# AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, TAMARAM (V), MAKAVARAPALEM (M), VISAKHAPATNAM-531113



#### INDUSTRIAL ELECTRICAL MAINTENANCE

From 7<sup>TH</sup> Feb 2022 T0 11<sup>TH</sup> Feb 2022



#### **ORGANIZED BY**

DEPT. OF ELECTRICAL &ELECTRONICS ENGINEERING AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, TAMARAM (V), MAKAVARAPALEM (M), VISAKHAPATNAM-531113

#### **AVANTHI EDUCATIONAL SOCIETY**

Avanthi Educational Society under the Leadership of Sri M.Srinivasa Rao garu as chairman was started in the Year 1991. Within a short span of its establishment, the group has made a remarkable stride in the field of education offering various courses at Under Graduate, Post Graduate, Pharmacy & Engineering levels. This milestone is achieved as the institution carved itself to impart quality and career oriented education, countering the challenges of the modern world through planning, dedication, determination, prompt execution and with the innovative ideas of our advisory board. Today, Avanthi Educational Society is proud to have a strength of over 16000 students with 15 institutions under its ambit. It is the path of glory towards the success during the last 19 years. The institution has been adjudged many times as the second best educational institutions in the twin cities and 16th best in all over India through the impartial survey made by the renowned magazine "India Today".

#### **AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY**

AIET started in the year 1999 and offers various courses at Engineering and PG level. The college is providing with rooms, computer centre, laboratories and seminar hall with audio-visual equipments. Industry Institute interaction is conducted regularly to emphasize on the latest trends in the present market.



It is very near to Narsipatnam. Frequent bus facilities are available both from Visakhapatnam and Narsipatnam. Very safe and secure hostel facility is available for Girl students. These are the additional facilities besides excellent academic atmosphere in the college campus.

# DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

The Department of Electrical & Electronics Engineering was established in the year 2001 along with the MECHANICAL, ECE and CSE departments. The department has an intake of 60 students. Commencing the academic year 2011, a post-graduate course in Power Electronics and 2014 in Power Systems was started. The department has full fledged laboratories, workshops and P.G. labs. The department is staffed with qualified, experienced and dedicated members who engage in research activities.. The department with active support from the management is aiming to expand its research activities and industrial consultancies.

#### **ABOUT COURSE**

This course is designed to provide basic electrical skills to those who need to perform first-line electrical maintenance tasks including the safe isolation, replacement and testing of a range of common electrical devices (motors, sensors, heating elements, solenoids, etc.) in a safe and effective manner. Importantly, the format of the course is specifically designed so that, when combined with suitable on-site consolidation of training, it will assist the maintenance manager in meeting the legal requirements for employee competence in electrical work.

#### CHIEF PATRON

Smt.M.Gnaneswari President, Avanthi Educational Society

#### PATRON

Dr. C P V N J Mohan Rao
Principal,
Avanthi Institute Of Engineering And Technology

#### TOPICS TO BE COVERED

- **Day 1:** Practice safe working methods on electrical systems. Understand the relevant regulative requirements. Demonstrate an understanding of electrical principles and units
- **Day 2:** Identify a wide range of electrical equipment & devices and understand their principles of operation / connections. Understand the principles of earthing / protection and associated protective devices
- **Day 3:** Demonstrate an understanding of electrical systems, switchgear and circuit types. Diagnose basic faults and recognise their associated symptoms. Work with a range of cable types and carry out correct terminations and connections
- **Day 4:** Recognise the most common industrial motor types and understand their operation, connections and maintenance requirements. Use electrical test equipment effectively and carry out testing of a range of motors, solenoids, cables, etc. (using insulation, continuity, tong testers, etc.). Identify motor and power circuit faults
- **Day 5:** Use circuit diagrams as an aid to maintenance. Access electrical enclosures and replace fuses, reset overloads etc. Perform electrical isolation, testing for dead, etc on a wide range of devices and circuits safely.

For any further information Contact Mr K NAARAYANARAO, Assistant Professor, EEE, and Mr P V DORA Assistant Professor, EEE

#### **CHAIRMAN**

Dr. T Srinivasa Rao Head of the Department Electrical & Electronics Engineering

#### **COORDINATORS**

K Narayanarao Asst. Professor

P V Dora Asst. Professor

(Approved by AICTE, Permanently Affiliated to JNT University Kakinada, Accredited by NAAC and Recognized under 2(f) &12 (b) by UGC, New Delhi)
Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-531113

# DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Date: 04/02/2022

#### CIRCULAR

A short term course on "INDUSTRIAL ELECTRICAL MAINTENANCE" for 1&11 Year students of Electrical and Electronics Engineering Department &III Year students of Electronics and Communication Engineering Department is scheduled 07th Feb 2022 to 11th Feb 2022. All the students should attend the course without fail. For any further information Contact course coordinators Mr K NARAYANARAO, Assistant Professor, EEE, and Mr P V DORA Assistant Professor EEE Department.

#### Resource Person Details:

Sri GOLLA SREEHARIBABU,
 Dy. Manager,
 EID Parry India Ltd,
 Sankili Village, RA Valasa Mandal,
 Vizianagaram, Andhrapradesh

2.Sri CHALLURI KOTESWARARAO, Dy. Manager, EID Parry India Ltd, Sankili Village, RA Valasa Mandal, Vizianagaram, Andhrapradesh

> Dr. T Srinivasa Rao Head of the Department, EEE

Head of the Department
Department of Electrical & Electronics Engg.
Avanthi Institute of Engg & Tech.
Makavarapalem, Visakhapatnam - 531113.

Copy to: Principal, AIET

# THE STREET STREE

# AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, Permanently Affiliated to JNT University Kakinada, ACCREDITED BY NAAC and Recognized under 2(f) &12 (b) by UGC, New Delhi) Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-531113

# INDUSTRIAL ELECTRICAL MAINTENANCE

Duration: 07-02-2022 to 11-02-2022

#### **SYLLABUS**

- Day 1: Safe working methods on electrical systems. Understand the relevant regulative requirements. Demonstrate an understanding of electrical principles and units.
- Day 2: Identification of a wide range of electrical equipment & devices and understand their principles of operation / connections. Understand the principles of earthing / protection and associated protective devices
- Day 3: Understanding of electrical systems, switchgear and circuit types. Diagnose basic faults and recognise their associated symptoms. Work with a range of cable types and carry out correct terminations and connections
- Day 4: Recognise the most common industrial motor types and understand their operation, connections and maintenance requirements. Use electrical test equipment effectively and carry out testing of a range of motors, solenoids, cables, etc. (using insulation, continuity, tong testers, etc.). Identify motor and power circuit faults

Day 5: Use circuit diagrams as an aid to maintenance. Access electrical enclosures and replace fuses, reset overloads etc. Perform electrical isolation, testing for dead, etc on a wide range of devices and circuits safely

COORDINATOR

HOW 3/20

Head of the Department
Department of Electrical & Electronics Engg.
Avanthi Institute of Engg & Tech.
Makayarapalem, Visakhapatnam-531113.



(Approved by AICTE, Permanently Affiliated to JNT University Kakinada, ACCREDITED BY NAAC and Recognized under 2(f) &12 (b) by UGC, New Delhi) Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-531113

# INDUSTRIAL ELECTRICAL MAINTENANCE

#### **SCHEDULE**

Duration: 07-02-2022 to 11-02-2022

DAY/DATE	Live Session - 1 09.00AM to 12.00 PM	Live Session - 2 1 PM to 4 I M  Understand the relevant regulative requirements. Demonstrate an understanding of electrical principles and units.			
Monday 07-02-2022	Introduction to Industrial Electrical Maintenance. Explanation of safe working methods on electrical systems.				
Tuesday 08-02-2022	Identify a wid range of electrical equipment & devices and understand their principles of op ration / connections.	Understand the princip es of earthin / protection and associated protectiv devices			
Wednesday 09-02-2022	Demonstrate an understanding of electrical systems, switch ear and circuit types.	Diagnose basic faults and recognise their associated symptoms. Work with a range of cable types and carr out correct terminations and connection			
Thursday 10-02-2022	Recognise the m st common industrial motor types and understand their operation, connections and m: intenance requirements.	Use electrical test equipment effectively and carry o t testing of a range of motors, sole oids, cables, etc. (using insulation, continuity, tong testers, etc.). Identify motor and power circuit faults			
Friday 11-02-2022	Use circuit di grams as an aid to maintenance. Acc; ss electrical enclosures and replace fuses, reset overloads etc.	Perform electrical isolation, testing for dead, etc on a wide range of devices and circuits safely			

COPREMATOR

HODE 123

Head of the Department
Department of Electrical & Electronics Engg.
Avanthi Institute of Engg & Tech.
Makavarapalem, Visakhapatnam - 531113,



Approved by AICTE, Permanently Affiliated to JNT University Kakinada, Accredited by NAAC and Recognized under 2(f) & 12(b) by UGC, New Delhi Tamaram,Makavarapalem,Narsipatnam(RD),Visakhapatnam-531113 INDUSTRIAL ELECTRICAL MAINTENANCE

From 07th Feb 2022 TO 11th Feb 2022

1st &2nd Year EEE & 3rd Year ECE Students Attendance

SNO	ROLL NUMBER	NAME OF THE STUDENT	07-Feb	08-Feb	00 5 1		
1	21811A0201	CHALLA PAVAN KUMAR	./	08-160	09-Feb	10-Feb	11-Feb
2	21811A0202	KANNAMREDDI GANESH	1	-V	V	4	V
3	21811A0203	KUNDRAPU DILIP	1	-	V/	- V	1
4	21811A0204	MAKIREDDY SOMESH	1	×/	Y	Y	1
5	21811A0205	MAMIDI PRADEEP	/	1	Y	1	V
6	21811A0206	PAILA RAVI TEJA	/	-	1	1	1
7	21811A0207	PILLA LAHARI	/	/	1	X	Y
8	21811A0208	RAAVI SRAVANI	1/	-/	1	1	1
9	21811A0209	REKHA NANI	/	1	Y	1	Y/
10	21811A0210	RONGALI VANAJA	1	1	Y	1	1
11	21811A0211	SOMIREDDI SAI MURALI	1	1	1	Y/	Y
12	21811A0212	VELAGA BALARAM	1/	1/	1	1	1
13	21811A0213	VURUKUTI JAYA SREE	1/	1/	Y/	Y	Y
14	20811A0201	ADLABOINA BHANUPRAKASH	1	1	1	1	Y
15	20811A0202	BALASADI JOGINDHAR SAI	1./	1	1	1	Y/
16	20811A0204	BOMMURU DINESH	- V	V/	1	1	V
17	20811A0205	CH SUPREETH	1/	1	1	1	1
18	20811A0206	CHANDAKA VENKATESH	1	1/	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1	1
19	20811A0207	CHOLLANGI MADHU NIKHILESH		V/	1	1	- V
20	20811A0208	DASARI ANITHA		V	1	Y	1
21	20811A0209	GOLAGANI VARSHINI	/	1.7	V	1	1
22	20811A0210	GUDIVADA VENKATA GANGA VASAVI		1	Y	1	Y
23	20811A0211	KALIGIRI LEELA PRASAD	1	1	1	1	1
24	20811A0212	KONA SRINUSAI	- /	1	1	+ V	Y
25	20811A0213	MUSULURI UDAY SATYA NARAYANA	- V	Y	V	+ 4	1
26	20811A0214	NELLIPARTHI AJITH KUMAR	- V	1	-	1	V/
27	20811A0215	PALLA DIVYA	- V	1	1	1	1
28	20811A0216	PEELA NAGAPARVATHI	1	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	+ 1	++	Y
29	20811A0217	PETLA LOHITHA	- V	1	- V	1	1
30	20811A0218	PITTA VINAY KUMAR	- V	- V	1	1	1
31	20811A0219	SADASIVUNI K V MONISH		1	+ V	1	V
32	20811A0220	SURABHI YESU	- V	1	+ V	V	- Y
33	21815A0202	GODABA KISHORE	- V	1	1	- V	V
34	21815A0203	KONDURI SRINIVAS	- V	1	1	V	V
35	21815A0204	KOTTHALA VEERA VENKATA GANESH	- V	1	Y	Y	- V
36	21815A0206	NAGARAPATI NARAYANARAO	V	V	1	V	Y
37	21815A0207	NAKKA UPENDRA KUMAR		1	1	V	V
38	21815A0208		- V	1	1	V	1
39	21815A0209	PALASI SIVA LEELA PRASA P		V	- V	1	
40	21815A0210	PALASI SIVA LEELA PRASAD	V	1	- V		1
41	EU WAR STONE	PUREDDY KEDARESWARI	V	V,	\	V	1
7.2	21815A0211	RAMATHOTA SANTOSH DILEEP	1	1	1	V	1
42	21815A0212	SILAPARASETTI SOWJANYA	V/	V/	V,	$\perp$ X	V
43	21815A0213	YADALA TARUN KUMAR	V	V	V	/	V

44	21815A0214	YEDLA NAVYA GANGA MANI DEVI		/	/		/
45	21815A0215	PANDIRI BHASKARA PRASAD		/	/	/	1
46	21815A0216	TAMANARA DIVAKAR	/		/		1
47	21815A0217	KANKIPATI BALA SIVA NAGENDRA BABU		/	/	/	1
48	20815A0404	BALIREDDY DIVYA	/	/	/	/	/
49	20815A0405	BOBBADI SREESAI SUDHA	<b>\</b>	/	V.		/
50	20815A0406	BONDA JAYA SRI	V.	V.	/	/	1
51	20815A0407	BUDDHA LEENA SRI	V.		/	/	1
52	20815A0408	CHANDAKA PRAMEELA RANI	/	/	1	V.	/
53	20815A0409	DEEPIKA GOWRIPATNAM	<b>✓</b>	X	/	/	/
54	20815A0410	DOLLY ANUSHA PABBIREDDY	/	/	V	/	1
55	20815A0411	EARLA SAI MANIKANTA GOWRI HARIKA	-/-	/	1	1	1
56	20815A0412	GANDEPALLI POORNIMA	/	/	<b>V</b>	/	1
57	20815A0413	JANAPAREDDY VASAVI		/	V		/
58	20815A0414	KANTAMREDDI SONY	V.		/	/	/
59	20815A0415	KILLADA MANI DEEPIKA		/	V	/	/
60	20815A0416	KOSURU DIVYASREE	/	V	/	/	/
61	20815A0417	KUDA PAVANI	/	/	/	/	V
62	20815A0418	LAXMI PRIYA NAGUMALLI	/	/	/	/	1
63	20815A0419	MUMMIDIVARAPU SAI LAXMI	/	1	/	/	V
64	20815A0420	MUTYALA DIVYA SREE		/	/	/	V
65	20815A0421	PICHIKA PAVAN	V	/	/	/	1
66	20815A0422	RAMADENI RAMYA RANI	/	/	/	/	1
67	20815A0423	SAHU PITAMBAR KUMAR	V	/	/	/	V
68	20815A0424	SIMBOTHU MOUNIKA	/	1	X	/	/
69	20815A0425	SK MD ZUBAIR AHAMED	/	1	/	/	1
70	20815A0426	SURISETTY KUSUMA	/	/	/	/	/
71	20815A0427	SURUKUTTI KUSUMA KUMARI	V	/	/	V	V_
72	20815A0428	VEGHI MEGHANA			1	<b>V</b>	1
73	20815A0429	VUDI KIRAN KUMAR		/	1	/	V
74	20815A0430	KATCHALLA NOOKA RAJU	V	/	/	/	V
75	20815A0431	LAGUDU GIRIDHAR	/	V	/	/	V
76	20815A0432	SURISETTI SIVA GANESH	V	/	/	/	/





Head of the Department
Department of Electrical & Electronics Engg.
Avanthi Institute of Engg & Tech.
Makavarapalem, Visakhapatnam-531113.



# AVANTHI

# INSTITUTE OF ENGINEERING AND TECHNOLOGY

Tamaram (V), Makavarapalem (M), Visakhapatnam Dist. 531113. (Approved by AICTE, Accredited by NAAC, Permanently Affiliated to JNTU Kakinada)

# Certificate of Participation

	This is to certify that Mr./Ms
of	has participated in the Certificate Course entitled
on	INDUSTRIAL ELECTRICAL MAINTENANCE during from 07th FEB 2022 to 11TH FEB 2022
wa	s organised by the Department of <code>ELECTRICAL</code> <code>AND</code> <code>ELECTRONICS</code> <code>ENGINEERING</code>
at	Avanthi Institute of Engineering and Technology.

Coordinator

HOD

**Principal** 



(Approved by AICTE, Permanently Affiliated to JNT University Kakinada. Accredited by NAAC and Recognized under 2(f) &12 (b) by UGC, New Delhi) Tamaram, Makayarapalem, Narsipatnam (RD), Visakhapatnam-531113

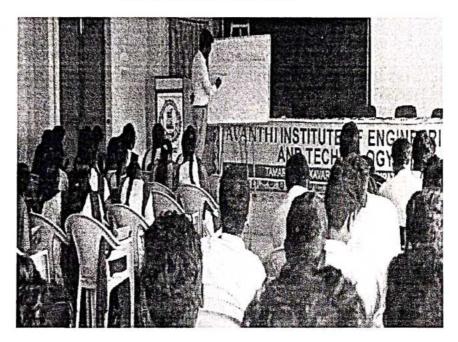
## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CERTIFICATE COURSE

ON

#### INDUSTRIAL ELECTRICAL MAINTENANCE

Dated:07-02-2022 to 11-02-2022



COORDINATOR



Head of the Department
Department of Electrical & Electronics Engg.
Avanthi Institute of Engg & Tech.
Makeyarapalem, Visakhapatnam-531113.



(Approved by AICTE, Permanently Affiliated to JNT University Kakinada, ACCREDITED BY NAAC and Recognized under 2(f) &12 (b) by UGC, New Delhi)
Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-531113

# Department of Electrical and Electronics Engineering

Dt: 14-02-2022

#### BRIEF REPORT

Department of Electrical and Electronics Engineering, Avanthi Institute of Engineering and Technology organized a certificate course On INDUSTRIAL ELECTRICAL MAINTENANCE from 07-02-2022 to 11-02-2022.

Sri G Srechari Babu explains the safe working methods on electrical systems, He demonstrates an understanding of electrical principles and units. He discuss the identification of a wide range of electrical equipment &devices and understand this principles of operation and connections. Sir also explain the principles of earthing, protection and associated protective devices.

Sri Ch Koteswara Rao demonstrates on electrical systems, Switch gear and circuit types. Sir, clearly explained that as an electrical engineer everyone should diagnosis the basic faults and recognise their associated symptoms. He discuss, the recognization of the most common industrial motor types and their operation, connections and maintenance requirements. He explains clearly the identification of motor and power circuit faults, he also said that how to use the circuit diagrams as an aid to maintenance. Finally the students were felt very happy with this informative industrial oriented program.

Coordinator -

Head of the Department

Head of the Department
Department of Electrical & Electronics Engg.
Avanthi Institute of Engg & Tech.
Makavarapalem, Visakhapatnam - 531113.