



DADI INSTITUTE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E., New Delhi & Affiliated to JNTUK, Kakinada)

NH-5, Anakapalle – 531002, Visakhapatnam, A.P.

Mobile: +91 9963981111, Website: www.diet.edu.in, E-mail: info@diet.edu.in

INVITATION

To
The principal sir,
Dadi institute of engineering and technology
Ankapalle, Visakhapatnam-531002,A.P.

SUB: PLC Workshop

Respected sir,

This is informed that will be a Workshop on PLC scheduled from 3rd March 2022 to 09th March 2022 at Computer lab-I. We are (EEE Dept.) inviting to join the workshop session and make the Workshop successful.

Thanking you,

Yours obediently

DIET EEE Dept.



Dadi Institute of Engineering & Technology

(Approved by A.I.C.T.E., New Delhi & Permanently Affiliated to J.N.T.U.K., Kakinada)

NAAC Accredited Institute and Inclusion of section 2(f) & 12 (B) of UGC Act

An ISO 9001:2008; ISO 14001:2004 & OHSAS 18001:2007 Certified Institution

NH-16, Anakapalle, Visakhapatnam - 531002, A.P.

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Dt: 28/02/2022

CIRCULAR

This is to inform you all that, EEE Dept. is going to conduct Industrial Automation with PLC workshop for IV B.Tech students. Hence HODs are requested to inform all the students.

Venue: Computer Lab-1

Principal

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NH-16, Anakapalle, Visakhapatnam-531002, Andhra Pradesh, www.diet.edu.in



Department of Electrical and Electronics Engineering

In association with

APSSDC

Andhra Pradesh State Skill Development Corporation



Presents

A SIX DAY WORKSHOP ON INDUSTRIAL AUTOMATION WITH PLC

From: 03-03-2022 to 09-03-2022
9AM TO 4PM

INAUGURATION on : 03.03.2022

VENUE: For Inauguration Seminar Hall- 2, Fourth Floor
For Workshop – Lab 1 & 2, First floor

A. Krishna Nag
HOD EEE

Dr. L. Prasanna Kumar
Skill Co-Ordinator (DIET)

Dr. Challa Narasimham
Principal(DIET)

Sri Dadi Ratnakar
Chairman (DIET)

List of Students:

1	18U41A020 1	B. PAVAN SAI PRAKASH RAO
2	18U41A020 2	BODI PRASANNA KUMAR
3	18U41A020 3	D. YAGNA SHIVA DATTA
4	18U41A020 4	SUNDARAPU INDU
5	18U41A020 5	DUNNA SRAVAN SIVA KUMAR
6	18U41A020 6	KRISHNAM RAJU KALLAYPILLI
7	18U41A020 7	KILLADI VIJAYKUMAR
8	18U41A020 8	KODURU VAMSI KRISHNA
9	18U41A020 9	KOTHALA POORNA RAJESWARI
10	18U41A021 0	KUCHARLA PREM KUMAR
11	18U41A021 1	MADDALA LOKESH
12	18U41A021 2	P. PRASANNA KUMAR
13	18U41A021 3	P. KALYAN CHAKRAVARTHY

1 4	18U41A021 4	RONGALI RAMYA
1 5	18U41A021 5	SARISA SRINOWSHYA
1 6	18U41A021 6	SENAPATHI BANU
1 7	18U41A021 7	VILLURI KIRAN KUMARI
1 8	18U41A021 8	BHEESETTI JASWANTH
1 9	18U41A021 9	V. MUNI HEMANTH RAO
2 0	18U41A022 0	LALAM VANDANA
2 1	18U41A022 1	KARRI MAHESH
2 2	18U41A022 2	GORLI JAIRAM JAYANTH
2 3	18U41A022 3	PENTAKOTA YESWANTHKUMAR
2 4	18U41A022 4	BOYANA VAMSI
2 5	19U45A020 1	AKKIREDDY KUSUMA KUMARI
2 6	19U45A020 2	APPANA SAI SASIKUMAR
2 7	19U45A020 3	BADAMPUDI VAMSI

28	19U45A020 4	BADDETI BHARATHI
29	19U45A020 5	BARNIKANA VENKATA RAKESH YADAV
30	19U45A020 6	BODDU SIRISHA
31	19U45A020 7	BOGADAKURTHI SIVA SAI KUMAR
32	19U45A020 8	BOLIBOYINA PYDIRAJU
33	19U45A020 9	BOTTA BHAVANA
34	19U45A021 0	BOTTA SOMESWARI
35	19U45A021 1	BUDDHA LOHIDHAR
36	19U45A021 2	CHERUKURI SRI HARSHA
37	19U45A021 3	DADI DUSHYANT
38	19U45A021 4	DADI PRAVEEN
39	19U45A021 5	EAGALA MOHAN
40	19U45A021 6	GILAKAMSETTY MANOHAR SRI
41	19U45A021 7	GILIVINDALA RAJESH

4 2	19U45A021 9	JETTI YASWANTH KUMAR
4 3	19U45A022 0	JOGA SHYAMALA
4 4	19U45A022 1	KAGITHAPALLI SUSMITHA
4 5	19U45A022 2	KALEPU LIKITHA
4 6	19U45A022 3	KALLA BHEEMA VINAY SANYASI NAIDU
4 7	19U45A022 4	KAPUSETTY MAMATHA
4 8	19U45A022 5	KARANAM SAI
4 9	19U45A022 6	KARANAM SHALINI
5 0	19U45A022 7	KAYALA MAHESWARI
5 1	19U45A022 8	KONDAKANCHI BHAGYA LAKSHMI
5 2	19U45A022 9	KOPPISETTI SAI SATYA JAHNAVI
5 3	19U45A023 0	KOSANAM KUSUL KUMAR
5 4	19U45A023 1	KOTA NARAYANA MURTHY
5 5	19U45A023 2	LALAM UMA MAHESH

5 6	19U45A023 3	MADDALA SAI SANTHOSH
5 7	19U45A023 4	MADHUPADA SRINIVAS
5 8	19U45A023 5	MADINI PAUL SAMUEL
5 9	19U45A023 6	MALLA CHAITANYA GANESH
6 0	19U45A023 7	MALLAPURADDY DIVYA
6 1	19U45A023 8	MAMIDI VENKATA SAGARIKA
6 2	19U45A023 9	MANDA SRAVAN KUMAR
6 3	19U45A024 0	MARISA KUMAR LALITHESWARA RAO
6 4	19U45A024 1	MATHUKUMALLI C VENKATA NAGA GANESH KUMAR
6 5	19U45A024 2	MOLLI SIVADURGA SAI KIRAN
6 6	19U45A024 3	MUTHA HEMANTH KUMAR
6 7	19U45A024 4	NAHAK SURAJ
6 8	19U45A024 5	NAKKA PRUDHVI
6 9	19U45A024 6	NAKKA SRINIVAS

7 0	19U45A024 7	NELLI SUMANTH KUMAR
7 1	19U45A024 8	PADISETTY TEJA SAI SATYA NOOKA RAJA
7 2	19U45A024 9	PANCHADARLA JYOTHI
7 3	19U45A025 0	PEDAPATI GNANENDRA KUMAR
7 4	19U45A025 1	PETLA RAMYA
7 5	19U45A025 2	POLAMARASETTY POORNA SAI
7 6	19U45A025 3	RAAVI SATISH SEKHAR
7 7	19U45A025 4	RAPETI JAGAN MURALI
7 8	19U45A025 5	SALADI NAGA GAYATHRI
7 9	19U45A025 6	SARAGADAM YESWANTH
8 0	19U45A025 7	SENAPATHI ANIL
8 1	19U45A026 0	SHAIK NAZEERA PRAVEEN
8 2	19U45A026 1	SOMIREDDY VARA PRASAD
8 3	19U45A026 2	SUNDARAPU SRAVANI

8 4	19U45A026 3	SUNKARA LAXMAN RAO
8 5	19U45A026 4	TALARI VENKATA SUDHEER
8 6	19U45A026 5	URUKUTI PRAMEELA
8 7	19U45A026 6	VANUMU GANESH
8 8	19U45A026 7	VATHADA LOKESH
8 9	19U45A026 8	VEGI SAI KUMAR
9 0	19U45A026 9	YANNAMREDDY MOHAN APPALA REDDY
9 1	19U45A027 0	YELCHURI CHANDRASEKHAR
9 2	19U45A027 1	K SIVA KUMAR
9 3	19U45A027 2	M SAVAN KUMAR

REPORT:

The program started by welcome lecture and introduction of recent trends in automation and role of youth towards the industrial empowerment by inviting Principal Dr. ChNarasimham, College level Skill coordinator Dr.L.Prasanna Kumar, A.Krishna Nag (H.O.D.Dept.of.EEE) and Technical skill coordinators from APSSDC (Kiran Varma, Madhuvamsi, Siva Gangadhar) on to the dias. Further, the event continued by valuable speech by the persons hosted on the dias.

Programmable Logic Controllers (PLCs) are small industrial computers with modular components designed to automate customized control processes. PLCs are often used in factories and industrial plants to control motors, pumps, lights, fans, circuit breakers and other machinery. Automation is set to disrupt almost every area and process, including equipment communications, maintenance and repairs, and production. There's a reason why the global market for PLCs stands at \$16 billion a year, growing annually at 9.2%. Their robust design, low costs, and simplicity in the face of complex integrations make them a fundamental component in manufacturing. Without PLCs, many businesses wouldn't be able to support the implementation of new control

technology. For now, PLCs continue to remain integral to the digital transformation Industry 4.0 promises to make. APSSDC is offering an “Industrial Automation with PLC Program” so that the faculty/students across engineering colleges in the state of Andhra Pradesh gain Industrial Automation with PLC knowledge.

Introduction to Automation: History of Automation Introduction to PLC Advantages, and disadvantages of PLC programming languages: Types of PLC Programming Languages Introduction to Ladder Logic Programming Rules for Ladder Logic Programming Software: Introduction to WPL Software Download and Installation procedure Introduction to Virtual Coils: Normally Opened, Normally Closed and Output Contacts Difference between normally opened and closed contacts Applications based on Virtual Coils Ladder Logic for Logic Gates Latched and Unlatched Contacts: Introduction to Latching Applications on the latching concept Interlinking Applications based on the interlinking concept Memory Coils/Dummy Coils: Introduction to the memory coil Applications on memory coil concept Timers: Introduction to the Timers Types of timers and their working Applications based on the timers Counters: Introduction to the Counters Types of counters and their working Applications based on counters 3 Introduction to Data Registers: 16 and 32-Bit Registers Arithmetic and Mathematical Operations Data Conversions Introduction to Analog Concept(Basics) Introduction to the Application Instructions: Conditional Jump comparison and Zone Comparison Data Move Instruction Internal Clock Pulse PLC Operation Flag Applications Based on the Covered Topics: Stair-case Direct Online Starter Star-delta Starter Sequence Application Quiz Application Automatic Tank Filling System Traffic Light Recipe Production Car Parking Application.

Course Outcomes:

Ladder logic programming is one of the best visual programming that's easy to understand. This course guides you on how to program the PLC, how PLC continuously monitors and receives information from input devices & processes the information and how it enables the output devices and you will get complete knowledge on virtual relay coils, timers, counters, Arithmetical& Logical operations. And how to interface the hardware with PLC such as relays, contactors, sensors.



