.Dhp	L.Dhp	L.Dhp
5	912020105006	P.GOBI	P.GOBI	P.GOBI	P.GOBI	P.GOBI	P.GOBI	P.GOBI
6	912020105007	P.GURUPRASATH	P.Gur	P.Gur	P.Gur	P.Gur	P.Gur	P.Gur
7	912020105008	M.PRIYADHARSHINI	M.Pr	M.Pr	M.Pr	M.Pr	M.Pr	M.Pr
8	912020105009	S.SANJAY	Sanjay	Sanjay	Sanjay	Sanjay	Sanjay	Sanjay
9	912020105010	B.SANTHOSHINI	B.San	B.San	B.San	B.San	B.San	B.San
10	912020105011	P.SWATHI	swathi	swathi	swathi	swathi	swathi	swathi
11	912020105012	A.THANVEER AHAMED	A.Than	A.Than	A.Than	A.Than	A.Than	A.Than
12	912020105301	S.AJAYSETHUPATHI	S.AJ	S.AJ	S.AJ	S.AJ	S.AJ	S.AJ
13	912020105302	K.MOHANASUNDARAM	K.Moh	K.Moh	K.Moh	K.Moh	K.Moh	K.Moh
14	912020105304	A.PRAGALATHAN	A.Pra	A.Pra	A.Pra	A.Pra	A.Pra	A.Pra
15	912020105305	R.SATHYA	Sathya	Sathya	Sathya	Sathya	Sathya	Sathya
16	912019105001	T.BABU	T.BABU	T.BABU	T.BABU	T.BABU	T.BABU	T.BABU
17	912019105002	K.DINESH	dinesh	dinesh	dinesh	dinesh	dinesh	dinesh
18	912019105003	J.GODSON	J.God	J.God	J.God	J.God	J.God	J.God
19	912019105004	M.KAVIYARASU	M.Kav	M.Kav	M.Kav	M.Kav	M.Kav	M.Kav
20	912019105005	MP.MADHANAGOPALAN	MP.MAD	MP.MAD	MP.MAD	MP.MAD	MP.MAD	MP.MAD
21	912019105006	K.MOORTHY	moorthi	moorthi	moorthi	moorthi	moorthi	moorthi
22	912019105007	M.PANTHEESWARAN	M.Pan	M.Pan	M.Pan	M.Pan	M.Pan	M.Pan
23	912019105008	A.SANJEEVKUMAR	A.San	A.San	A.San	A.San	A.San	A.San
24	912019105009	S.SATHISHKUMAR	S.Sath	S.Sath	S.Sath	S.Sath	S.Sath	S.Sath
25	912019105010	R.SIVANESAN	R.Siv	R.Siv	R.Siv	R.Siv	R.Siv	R.Siv
26	912019105012	M.SRIMALAVIKA	M.Sri	M.Sri	M.Sri	M.Sri	M.Sri	M.Sri
27	912019105013	M.VALLARASU	M.Val	M.Val	M.Val	M.Val	M.Val	M.Val

[Signature]
 Course coordinator

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 HOD/EEE

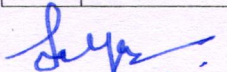
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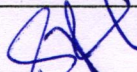
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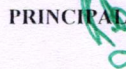
Student Attendance Sheet

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2	912020105002	M.DHANAPRAKASH	M.Dh	M.Dh	M.Dh	M.Dh	M.Dh	M.Dh
3	912020105003	D.DHARINISHRI	D.Dh	D.Dh	D.Dh	D.Dh	D.Dh	D.Dh
4	912020105005	L.DINESHKUMAR	L.Di	L.Di	L.Di	L.Di	L.Di	L.Di
5	912020105006	P.GOBI	P.Gobi	P.Gobi	P.Gobi	P.Gobi	P.Gobi	P.Gobi
6	912020105007	P.GURUPRASATH	P.Gur	P.Gur	P.Gur	P.Gur	P.Gur	P.Gur
7	912020105008	M.PRIYADHARSHINI	M.Pr	M.Pr	M.Pr	M.Pr	M.Pr	M.Pr
8	912020105009	S.SANJAY	S.Sa	S.Sa	S.Sa	S.Sa	S.Sa	S.Sa
9	912020105010	B.SANTHOSHINI	B.Sa	B.Sa	B.Sa	B.Sa	B.Sa	B.Sa
10	912020105011	P.SWATHI	P.Sw	P.Sw	P.Sw	P.Sw	P.Sw	P.Sw
11	912020105012	A.THANVEER AHAMED	A.Th	A.Th	A.Th	A.Th	A.Th	A.Th
12	912020105301	S.AJAYSETHUPATHI	S.Aj	S.Aj	S.Aj	S.Aj	S.Aj	S.Aj
13	912020105302	K.MOHANASUNDARAM	K.Mo	K.Mo	K.Mo	K.Mo	K.Mo	K.Mo
14	912020105304	A.PRAGALATHAN	A.Pr	A.Pr	A.Pr	A.Pr	A.Pr	A.Pr
15	912020105305	R.SATHYA	R.Sa	R.Sa	R.Sa	R.Sa	R.Sa	R.Sa
16	912019105001	T.BABU	T.Babu	T.Babu	T.Babu	T.Babu	T.Babu	T.Babu
17	912019105002	K.DINESH	K.D	K.D	K.D	K.D	K.D	K.D
18	912019105003	J.GODSON	J.G	J.G	J.G	J.G	J.G	J.G
19	912019105004	M.KAVIYARASU	M.Ka	M.Ka	M.Ka	M.Ka	M.Ka	M.Ka
20	912019105005	MP.MADHANAGOPALAN	MP.M	MP.M	MP.M	MP.M	MP.M	MP.M
21	912019105006	K.MOORTHY	K.M	K.M	K.M	K.M	K.M	K.M
22	912019105007	M.PANTHEESWARAN	M.Pa	M.Pa	M.Pa	M.Pa	M.Pa	M.Pa
23	912019105008	A.SANJEEVKUMAR	A.Sa	A.Sa	A.Sa	A.Sa	A.Sa	A.Sa
24	912019105009	S.SATHISHKUMAR	S.Sa	S.Sa	S.Sa	S.Sa	S.Sa	S.Sa
25	912019105010	R.SIVANESAN	R.Si	R.Si	R.Si	R.Si	R.Si	R.Si
26	912019105012	M.SRIMALAVIKA	M.Sa	M.Sa	M.Sa	M.Sa	M.Sa	M.Sa
27	912019105013	M.VALLARAJU	M.Val	M.Val	M.Val	M.Val	M.Val	M.Val


Course coordinator


HOD/EEE

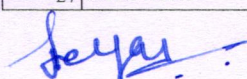

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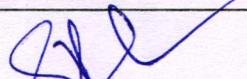
Pandian Saraswathi yadav Engineering College, Arasanoor -630561
Department of Electrical and Electronics Engineering

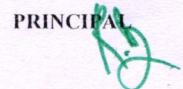
Student Attendance Sheet

Academic Year : 2022-2023
Course Code : VACEE2223SPVD
Course Name : Solar PV Systems Design
Duration of hours : 35
Period of Course : 06.02.2023-10.2.2023

Attendance Sheet			Date:					
Sl. No	Register Number	Student Name	09.00 am - 10.00 am	10.00 am - 11.00 am	11.15 am - 12.15 pm	01.00 pm - 02.00 pm	02.00 pm - 03.00 pm	03.15 pm - 04.15 pm
1	912020105001	S.BOSE	S.Bose	S.Bose	S.Bose	S.Bose	S.Bose	S.Bose
2	912020105002	M.DHANAPRAKASH	M.Dh	M.Dh	M.Dh	M.Dh	M.Dh	M.Dh
3	912020105003	D.DHARINISHRI	D.Dhi	D.Dhi	D.Dhi	D.Dhi	D.Dhi	D.Dhi
4	912020105005	L.DINESHKUMAR	L.Di	L.Di	L.Di	L.Di	L.Di	L.Di
5	912020105006	P.GOBI	P.Gobi	P.Gobi	P.Gobi	P.Gobi	P.Gobi	P.Gobi
6	912020105007	P.GURUPRASATH	P.Gur	P.Gur	P.Gur	P.Gur	P.Gur	P.Gur
7	912020105008	M.PRIYADHARSHINI	M.Pr	M.Pr	M.Pr	M.Pr	M.Pr	M.Pr
8	912020105009	S.SANJAY	Sanjay	Sanjay	Sanjay	Sanjay	Sanjay	Sanjay
9	912020105010	B.SANTHOSHINI	B.Sa	B.Sa	B.Sa	B.Sa	B.Sa	B.Sa
10	912020105011	P.SWATHI	P.Sw	P.Sw	P.Sw	P.Sw	P.Sw	P.Sw
11	912020105012	A.THANVEER AHAMED	A.Th	A.Th	A.Th	A.Th	A.Th	A.Th
12	912020105301	S.AJAYSETHUPATHI	Ajay.S	Ajay.S	Ajay.S	Ajay.S	Ajay.S	Ajay.S
13	912020105302	K.MOHANASUNDARAM	K.Mo	K.Mo	K.Mo	K.Mo	K.Mo	K.Mo
14	912020105304	A.PRAGALATHAN	A.Pr	A.Pr	A.Pr	A.Pr	A.Pr	A.Pr
15	912020105305	R.SATHYA	R.Sa	R.Sa	R.Sa	R.Sa	R.Sa	R.Sa
16	912019105001	T.BABU	T.Babu	T.Babu	T.Babu	T.Babu	T.Babu	T.Babu
17	912019105002	K.DINESH	Dinesh	Dinesh	Dinesh	Dinesh	Dinesh	Dinesh
18	912019105003	J.GODSON	J.G	J.G	J.G	J.G	J.G	J.G
19	912019105004	M.KAVIYARASU	M.Ko	M.Ko	M.Ko	M.Ko	M.Ko	M.Ko
20	912019105005	MP.MADHANAGOPALAN	MP.M	MP.M	MP.M	MP.M	MP.M	MP.M
21	912019105006	K.MOORTHY	K.Mo	K.Mo	K.Mo	K.Mo	K.Mo	K.Mo
22	912019105007	M.PANTHEESWARAN	M.Pan	M.Pan	M.Pan	M.Pan	M.Pan	M.Pan
23	912019105008	A.SANJEEVKUMAR	A.Sk	A.Sk	A.Sk	A.Sk	A.Sk	A.Sk
24	912019105009	S.SATHISHKUMAR	S.Sk	S.Sk	S.Sk	S.Sk	S.Sk	S.Sk
25	912019105010	R.SIVANESAN	R.S	R.S	R.S	R.S	R.S	R.S
26	912019105012	M.SRIMALAVIKA	M.Sl	M.Sl	M.Sl	M.Sl	M.Sl	M.Sl
27	912019105013	M.VALLARASU	M.Val	M.Val	M.Val	M.Val	M.Val	M.Val


Course coordinator


HOD

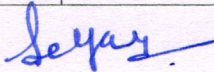

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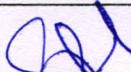
Pandian Saraswathi yadav Engineering College, Arasanoor -630561
Department of Electrical and Electronics Engineering

Student Attendance Sheet

Academic Year : 2022-2023
Course Code : VACEE2223SPVD
Course Name : Solar PV Systems Design
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Attendance Sheet			Date:					
Sl. No	Register Number	Student Name	09.00 am - 10.00 am	10.00 am - 11.00 am	11.15 am - 12.15pm	01.00 pm - 02.00 pm	02.00 pm - 03.00 pm	03.15 pm - 04.15 pm
1	912020105001	S.BOSE	S.Bos	S.Bos	S.Bos	S.Bos	S.Bos	S.Bos
2	912020105002	M.DHANAPRAKASH	M.Dha	M.Dha	M.Dha	M.Dha	M.Dha	M.Dha
3	912020105003	D.DHARINISHRI	D.Dh	D.Dh	D.Dh	D.Dh	D.Dh	D.Dh
4	912020105005	L.DINESHKUMAR	L.Di	L.Di	L.Di	L.Di	L.Di	L.Di
5	912020105006	P.GOBI	P.G	P.G	P.G	P.G	P.G	P.G
6	912020105007	P.GURUPRASATH	P.Gur	P.Gur	P.Gur	P.Gur	P.Gur	P.Gur
7	912020105008	M.PRIYADHARSHINI	M.Pri	M.Pri	M.Pri	M.Pri	M.Pri	M.Pri
8	912020105009	S.SANJAY	S.S	S.S	S.S	S.S	S.S	S.S
9	912020105010	B.SANTHOSHINI	B.S	B.S	B.S	B.S	B.S	B.S
10	912020105011	P.SWATHI	P.S	P.S	P.S	P.S	P.S	P.S
11	912020105012	A.THANVEER AHAMED	A.Ah	A.Ah	A.Ah	A.Ah	A.Ah	A.Ah
12	912020105301	S.AJAYSETHUPATHI	S.Aj	S.Aj	S.Aj	S.Aj	S.Aj	S.Aj
13	912020105302	K.MOHANASUNDARAM	K.Mo	K.Mo	K.Mo	K.Mo	K.Mo	K.Mo
14	912020105304	A.PRAGALATHAN	A.Pro	A.Pro	A.Pro	A.Pro	A.Pro	A.Pro
15	912020105305	R.SATHYA	R.Sa	R.Sa	R.Sa	R.Sa	R.Sa	R.Sa
16	912019105001	T.BABU	T.B	T.B	T.B	T.B	T.B	T.B
17	912019105002	K.DINESH	K.D	K.D	K.D	K.D	K.D	K.D
18	912019105003	J.GODSON	J.G	J.G	J.G	J.G	J.G	J.G
19	912019105004	M.KAVIYARASU	M.Ka	M.Ka	M.Ka	M.Ka	M.Ka	M.Ka
20	912019105005	MP.MADHANAGOPALAN	MP.M	MP.M	MP.M	MP.M	MP.M	MP.M
21	912019105006	K.MOORTHY	K.Mo	K.Mo	K.Mo	K.Mo	K.Mo	K.Mo
22	912019105007	M.PANTHEESWARAN	M.Pan	M.Pan	M.Pan	M.Pan	M.Pan	M.Pan
23	912019105008	A.SANJEEVKUMAR	A.S	A.S	A.S	A.S	A.S	A.S
24	912019105009	S.SATHISHKUMAR	S.Sa	S.Sa	S.Sa	S.Sa	S.Sa	S.Sa
25	912019105010	R.SIVANESAN	R.S	R.S	R.S	R.S	R.S	R.S
26	912019105012	M.SRIMALAVIKA	M.Sri	M.Sri	M.Sri	M.Sri	M.Sri	M.Sri
27	912019105013	M.VALLARASU	M.Val	M.Val	M.Val	M.Val	M.Val	M.Val


Course coordinator


HOD/EEE

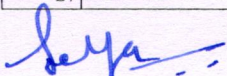

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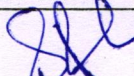
Pandian Saraswathi yadav Engineering College, Arasanoor -630561
Department of Electrical and Electronics Engineering

Student Attendance Sheet

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Sl. No	Register Number	Student Name	09.00 am - 10.00 am	10.00 am - 11.00 am	11.15 am - 12.15pm	01.00 pm - 02.00 pm	02.00 pm - 03.00 pm	03.15 pm - 04.15 pm
1	912020105001	S.BOSE	S.Bose	S.Bose	S.Bose	S.Bose	S.Bose	S.Bose
2	912020105002	M.DHANAPRAKASH	M.Dh	M.Dh	M.Dh	M.Dh	M.Dh	M.Dh
3	912020105003	D.DHARINISHRI	D.Dh	D.Dh	D.Dh	D.Dh	D.Dh	D.Dh
4	912020105005	L.DINESHKUMAR	L.D	L.D	L.D	L.D	L.D	L.D
5	912020105006	P.GOBI	P.G	P.G	P.G	P.G	P.G	P.G
6	912020105007	P.GURUPRASATH	P.Gu	P.Gu	P.Gu	P.Gu	P.Gu	P.Gu
7	912020105008	M.PRIYADHARSHINI	M.P	M.P	M.P	M.P	M.P	M.P
8	912020105009	S.SANJAY	S.S	S.S	S.S	S.S	S.S	S.S
9	912020105010	B.SANTHOSHINI	B.S	B.S	B.S	B.S	B.S	B.S
10	912020105011	P.SWATHI	P.S	P.S	P.S	P.S	P.S	P.S
11	912020105012	A.THANVEER AHAMED	A.TA	A.TA	A.TA	A.TA	A.TA	A.TA
12	912020105301	S.AJAYSETHUPATHI	S.AS	S.AS	S.AS	S.AS	S.AS	S.AS
13	912020105302	K.MOHANASUNDARAM	K.MO	K.MO	K.MO	K.MO	K.MO	K.MO
14	912020105304	A.PRAGALATHAN	A.PR	A.PR	A.PR	A.PR	A.PR	A.PR
15	912020105305	R.SATHYA	R.Sa	R.Sa	R.Sa	R.Sa	R.Sa	R.Sa
16	912019105001	T.BABU	T.B	T.B	T.B	T.B	T.B	T.B
17	912019105002	K.DINESH	K.D	K.D	K.D	K.D	K.D	K.D
18	912019105003	J.GODSON	J.G	J.G	J.G	J.G	J.G	J.G
19	912019105004	M.KAVIYARASU	M.Ka	M.Ka	M.Ka	M.Ka	M.Ka	M.Ka
20	912019105005	MP.MADHANAGOPALAN	MP.M	MP.M	MP.M	MP.M	MP.M	MP.M
21	912019105006	K.MOORTHY	K.Mo	K.Mo	K.Mo	K.Mo	K.Mo	K.Mo
22	912019105007	M.PANTHEESWARAN	M.Pan	M.Pan	M.Pan	M.Pan	M.Pan	M.Pan
23	912019105008	A.SANJEEVKUMAR	A.S	A.S	A.S	A.S	A.S	A.S
24	912019105009	S.SATHISHKUMAR	S.S	S.S	S.S	S.S	S.S	S.S
25	912019105010	R.SIVANESAN	R.S	R.S	R.S	R.S	R.S	R.S
26	912019105012	M.SRIMALAVIKA	M.Sri	M.Sri	M.Sri	M.Sri	M.Sri	M.Sri
27	912019105013	M.VALLARASU	M.Val	M.Val	M.Val	M.Val	M.Val	M.Val


Course coordinator


MOD/EEE

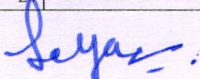

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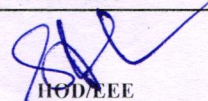
Pandian Saraswathi yadav Engineering College, Arasanoor -630561
Department of Electrical and Electronics Engineering

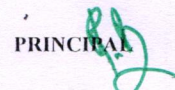
Student Attendance Sheet

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2	912020105002	M.DHANAPRAKASH	DP	DP	DP	DP	DP	DP
3	912020105003	D.DHARINISHRI	DP	DP	DP	DP	DP	DP
4	912020105005	L.DINESHKUMAR	LD	LD	LD	LD	LD	LD
5	912020105006	P.GOBI	PGR	PGR	PGR	PGR	PGR	PGR
6	912020105007	P.GURUPRASATH	P-Gur	P-Gur	P-Gur	P-Gur	P-Gur	P-Gur
7	912020105008	M.PRIYADHARSHINI	M.PR	M.PR	M.PR	M.PR	M.PR	M.PR
8	912020105009	S.SANJAY	S-S	S-S	S-S	S-S	S-S	S-S
9	912020105010	B.SANTHOSHINI	B-S	B-S	B-S	B-S	B-S	B-S
10	912020105011	P.SWATHI	P-S	P-S	P-S	P-S	P-S	P-S
11	912020105012	A.THANVEER AHAMED	A-TH	A-TH	A-TH	A-TH	A-TH	A-TH
12	912020105301	S.AJAYSETHUPATHI	S-AS	S-AS	S-AS	S-AS	S-AS	S-AS
13	912020105302	K.MOHANASUNDARAM	K-Mo	K-Mo	K-Mo	K-Mo	K-Mo	K-Mo
14	912020105304	A.PRAGALATHAN	A-PR	A-PR	A-PR	A-PR	A-PR	A-PR
15	912020105305	R.SATHYA	R-Sa	R-Sa	R-Sa	R-Sa	R-Sa	R-Sa
16	912019105001	T.BABU	T-B	T-B	T-B	T-B	T-B	T-B
17	912019105002	K.DINESH	K-D	K-D	K-D	K-D	K-D	K-D
18	912019105003	J.GODSON	J-G	J-G	J-G	J-G	J-G	J-G
19	912019105004	M.KAVIYARASU	M-Ka	M-Ka	M-Ka	M-Ka	M-Ka	M-Ka
20	912019105005	MP.MADHANAGOPALAN	MPM	MPM	MPM	MPM	MPM	MPM
21	912019105006	K.MOORTHY	K-Mo	K-Mo	K-Mo	K-Mo	K-Mo	K-Mo
22	912019105007	M.PANTHEESWARAN	M-Pan	M-Pan	M-Pan	M-Pan	M-Pan	M-Pan
23	912019105008	A.SANJEEVKUMAR	A-S	A-S	A-S	A-S	A-S	A-S
24	912019105009	S.SATHISHKUMAR	S-Sa	S-Sa	S-Sa	S-Sa	S-Sa	S-Sa
25	912019105010	R.SIVANESAN	R-S	R-S	R-S	R-S	R-S	R-S
26	912019105012	M.SRIMALAVIKA	M-Sr	M-Sr	M-Sr	M-Sr	M-Sr	M-Sr
27	912019105013	M.VALLARASU	M-Va	M-Va	M-Va	M-Va	M-Va	M-Va


Course coordinator


HOD/EEE


PRINCIPAL

Enrollment
Student Name
List

Pandian Saraswathi yadav Engineering College, Arasanoor -630561

Department of Electrical and Electronics Engineering

Student Registration Sheet

Academic Year : 2022-2023
Course Code : VACEE2223SPVD
Course Name : Solar PV Systems Design
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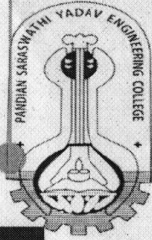
Enrolled student list			Signature
Sl. No	Register Number	Student Name	
1	912020105001	S.BOSE	S. Bose
2	912020105002	M.DHANAPRAKASH	Mr. Dhana
3	912020105003	D.DHARINISHRI	D. DHARINISHRI
4	912020105005	L.DINESHKUMAR	L. Dinesh Kumar
5	912020105006	P.GOBI	P. GOBI
6	912020105007	P.GURUPRASATH	P. Guruprasath
7	912020105008	M.PRIYADHARSHINI	M. Priyadharshini
8	912020105009	S.SANJAY	Sanjay S.
9	912020105010	B.SANTHOSHINI	B. Santhoshini
10	912020105011	P.SWATHI	Swathi P.
11	912020105012	A.THANVEER AHAMED	A. Thanveer Ahamed
12	912020105301	S.AJAYSETHUPATHI	S. Ajaysethupathi
13	912020105302	K.MOHANASUNDARAM	K. Mohanasundaram
14	912020105304	A.PRAGALATHAN	A. Pragalathan
15	912020105305	R.SATHYA	R. Sathya
16	912019105001	T.BABU	T. Babu
17	912019105002	K.DINESH	K. Dinesh
18	912019105003	J.GODSON	J. Godson
19	912019105004	M.KAVIYARASU	M. Kaviyarasu
20	912019105005	MP.MADHANAGOPALAN	Madhan MP
21	912019105006	K.MOORTHY	K. Moorthy
22	912019105007	M.PANTHEESWARAN	M. Pantheeswaran
23	912019105008	A.SANJEEVKUMAR	A. Sanjeev Kumar
24	912019105009	S.SATHISHKUMAR	S. Sathish Kumar
25	912019105010	R.SIVANESAN	R. Sivanesan
26	912019105012	M.SRIMALAVIKA	M. Srimalavika
27	912019105013	M.VALLARASU	M. Vallarasu

Course coordinator

HOD/EEE

PRINCIPAL

MODEL
CERTIFICATES



PANDIAN SARASWATHI YADAV ENGINEERING COLLEGE

Approved by AICTE & Affiliated to Anna University, Chennai.
Arasanoor, Thirumansolai Post, Sivagangai – Madurai Highway, Tamilnadu - 630 561

Value added course on SOLAR PV SYSTEMS DESIGN

Organized by
DEPARTMENT OF ELECTRICAL AND ELECTRONICS
ENGINEERING

CERTIFICATE

This is Certify that **K.DHINESH** From **Third/Final**
year EEE has participated in the value-added course on **Solar PV Systems Design** organized by the
Department of Electrical And Electronics Engineering From 6.02.2023 to 10.02.2023 (35 Hours) at
Pandian Saraswathi Yadav Engineering College, Sivagangai.


Mrs. S. Pandimeena

AP/EEE

Head of the Department

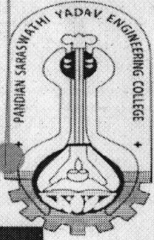

Dr. R. RAJA

Principal

R

RAJA

Digitally signed
by R RAJA
Date:
2024.07.16
12:03:39 +05'30'



PANDIAN SARASWATHI YADAV ENGINEERING COLLEGE

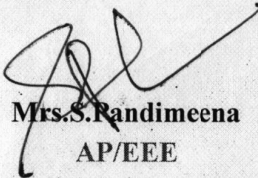
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Arasanoor, Thirumansolai Post, Sivagangai – Madurai Highway, Tamilnadu - 630 561

Value added course on SOLAR PV SYSTEMS DESIGN


Organized by
DEPARTMENT OF ELECTRICAL AND ELECTRONICS
ENGINEERING

CERTIFICATE

This is Certify that J. GODSON From **Third/Final**
year EEE has participated in the value-added course on **Solar PV Systems Design** organized by the
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Pandian Saraswathi Yadav Engineering College, Sivagangai.


Mrs. S. Pandimeena
AP/EEE

Head of the Department


Dr. R. RAJA
Principal

R
RAJA

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by R RAJA
Date:
2024.07.16
12:03:57
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