(Approved by A.LC.T.E., New Delhi & Affiliated to JNTUK, Kakinada) NAAC Accredited Institute and Inclusion under Section 2(f) of UGC Act An ISO 9001:2008, ISO 14001/2001 & OHSAS 18001:2007 Certified Institution N11-16, Anakapalle – \$31002, Visakhapatnam, NP Mobile: +91 9963981111, Website: www.diet.edu.in, E-mail: info@diet.edu.in

> Anakapalle, Dt: 27-08-2019

From, Mr.K Joginaidu HOD - ECE, Dadi Institute of Engineering & Technology.

(Through Proper Channel)

To.

The Principal. Dadi Institute of Engineering & Technology.

Sub: Request to approve permission for a Three weeks internship on BASICS OF PLC at SIEMENS

Sir,

With due respect, hereby stating that, I, on behalf of ECE Department request you for sending three final year ECE students for training on BASICS OF PLC at SIEMENS from 5th Sep 2019 to 5th Oct 2019.

We, therefore, hope that you would be kind enough to grant us the permission. Waiting anxiously for your reply.

8 E 9 - 3

Thanking you

Yours Sincerely,

HOD-ECE, DIET

Head of the Doperiment Electronics & Comministration Eng Data Institute Au

 (Approved by A.I.C.T.E., New Delhi & Affiliated to JN1UK, Kakinada)
NAAC Accredited Institute and Inclusion under Section 2(f) of UGC Act
An ISO 9001,2008; ISO 14001,2004 & OHSAS 18001;2007 Certified Institution NII-16, Anakapalle 531002, Visakhapatnam, A.P.
Mobile: +91 9963981111, Website: www.diet.edu.in, E-mail: info@diet.edu.in

CIRCULAR

DATE: 29-08-2019

This is to inform all the Students, Teaching & Technical Staff of Dadi Institute of Engineering and Technology that three final year ECE students got permission for internship training on BASICS OF PLC at SIEMENS from 5th Sep 2019 to 5th Oct 2019.

HOD ECE

der ai

Dadi Institute of Engg & Tech She was a San She was a straight for the same Dadi Institute of Engg & Tech

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

REPORT ON THREE WEEKS INTERNSHIP ON BASICS OF PLC BY SIEMENS

SIEMENS specific courses based on Massive Open Online Course (MOOC) and blended learning concepts for automation and drive technology in selected countries. They support you in the practice-oriented classes to transfer product and system know-how. Our range of courses comprises a wide variety of training modules based on Totally Integrated Automation (TIA) concept. Every PLC and drive course is oriented on state-of-the-art technology. Your graduates can thus be prepared optimally for their professional future.

BASICS OF PLC TRAINING

The main objective of this course is to provide a novice understanding of Siemens PLC programming, ladder logic and familiarize enough with a variety of ladder logic instructions to develop a PLC program using Simatic manager.

The learning/training documents cover the following topics:

- Hardware Configuration
- Example Processes
- Basics of PLC Programming
- Visualization
- Advanced Programming
- Drives

A Programmable Logic Controller (PLC) is an industrial computer control system that continuously monitors the state of input device and makes decision based upon a custom program to control the state of output devices. Almost any production line, machine function, or process can be greatly enhances using this type of control system. However, the biggest benefit in using a PLC is the ability to change and replicate the operation or process while collecting and communication vital information.

A programmable controller manufacture by any company has several common function parts.

INPUT

Input defined as real-world signals giving the controller real-time status of process variables. These signals can be analog or digital, low or high frequency, maintained or momentary. Typically they are presented to the programmable controller as a varying voltage current or resistance value. Signals from thermocouples (TCs) and resistance temperature detectors (RTDs) are common examples of analog signals. Some flow meters and strain gauge provide variable frequency signals, while pushbuttons, limit switches, or even electro mechanically relayed contacts are familiar examples of digital, contact closure type signals. One additional type of input signal, the register input, reflects the computer nature of the programmable controller.

OUTPUT

There are three common categories of outputs: Discrete, Register, and Analog. Discrete Output can be pilot light, solenoid valves, or enunciator Windows (lamp box). Register output can be drive panel meters or displays; analog outputs can drive signals to variable speed drive or to I/P converters and thus to control values.

CENTRAL PROCESSOR UNIT (REAL TIME)

The central processor unit (CPU), or central control unit (CCU), perform the tasks necessary to fulfill the PLC function. Amount these are scanning, I/O bus traffic control, program execution device communication, special function or data handling execution (enhancement), and self-diagnostics

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

NAAC Accredited Institute and Inclusion under Section 2(f) of UGC Act An ISO 9001:2008; ISO 14001:2004 & OHSAS 18001:2007 Certified Institution NH-16, Anakapalle – 531002, Visakhapatnam, A.P.

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

ADVANTAGES OF PLC

- Small size
- Faster Response
- Wiring reduced upto 80%
- Low maintenance cost
- Easy for troubleshooting



• Fig1 : Participation Certificate of Students

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

NAAC Accredited Institute and Inclusion under Section 2(f) of UGC Act

An ISO 9001:2008; ISO 14001:2004 & OHSAS 18001:2007 Certified Institution NH-16, Anakapalle – 531002, Visakhapatnam, A.P.

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



Fig 2: Completion certificate

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

NAAC Accredited Institute and Inclusion under Section 2(f) of UGC Act

An ISO 9001:2008; ISO 14001:2004 & OHSAS 18001:2007 Certified Institution NH-16, Anakapalle – 531002, Visakhapatnam, A.P.

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



Fig 3: Completion certificate

List of participants

Sl.No	Name of Participants
1	Kumar Ayinaparthi
2	K Reshma
3	P Preethi

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

NAAC Accredited Institute and Inclusion under Section 2(f) of UGC Act An ISO 9001:2008; ISO 14001:2004 & OHSAS 18001:2007 Certified Institution NH-16, Anakapalle – 531002, Visakhapatnam, A.P.

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

Department of ECE

FEEDBACK FORMON INTERNSHIP TRAINING

- 1. Has the Internship attained its objectives
- □ Yes
- □ No
- 2. Internship was relevant to my needs
- □ Strongly agree
- □ Agree
- □ Neutral
- □ Disagree
- □ Strongly disagree
- 3. Instructions were clear and understandable
- □ Strongly agree
- □ Agree
- □ Neutral
- □ Disagree
- □ Strongly disagree
- 4. Classes was well organized
- □ Strongly agree
- □ Agree
- □ Neutral
- □ Disagree
- □ Strongly disagree
- 5. Was the Duration of the training sufficient.
- □ Yes
- □ No

6.Resource persons were effective.

- □ Strongly agree
- □ Agree
- □ Neutral

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

NAAC Accredited Institute and Inclusion under Section 2(f) of UGC Act

An ISO 9001:2008; ISO 14001:2004 & OHSAS 18001:2007 Certified Institution NH-16, Anakapalle – 531002, Visakhapatnam, A.P.

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

- □ Disagree
- □ Strongly disagree
- 7. Queries were encouraged
- □ Strongly agree
- □ Agree
- □ Neutral
- □ Disagree
- □ Strongly disagree

8. Any additional remarks

- 9. Overall how would you rate this event
- □ Excellent
- □ Very good
- \Box Good
- □ Fair
- □ Poor

10.Propose the name of the training program you will be interested in participating in future.