



Indra Ganesan

COLLEGE OF ENGINEERING

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

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

NAAC DOCUMENTS

QUALITY INDICATOR FRAME WORK

CRITERION – 1

CURRICULAR ASPECTS

SUBMITTED BY

IQAC

INTERNAL QUALITY ASSURANCE CELL

INDRA GANESAN COLLEGE OF ENGINEERING





DEPARTMENT OF ELECTRICAL AND ELECTRIC ENGINEERING

ACADEMIC YEAR 2022-2023 / ODD SEMESTER

1.2 Academic Flexibility (30)

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

AND

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

VAC Title:	POWER GRID PROTECTION				
Resource Person:	Mr.M.Elangovan, Trainer, Startus Electric, Trichy.				
Date of conduct from:	30.01.2023	To:	03.02.2023	Duration:	30 Hours
Organized Department:	ELECTRICAL AND ELECTRIC ENGINEERING				
Participant Year:	EEE- IV, III, II	Semester:	ODD	No. of Students Registered:	32
Venue:	EEE III Year Class Room.				

Table of Content

S. No	Document	Page No
1.	VAC Circular	3-3
2.	VAC Schedule	4-4
3.	List of the Students Participation	5-6
4.	Attendance Of Students	7-8
5.	VAC Test Paper	9-12
6.	VAC Answer Key	13-13
7.	VAC Test Answer Sheet- Sample	14-25
8.	VAC Mark Statement	26-28
9.	VAC Report	29-30
10.	Course Completion Certificates	31-48



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Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
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Department of Electrical and Electronics Engineering

Academic Year 2022-2023 –Odd Semester

25.01.2023

DEPARTMENT CIRCULAR

Department of Electrical and Electronics Engineering and IQAC of IGCE in association with Startus Electric, Trichy is going to organize Value Added Course for all second, Third and Final year students on “Power Grid Protection” from 30.01.2023 to 03.02.2023. Certificates will be issued to the eligible participants at the end of the Course. This training is to be provided in our campus.

Resource Person Detail	1. Mr.M.Elangovan, Trainer, Startus Electric , Trichy.
Venue	EEE III yr Classroom, IGCE

G. Ma lath

HOD/EEE

[Signature]
Principal

Cc:

- Principal office
- IQAC Co-Ordinator
- Class In charges - II, III & IV-Year
- II, III & IV-Year EEE Students
- Office File
- Notice Board

[Signature]
Dr. G. Balakrishnan, M.E., Ph.D.,
Principal

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



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Value Added Course


"Power Grid Protection"

SYLLABUS

S.NO	TOPIC COVERED	DURATION (in hours)	DATE
1	Fundamentals of Power System	3	30.01.2023
2	Fundamentals of Protective Relaying	3	30.01.2023
3	Current based Relaying Scheme	3	31.01.2023
4	Protection of Transmission Lines using Distance Relays	3	31.01.2023
5	Carrier Aided Schemes for Transmission Lines and Auto-reclosing and Synchronizing	3	01.02.2023
6	Protection of Generators, Transformers, Induction Motors and Bus bars	3	01.02.2023
7	Protection against Transients and Surges along with System Response to Severe Upsets	3	02.02.2023
8	Arc Interruption Theory in Circuit Breaker,	3	02.02.2023
9	Types of Circuit Breakers and their Testing	3	03.02.2023
10	Testing, Commissioning and Maintenance of Relays	3	03.02.2023
11	Exam	1	03.02.2023
Total Hours (Excluding Exam)		30	-


VAC Coordinator


HoD/EEE


Dr. G. Balakrishnan, M.E., Ph.D.,
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Value Added Course

“Power Grid Protection”

STUDENTS PARTICIPATION LIST

S.N O	Register Number	Name	Department
1	811219105002	M.BARATH	IV/EEE
2	811219105003	A.MANIKANDAN	IV/EEE
3	811219105005	C.PONNALAGU	IV/EEE
4	811219105006	A.SALAMON	IV/EEE
5	811219105007	M.SARAVANAKUMAR	IV/EEE
6	811219105008	K.SOLAIMATHI	IV/EEE
7	813919105001	P.DHEVENTHIRAN	IV/EEE
8	811219105301	A. VENKATRAMAN	IV/EEE
9	811220105001	ABINESH T	III/EEE
10	811220105002	ALEX IMMANVEL S	III/EEE
11	811220105006	BALAMURUGAN A	III/EEE
12	811220105011	DIVYA B	III/EEE
13	811220105013	GAYATHRI M	III/EEE
14	811220105017	KARTHIK D	III/EEE
15	811220105019	LATCHIYA K	III/EEE
16	811220105022	MANIKANDAN K	III/EEE
17	811220105023	MOHANDOSS S	III/EEE

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S.N O	Register Number	Name	Department
18	811220105024	NAVEEN R	III/EEE
19	811220105031	SANDURU K	III/EEE
20	811220105032	SANTHIYA A	III/EEE
21	811220105035	SHANMUGAM S	III/EEE
22	811220105037	SNEKA T	III/EEE
23	811220105038	SOPHIYA K	III/EEE
24	811220105301	AARTHI S	III/EEE
25	811220105303	THIRUNAVUKARASU M	III/EEE
26	811220105305	VENKATESHWARAN.A	III/EEE
27	811220105306	DIVYA BHARATHI	III/EEE
28	811220105307	SATHEESH KUMAR	III/EEE
29	811221105012	HARIHARAN E	II/EEE
30	811221105018	LINGESWARAN R	II/EEE
31	811221105027	SANGILI S	II/EEE
32	811221105039	SRIKANTH M	II/EEE


VAC Coordinator


HoD/EEE


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Department of Electrical and Electronics Engineering

Academic Year 2022-2023 – Odd Semester

STUDENTS ATTENDANCE LIST

Value Added Course

“Power Grid Protection”

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

Principal

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

S.NO	Register Number	Name	YEAR/ BRANCH	30.01.2023		31.01.2023		01.02.2023		02.02.2023		03.02.2023		NO OF SESSIONS ATTENDED	SIGNA OF THE STUDENT
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN		
1	811219105002	M.BARATH	IV/EEE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	H. Barath
2	811219105003	A.MANIKANDAN	IV/EEE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	A. Manikandan
3	811219105005	C.PONNALAGU	IV/EEE	✓	✓	✓	a	✓	✓	✓	✓	✓	✓	9	C. Pon
4	811219105006	A.SALAMON	IV/EEE	✓	✓	✓	✓	✓	✓	✓	a	✓	✓	9	A. Sal
5	811219105007	M.SARAVANAKUMAR	IV/EEE	✓	a	✓	✓	✓	✓	✓	✓	✓	✓	9	M. Saravan
6	811219105008	K.SOLAIMATHI	IV/EEE	✓	✓	✓	✓	✓	a	✓	✓	✓	✓	9	K. Solaimathi
7	813919105001	P.DHEVENTHIRAN	IV/EEE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	P. Dheventhiran
8	811219105301	A. VENKATRAMAN	IV/EEE	✓	✓	✓	✓	a	✓	✓	✓	✓	✓	9	A. Venkatesh
9	811220105001	ABINESH T	III/EEE	a	✓	✓	✓	✓	✓	✓	✓	✓	✓	9	A. Bin
10	811220105002	ALEX IMMANVEL S	III/EEE	✓	✓	a	✓	✓	✓	✓	✓	✓	✓	9	A. Alex
11	811220105006	BALAMURUGAN A	III/EEE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	B. Balamurugan
12	811220105011	DIVYA B	III/EEE	✓	✓	✓	✓	✓	✓	a	✓	✓	✓	9	D. Divya
13	811220105013	GAYATHRI M	III/EEE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	G. Gayathri



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S.NO	Register Number	Name	YEAR/ BRANCH	30.01.2023		31.01.2023		01.02.2023		02.02.2023		03.02.2023		NO OF SESSIONS ATTENDED	SIGNA OF THE STUDENT
				FN	AN	FN	AN	FN	AN	FN	AN	FN	AN		
14	811220105017	KARTHIK D	III/EEE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	Karthik D
15	811220105019	LATCHIYA K	III/EEE	✓	✓	✓	a	✓	✓	✓	✓	✓	✓	9	Latchiya
16	811220105022	MANIKANDAN K	III/EEE	✓	✓	✓	✓	a	a	✓	✓	✓	✓	8	Manikanda
17	811220105023	MOHANDOSS S	III/EEE	a	a	✓	✓	✓	✓	✓	✓	✓	✓	8	Mohanoss
18	811220105024	NAVEEN R	III/EEE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	9	Naveen R
19	811220105031	SANDURU K	III/EEE	✓	✓	✓	✓	✓	✓	✓	a	✓	✓	10	Sanduru
20	811220105032	SANTHIYA A	III/EEE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	9	Santhiya
21	811220105035	SHANMUGAM S	III/EEE	✓	✓	a	✓	✓	✓	✓	✓	✓	✓	8	Shanmugam
22	811220105037	SNEKA T	III/EEE	✓	✓	✓	✓	✓	✓	a	a	✓	✓	9	Sneka
23	811220105038	SOPHIYA K	III/EEE	✓	✓	✓	a	✓	✓	✓	✓	✓	✓	10	Sophiya K
24	811220105301	AARTHI S	III/EEE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	AARTHI S
25	811220105303	THIRUNAVUKARASU M	III/EEE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	Thirunavukarasu
26	811220105305	VENKATESHWARAN.A	III/EEE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	Venkateshwaran
27	811220105306	DIVYA BHARATHI	III/EEE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	Divya Bharathi
28	811220105307	SATHEESH KUMAR	III/EEE	a	✓	✓	✓	✓	✓	✓	✓	✓	✓	9	Satheesh
29	811221105012	HARIHARAN E	II/EEE	✓	✓	✓	a	✓	✓	✓	✓	✓	✓	9	Harihara
30	811221105018	LINGESWARAN R	II/EEE	✓	a	✓	✓	✓	✓	✓	✓	✓	✓	9	Lingeswaran
31	811221105027	SANGILI S	II/EEE	✓	✓	✓	✓	✓	a	✓	✓	✓	✓	9	Sangili
32	811221105039	SRIKANTH M	II/EEE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	Srikanth

Devi Seifur
VAC Coordinator

Dr. G. Balakrishnan, M.E., Ph.D.,
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Gr. Matathi
HOD/EEE

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Name of the Student:

Year/Sem:

AU Register Number:

Value Added Course

“Power Grid Protection”

MULTIPLE CHOICE QUESTIONS (25X1 = 25 Marks)

- Which of the following circuit breakers has the lowest operating voltage?
(a) SF6 gas. (b) Air-break. (c) Air-blast. (d) Minimum oil.
- Which of the following circuit breakers produce the least arc energy?
(a) Plain oil. (b) Minimum oil. (c) Air-blast. (d) Air break.
- Which of the following circuit breakers has high reliability and negligible maintenance?
(a) Air-blast. (b) SF6 (c) Oil. (d) Vacuum.
- Which of the following circuit breakers take minimum time in installation?
(a) Air-blast. (b) Minimum oil. (c) Bulk oil. (d) SF6
- Where voltages are high and current to be interrupted is low, the circuit breaker preferred is.....one.
(a) air-break (b) vacuum (c) oil (d) air-blast
- For rural electrification in a country like India with complex network, the circuit breaker preferred is.....one.
(a) air-break (b) oil (c) vacuum (d) minimum oil

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7. The most suitable circuit breaker for short line fault without switching resistor is.....one.

- (a) Minimum oil (b) air-blast (c) SF6 (d) air-break

8. The rating of a circuit breaker is usually determined on the basis of.....fault.

- (a) Symmetrical (b) line to line
(c) single line to ground (d) double line to ground

9. The transient phenomenon lasts in a power system for a period ranging from

- (a) Few ms to 1 s (b) 1 s to 2 s (c) 2 s to 3 s. (d) greater than 3 s.

10. Circuit breakers usually operate under

- (a) Steady short-circuits current. (b) Sub-transient state of short-circuit current.
(c) Transient state of short-circuit current. (d) None of these

11. The restriking voltage is measured in

- (a) RMS value. (b) Peak value. (c) Instantaneous value. (d) Average value.

12. The making and breaking currents of 3-phase ac circuit breakers in power system are respectively in what form?

- (a) rms value, rms value. (b) Instantaneous value, rms value.
(c) rms value. (d) Instantaneous value, instantaneous value.

13. The making to breaking current ratio for an EHV circuit breaker is

- (a) More than 1. (b) Equal to 1. (c) Less than 1. (d) A negative number.

14. The making capacity of a circuit breaker is

- (a) Less than the asymmetrical breaking capacity of the breaker.
(b) Greater than the asymmetrical breaking capacity of the breaker.
(c) Equal to the symmetrical breaking capacity of the breaker.
(d) Equal to the asymmetrical breaking capacity.


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15. Which of the following statements is not correct?

- (a) Arc chutes are used in air break circuit breakers.
- (b) Air-blast circuit breakers are employed for high voltage traction system.
- (c) Resistance switching is employed for overcoming current chopping.
- (d) Linear resistors are used in resistance switching.

16. Capacitor switching in 33 kV power systems is better done with.....circuit breakers.

- (a) air-blast
- (b) minimum oil
- (c) vacuum

17. The probable cause(s) for fall in insulation resistance between phase terminal and earthed frame could be

- (a) Dirty insulation surface.
- (b) Ingress of moisture.
- (c) Sticking of carbon or copper particles to the internal surface.
- (d) all of the above.

18. The probable cause(s) for failure of a circuit breaker on electrical compound could be


- (a) Trip circuit open.
- (b) Trip latch defective.
- (c) Spring defective.
- (d) Any of the above.

19. An isolator is installed

- (a) To isolate one portion of the circuit from another.
- (b) Usually on both sides of a circuit breaker.
- (c) As a substitute for a circuit breaker.
- (d) Both (a) and (b).

20. Current rating is not necessary in case of

- (a) Isolators.
- (b) Circuit breakers.
- (c) Load break switches.
- (d) Circuit breakers and load break switches.


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21. An isolator is meant for

- (a) Breaking abnormal current. (b) Making under fault condition.
(c) Breaking the circuit under no-load condition. (d) None of the above.

22. Isolators used in transmission lines are capable of breaking:

- (a) Fault current. (b) No current.
(c) Charging current. (d) All the above

23. For a fault at the terminals of synchronous generator, the fault current is maximum for a

- (a) 3-phase fault. (b) 3-phase to ground fault.
(c) line-to-ground fault. (d) line-to-line fault.

24. If all the sequence voltages at the fault point in a power system are equal, then the fault is a

- (a) three-phase fault. (b) line-to ground fault.
(c) line-to-line fault. (d) double-line-to ground fault.

25. The material used in liquid fuses is

- (a) SF₆ (b) distilled water. (c) Carbon tetra chloride. (d) Transformer oil.


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Value Added Course

“Power Grid Protection”

Answer Key

1	b	6	c	11	b	16	c	21	c
2	c	7	c	12	d	17	d	22	c
3	b	8	a	13	a	18	d	23	c
4	d	9	a	14	b	19	d	24	d
5	b	10	b	15	d	20	a	25	c


VAC Coordinator


Dr. G. Balakrishnan, M.E., Ph.D.,
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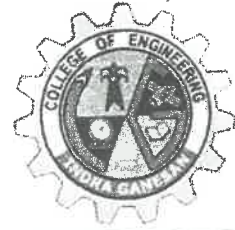
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Name of the Student: M. Barath

Year/Sem: IV / VII

AU Register Number: 811219105002

20
25

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“Power Grid Protection”

MULTIPLE CHOICE QUESTIONS (25X1 = 25 Marks)

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(d) Equal to the asymmetrical breaking capacity.

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

Principal

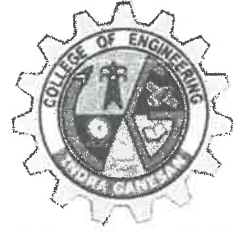
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21. An isolator is meant for

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22. Isolators used in transmission lines are capable of breaking:

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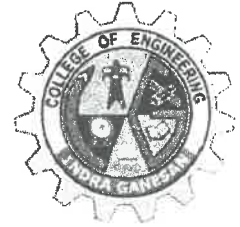

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Name of the Student: HARIHARAN.E

Year/Sem: II/III

AU Register Number: 811 2 21105012

19/25

Value Added Course

“Power Grid Protection”

MULTIPLE CHOICE QUESTIONS (25X1 = 25 Marks)

- Which of the following circuit breakers has the lowest operating voltage?
(a) SF6 gas. (b) Air-break. (c) Air-blast. (d) Minimum oil.
- Which of the following circuit breakers produce the least arc energy?
(a) Plain oil. (b) Minimum oil. (c) Air-blast. (d) Air break.
- Which of the following circuit breakers has high reliability and negligible maintenance?
(a) Air-blast. (b) SF6 (c) Oil. (d) Vacuum.
- Which of the following circuit breakers take minimum time in installation?
(a) Air-blast. (b) Minimum oil. (c) Bulk oil. (d) SF6
- Where voltages are high and current to be interrupted is low, the circuit breaker preferred is.....one.
(a) air-break (b) vacuum (c) oil (d) air-blast
- For rural electrification in a country like India with complex network, the circuit breaker preferred is.....one.
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7. The most suitable circuit breaker for short line fault without switching resistor is.....one.

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8. The rating of a circuit breaker is usually determined on the basis of.....fault.

- (a) Symmetrical (b) line to line
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9. The transient phenomenon lasts in a power system for a period ranging from

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11. The restriking voltage is measured in

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12. The making and breaking currents of 3-phase ac circuit breakers in power system are respectively in what form?

- (a) rms value, rms value. (b) Instantaneous value, rms value.
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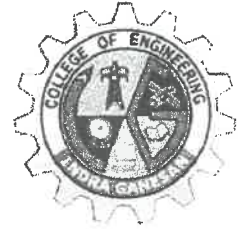

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Name of the Student: B. DIVYA
AU Register Number: 811220105011

Year/Sem: III / V

20
25

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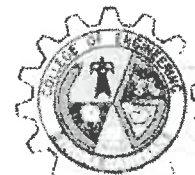

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Department of Electrical and Electronics Engineering

Academic Year 2022-2023 – Odd Semester

VALUE ADDED COURSE ASSESMENT SHEET

“Power Grid Protection”

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

Principal

Indra Ganesan College of Engineering

IG Valley, Madurai Main Road

Manikandam, Trichy-620 012.

S.NO	Register Number	Name	YEAR/ BRANCH	Attendance Details		VAC-MCQ TEST		OVERALL MARK (100)
				No. of Hours Attended	Attendance Mark(100) (A)	No of Correct Answers	MCQ Mark(100) (B)	(50% of A + 50% of B)
1	811219105002	M.BARATH	IV/EEE	30	100	20	80	90
2	811219105003	A.MANIKANDAN	IV/EEE	30	100	20	80	90
3	811219105005	C.PONNALAGU	IV/EEE	27	90	21	84	87
4	811219105006	A.SALAMON	IV/EEE	27	90	21	84	87
5	811219105007	M.SARAVANAKUMAR	IV/EEE	27	90	22	88	89
6	811219105008	K.SOLAIMATHI	IV/EEE	27	90	19	76	83
7	813919105001	P.DHEVENTHIRAN	IV/EEE	30	100	20	80	90
8	811219105301	A. VENKATRAMAN	IV/EEE	27	90	23	92	91
9	811220105001	ABINESH T	III/EEE	27	90	19	76	83
10	811220105002	ALEX IMMANVEL S	III/EEE	27	90	19	76	83
11	811220105006	BALAMURUGAN A	III/EEE	30	100	21	84	92



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				No. of Hours Attended	Attendance Mark(100) (A)	No of Correct Answers	MCQ Mark(100) (B)	(50% of A + 50% of B)
12	811220105011	DIVYA B	III/EEE	27	90	20	80	85
13	811220105013	GAYATHRI M	III/EEE	30	100	21	84	92
14	811220105017	KARTHIK D	III/EEE	30	100	20	80	90
15	811220105019	LATCHIYA K	III/EEE	27	90	19	76	83
16	811220105022	MANIKANDAN K	III/EEE	24	80	20	80	80
17	811220105023	MOHANDOSS S	III/EEE	24	80	21	84	82
18	811220105024	NAVEEN R	III/EEE	27	90	22	88	89
19	811220105031	SANDURU K	III/EEE	30	100	20	80	90
20	811220105032	SANTHIYA A	III/EEE	27	90	21	84	87
21	811220105035	SHANMUGAM S	III/EEE	24	80	20	80	80
22	811220105037	SNEKA T	III/EEE	27	90	21	84	87
23	811220105038	SOPHIYA K	III/EEE	30	100	20	80	90
24	811220105301	AARTHI S	III/EEE	30	100	20	80	90
25	811220105303	THIRUNAVUKARASU M	III/EEE	30	100	21	84	92
26	811220105305	VENKATESHWARAN.A	III/EEE	30	100	21	84	92



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27	811220105306	DIVYA BHARATHI	III/EEE	27	90	22	88	89
28	811220105307	SATHEESH KUMAR	III/EEE	27	90	20	80	85
29	811221105012	HARIHARAN E	II/EEE	27	90	19	76	83
30	811221105018	LINGESWARAN R	II/EEE	27	90	21	84	87
31	811221105027	SANGILI S	II/EEE	30	100	22	88	94
32	811221105039	SRIKANTH M	II/EEE	27	90	20	80	85


VAC Coordinator


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HoD/EEE






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REPORT ON VALUE ADDED COURSE

Title:	"Power Grid Protection"				
Resource Persons:	Mr.M.Elangovan, Trainer. Startus Electric , Trichy.				
Date of conduct from :	30.01.2023	To:	03.02.2023	Duration:	30 Hours
Organized Department :	Electrical and Electronics Engineering				
Participant Year:	2,3,4	No. of Students Registered :	32		
Venue:	EEE III yr Classroom				
Outcome of Value Added Course (VAC): At the end of the Course, Students can able to					
<ul style="list-style-type: none">● Learn the basic concepts of power system protection and relays.● Design the relevant protection systems for the main elements of a power system.● Learn the theory of arcing phenomenon.● Analyze the purpose and working principle of different circuit breakers and tests.					
Assessment Process					
<ul style="list-style-type: none">● Students, who are securing more than 70% on total score and secured more than 75% in attendance is eligible to receive the certificate for the VAC course conducted● Total Score = (0.5 *Attendance in VAC out of 100 percentage + 0.5 *Test mark in VAC out of 100 marks)					
 VAC Coordinator		 HoD/EEE		 Principal	

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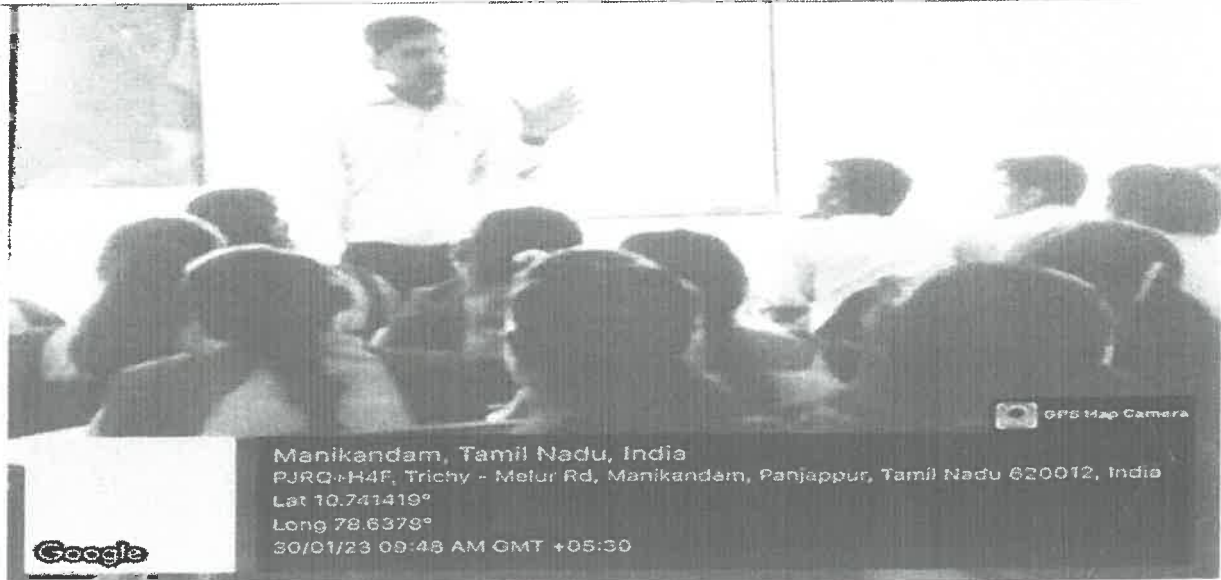
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SAMPLE PHOTOS OF VALUE ADDED COURSE

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CERTIFICATE OF PARTICIPATION

This is to certify that Mr. A.MANIKANDAN, IV Year, EEE has successfully completed the Value Added Course on “Power Grid Protection” organized by Department of Electrical & Electronics Engineering and IQAC of our Institution in Association with Startus Electric from 30th January 2023 to 3rd January 2023 (5days) during the Academic year 2022-2023.

Startus Electric
Mr.L.Ramesh
Chief Executive Officer.

Dr. G. Balakrishnan, M.E., Ph.D.,
Principal
Indra Ganesan College of Engineering
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IGCE



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CERTIFICATE OF PARTICIPATION

This is to certify that Mr. A.SALAMON, IV Year, EEE has successfully completed the Value Added Course on “Power Grid Protection” organized by Department of Electrical & Electronics Engineering and IQAC of our Institution in Association with Startus Electric from 30th January 2023 to 3rd January 2023 (5days) during the Academic year 2022-2023.

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Chief Executive Officer.

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IGCE

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This is to certify that Mr. M.SARAVANAKUMAR, IV Year, EEE has successfully completed the Value Added Course on “Power Grid Protection” organized by Department of Electrical & Electronics Engineering and IQAC of our Institution in Association with Startus Electric from 30th January 2023 to 3rd January 2023 (5days) during the Academic year 2022-2023.

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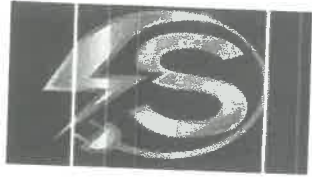
CERTIFICATE OF PARTICIPATION

This is to certify that Ms. K.SOLAIMATHI, IV Year, EEE has successfully completed the Value Added Course on “Power Grid Protection” organized by Department of Electrical & Electronics Engineering and IQAC of our Institution in Association with Startus Electric from 30th January 2023 to 3rd January 2023 (5days) during the Academic year 2022-2023.

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This is to certify that Mr. P.DHEVENTHIRAN, IV Year, EEE has successfully completed the Value Added Course on “Power Grid Protection” organized by Department of Electrical & Electronics Engineering and IQAC of our Institution in Association with Startus Electric from 30th January 2023 to 3rd January 2023 (5days) during the Academic year 2022-2023.

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This is to certify that Mr. NAVEEN R, III Year, EEE has successfully completed the Value Added Course on “Power Grid Protection” organized by Department of Electrical & Electronics Engineering and IQAC of our Institution in Association with Startus Electric from 30th January 2023 to 3rd January 2023 (5days) during the Academic year 2022-2023.

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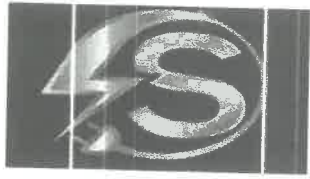
CERTIFICATE OF PARTICIPATION

This is to certify that Mr. BALAMURUGAN A, III Year, EEE has successfully completed the Value Added Course on “Power Grid Protection” organized by Department of Electrical & Electronics Engineering and IQAC of our Institution in Association with Startus Electric from 30th January 2023 to 3rd January 2023 (5days) during the Academic year 2022-2023.

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This is to certify that Mr. KARTHIC D, III Year, EEE has successfully completed the Value Added Course on “Power Grid Protection” organized by Department of Electrical & Electronics Engineering and IQAC of our Institution in Association with Startus Electric from 30th January 2023 to 3rd January 2023 (5days) during the Academic year 2022-2023.

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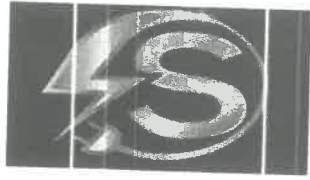
CERTIFICATE OF PARTICIPATION

This is to certify that Mr. MANIKANDAN K, III Year, EEE has successfully completed the Value Added Course on "Power Grid Protection" organized by Department of Electrical & Electronics Engineering and IQAC of our Institution in Association with Startus Electric from 30th January 2023 to 3rd January 2023 (5days) during the Academic year 2022-2023.

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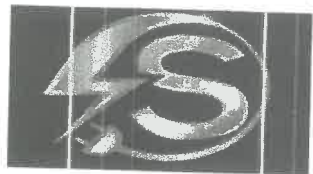
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This is to certify that Ms. SANTIYA A, III Year, EEE has successfully completed the Value Added Course on “Power Grid Protection” organized by Department of Electrical & Electronics Engineering and IQAC of our Institution in Association with Startus Electric from 30th January 2023 to 3rd January 2023 (5days) during the Academic year 2022-2023.

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This is to certify that Mr. THIRUNAVUKARASU M, III Year, EEE has successfully completed the Value Added Course on “Power Grid Protection” organized by Department of Electrical & Electronics Engineering and IQAC of our Institution in Association with Startus Electric from 30th January 2023 to 3rd January 2023 (5days) during the Academic year 2022-2023.

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This is to certify that Mr. SHANMUGAM S, II Year, EEE has successfully completed the Value Added Course on “Power Grid Protection” organized by Department of Electrical & Electronics Engineering and IQAC of our Institution in Association with Startus Electric from 30th January 2023 to 3rd January 2023 (5days) during the Academic year 2022-2023.

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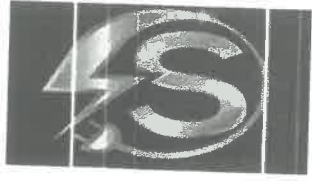
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This is to certify that Ms. LATCHIYA K, III Year, EEE has successfully completed the Value Added Course on “Power Grid Protection” organized by Department of Electrical & Electronics Engineering and IQAC of our Institution in Association with Startus Electric from 30th January 2023 to 3rd January 2023 (5days) during the Academic year 2022-2023.

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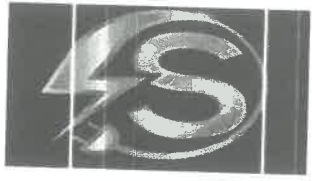
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This is to certify that Mr. HARIHARAN E, II Year, EEE has successfully completed the Value Added Course on “Power Grid Protection” organized by Department of Electrical & Electronics Engineering and IQAC of our Institution in Association with Startus Electric from 30th January 2023 to 3rd January 2023 (5days) during the Academic year 2022-2023.

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This is to certify that Mr. LINGESWARAN R, II Year, EEE has successfully completed the Value Added Course on “Power Grid Protection” organized by Department of Electrical & Electronics Engineering and IQAC of our Institution in Association with Startus Electric from 30th January 2023 to 3rd January 2023 (5 days) during the Academic year 2022-2023.

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This is to certify that Mr.SANGILI S, III Year, EEE has successfully completed the Value Added Course on “Power Grid Protection” organized by Department of Electrical & Electronics Engineering and IQAC of our Institution in Association with Startus Electric from 30th January 2023 to 3rd January 2023 (5days) during the Academic year 2022-2023.

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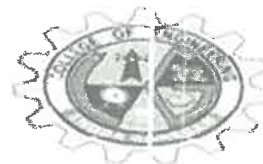
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This is to certify that Mr. SRIKANTH M, III Year, EEE has successfully completed the Value Added Course on “Power Grid Protection” organized by Department of Electrical & Electronics Engineering and IQAC of our Institution in Association with Startus Electric from 30th January 2023 to 3rd January 2023 (5days) during the Academic year 2022-2023.

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