

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



*Certificate Course
on*

PLC

From 04 July 2018 to 09 July 2018



ORGANIZED BY

**DEPT. OF ELECTRONICS AND COMMUNICATION ENGINEERING
AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY,
MAKAVARAPALEM (V), VISAKHAPATNAM-531113**

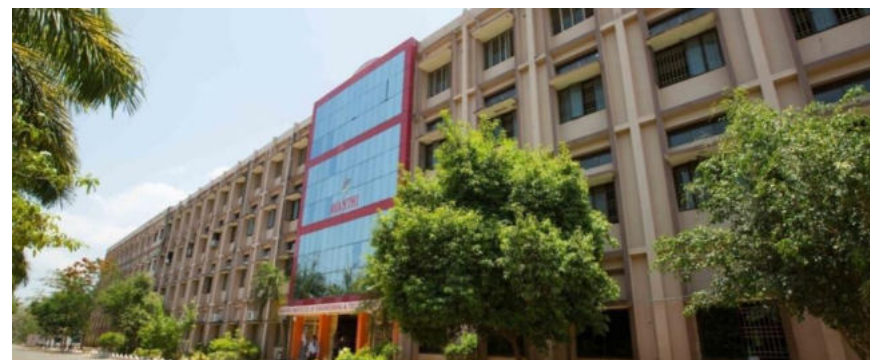
AVANTHI EDUCATIONAL SOCIETY

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 and to 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 ELECTRONICS COMMUNICATION ENGINEERING

The ECE Department was established in the year 1999 with an intake of 60 students and this was increased to 120 students in the 2007 and increased to 180 students in the 2012. The department has an eminent faculty and well supported infrastructure and laboratories. The faculty keeps abreast with the latest advances in technology and ensures that hardware equipment and related software are upgraded to ensure its students are able to keep pace with current trends in technology and the industry.

The department also offers a Post – Graduate courses in DECS and VLSI Design. The students are encouraged to participate in workshops, industrial internship, industrial visits and seminars; along with the projects assigned during the course, these activities enable them to broaden their outlook and build in professionalism that makes their transition from college to industry smoother after graduation.

ABOUT COURSE

A **programmable logic controller (PLC)** or **programmable controller** is an industrial computer that has been ruggedized and adapted for the control of manufacturing processes, such as assembly lines, machines, robotic devices, or any activity that requires high reliability, ease of programming, and process fault diagnosis. Dick Morley is considered as the father of PLC as he had invented the first PLC, the Modicon 084, for General Motors in 1968.

TOPICS TO BE COVERED

Day 1: INTRODUCTION TO LOGIC GATES AND NUMBER SYSTEM

Day 2: INTERFACING PERIPHERAL CHIPS FF, REGISTERS, TRISTATE
BUFFERS, LATCHES, DECODERS, MEMORY

Day 3: INTRODUCTION TO PLC, MICROPROCESSORS, I/O
PORTS, ISOLATION FILTERS, DRIVERS, MICROCONTROLLERS, DSP, PIC

Day 4: PLC CONSTRUCTION, WHAT IS A PLC, PLC MEMORIES, PLC
I/O, PLC PROGRAMMING INTRODUCTION TO LADDER, PLC SPECIAL I/O,

Day 5: PLC INSTRUCTIONS, PLC LADDER LANGUAGE, LADDER INSTRUCTION
LIST PLC BASIC INTRODUCTION BASIC EXAMPLES START STOP
RUNG, ENTRY RESET RUNG

For Registration please contact Mr P. Ashok kumar, Assistant Professor, ECE

| | | |
|---|---|---|
| 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 | CHAIRMAN Sri. E. Govinda Head of the Department Electronics and Communication Engineering |
|---|---|---|



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

CIRCULAR

Date: 02/07/2018.

This is informed to all the II B.Tech ECE students that our department is planning to conduct one week course on "PLC" scheduled from 04-07-2018 to 09-07-2018. It is directed to all the students of II ECE to utilize this opportunity to enhance your technical skills. For more details about registration process and participation contact Course Coordinator Mr P.ASHOK KUMAR, Assistant Professor, ECE Department.

Resource Person Details:

CH .SANTOSH KUMAR,
APSSDC.


E. Govinda

Head of the Department,
ECE

Copy to: Principal, AIET

HEAD OF THE DEPARTMENT
DEPARTMENT OF ECE
Avanathi Institute of Engg.&Tech.
Makavarapalem, Visakhapatnam Dist-53



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PLC

From 04 July 2018 to 09 July 2018

SYLLABUS

- Day 1: INTRODUCTION TO LOGIC GATES AND NUMBERSYSTEM
Day 2: INTERFACING PERIPHERAL CHIPS FF,REGISTERS,TRISTATE
BUFFERS,LATCHES DECODERS,MEMORY
Day 3: INTRODUCTION TO PLC,MICROPROCESSORS,I/O
PORTS,ISOLATIONFILTERS,DRIVERS,MICROCONTROLLERS,DSP,PIC
Day 4: PLC CONSTRUCTION,WHAT IS A PLC,PLC MEMORIES,PLC
I/O,PLCPROGRAMMING INTRODUCTION TO LADDER,PLC SPECIAL I/O,
Day 5: PLC INSTRUCTIONS,PLC LADDER LANGUAGE,LADDER INSTRUCTION
LIST PLC BASIC INTODUCTION BASIC EXAMPLES START STOP
RUNG,ENTRY RESET RUNG

E.Govinda
CHAIRMAN
&

Head of the Department
Electronics and communication Eng ineering

P. Ashok Kumar

P.ASHOK KUN AR

Asst. Professor

Coordinat r

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PLC

From 04 July 2018 to 09 July 2018

Schedule

Day-1 (04/07/2018)

| | |
|----------------|---|
| 09:00 to 10:00 | Introduction to Logic Circuit |
| 10:00 to 12:00 | Digital Electronics Basics PLC Fundamentals |
| 12:00 to 01:00 | Lunch Break |
| 01:00 to 04:00 | PLC Hardware & Architecture |

Day-2 (05/07/2018)

| | |
|----------------|---|
| 09:00 to 12:00 | Interfacing Peripheral chips |
| 12:00 to 01:00 | Lunch Break |
| 01:00 to 04:00 | F.F., Registers Tristate Buffers, Latches, Decoders, Memory |

Day-3 (06/07/2018)


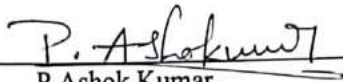
| | |
|----------------|--|
| 09:00 to 12:00 | Introduction to PLC Microprocessor, I |
| 12:00 to 01:00 | Lunch Break |
| 01:00 to 04:00 | I/O Ports, Isolation, Filters, Drivers, Microcontrollers/DSP, PLC/DDC. |

Day-4 (07/07/2018)

| | |
|----------------|---|
| 09:00 to 12:00 | PLC Construction: What is a PLC, Why preferring PLC, |
| 12:00 to 01:00 | Lunch Break |
| 01:00 to 04:00 | Introduction to PLC ladder, PLC Special I/O, PLC Types. |

Day-5(09/07/2018)

| | |
|----------------|--|
| 09:00 to 12:00 | PLC Basic Instructions: PLC Ladder Language, |
| 12:00 to 01:00 | Lunch Break |
| 01:00 to 04:00 | Ladder/Instruction List, PLC Basic Instructions, Basic Examples (Start Stop Rung Entry/Reset Rung |

| | |
|---|--|
|  E. Govinda CHAIRMAN & Head of the Department Electronics and Communication Engineering |  P. Ashok Kumar, Asst. Professor |
| | Coordinator |

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PLC

From 4TH JULY 2018 To 9TH JULY 2018

II B.Tech ECE STUDENTS ATTENDANCE LIST

| S.NO | ROLL NO | STUDENT NAME | 4/7 | 5/7 | 6/7 | 7/7 | 9/7 |
|------|------------|--|-----|-----|-----|-----|-----|
| 1 | 17811A0401 | ADARI UMA MAHESH | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2 | 17811A0402 | AKKENA SOMASEKHAR | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3 | 17811A0403 | ALLAM LOKESH KUMAR | ✓ | ✓ | ✓ | ✓ | ✓ |
| 4 | 17811A0404 | AMALAKANTI BHARGAV NAVEEN | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5 | 17811A0405 | AMIREDDI SIVAJI | ✓ | ✓ | ✓ | ✓ | ✓ |
| 6 | 17811A0406 | ANGINA VAMSI | ✓ | ✓ | ✓ | ✓ | ✓ |
| 7 | 17811A0407 | ANNAMREDDI SAI SANTHOSHI VINEELA | ✓ | ✓ | ✓ | ✓ | ✓ |
| 8 | 17811A0408 | BALIREDDI PREM KUMAR | ✓ | ✓ | ✓ | ✓ | ✓ |
| 9 | 17811A0409 | BOBBILI ANUVARA | ✓ | ✓ | ✓ | ✓ | ✓ |
| 10 | 17811A0410 | BODDU SWAMI NAIDU | ✓ | ✓ | ✓ | ✓ | ✓ |
| 11 | 17811A0411 | BOMMALI REVATHI | ✓ | ✓ | ✓ | ✓ | ✓ |
| 12 | 17811A0412 | CHINTA SANTOSH | ✓ | ✓ | ✓ | ✓ | ✓ |
| 13 | 17811A0413 | DODDI RAMA KRISHNA | ✓ | ✓ | ✓ | ✓ | ✓ |
| 14 | 17811A0414 | DUBASI TEJA SRUTHI | ✓ | ✓ | ✓ | ✓ | ✓ |

| | | | | | | | |
|----|------------|-----------------------------------|---|---|---|---|---|
| 15 | 17811A0415 | DUBASI YOGITHA NANDINI | ✓ | ✓ | ✓ | ✓ | ✓ |
| 16 | 17811A0416 | GALI MADHU KISHORE | ✓ | ✓ | ✓ | ✓ | ✓ |
| 17 | 17811A0417 | GANANADHAM RAMAKRISHNA TEJA | ✓ | ✓ | ✓ | ✓ | ✓ |
| 18 | 17811A0418 | GANTYADA NAGASUDHA | ✓ | ✓ | ✓ | ✓ | ✓ |
| 19 | 17811A0419 | GOLLU GOWRI RAJYALAKSHMI | ✓ | ✓ | ✓ | ✓ | ✓ |
| 20 | 17811A0420 | GOLUSU SUSHMANJALI | ✓ | ✓ | ✓ | ✓ | ✓ |
| 21 | 17811A0421 | GOPASANA PRUDHVI | ✓ | ✓ | ✓ | ✓ | ✓ |
| 22 | 17811A0422 | GORLE JITENDRA | ✓ | ✓ | ✓ | ✓ | ✓ |
| 23 | 17811A0423 | INDALA POOJITHA | ✓ | ✓ | ✓ | ✓ | ✓ |
| 24 | 17811A0424 | JANAPAREDDY TIRUMALA | ✓ | ✓ | ✓ | ✓ | ✓ |
| 25 | 17811A0425 | KANUBUDDI MANOJ NAIDU | ✓ | ✓ | ✓ | ✓ | ✓ |
| 26 | 17811A0426 | KOLLATI NAVYA | ✓ | ✓ | ✓ | ✓ | ✓ |
| 27 | 17811A0427 | KONATHALA HARISH BABU | ✓ | ✓ | ✓ | ✓ | ✓ |
| 28 | 17811A0428 | KONDURU SRINUVASULU | ✓ | ✓ | ✓ | ✓ | ✓ |
| 29 | 17811A0429 | KOTAMSETTI BALA VENKATA SAI | ✓ | ✓ | ✓ | ✓ | ✓ |
| 30 | 17811A0430 | KUDELI DIVYA | ✓ | ✓ | ✓ | ✓ | ✓ |
| 31 | 17811A0431 | LOMBORI KRUPA RANI | ✓ | ✓ | ✓ | ✓ | ✓ |
| 32 | 17811A0432 | MALLA RUPA JAGADEESHA | ✓ | ✓ | ✓ | ✓ | ✓ |

| | | | | | | | |
|----|------------|---------------------------------|---|---|---|---|---|
| 33 | 17811A0433 | MANGALAGIRI ANJANI SAI | ✓ | ✓ | ✓ | ✓ | ✓ |
| 34 | 17811A0434 | MEDAPUREDDI GAYATHRI | ✓ | ✓ | ✓ | ✓ | ✓ |
| 35 | 17811A0435 | NADELLA AJAY KUMAR | ✓ | ✓ | ✓ | ✓ | ✓ |
| 36 | 17811A0436 | PALAKA SASIPRIYA | ✓ | ✓ | ✓ | ✓ | ✓ |
| 37 | 17811A0437 | PALLA ARUNA JYOTHI | ✓ | ✓ | ✓ | ✓ | ✓ |
| 38 | 17811A0438 | PENTAKOTA SRAVANI | ✓ | ✓ | ✓ | ✓ | ✓ |
| 39 | 17811A0439 | PENUMATSA LALITHA VARMA | ✓ | ✓ | ✓ | ✓ | ✓ |
| 40 | 17811A0440 | RAMISETTY MANOJ KUMAR | ✓ | ✓ | ✓ | ✓ | ✓ |
| 41 | 17811A0441 | REDDY ANAND KUMAR | ✓ | ✓ | ✓ | ✓ | ✓ |
| 42 | 17811A0442 | ROKKAM SAI RATNA DEEPIKA | ✓ | ✓ | ✓ | ✓ | ✓ |
| 43 | 17811A0443 | RONGALA RAMA KRISHNA | ✓ | ✓ | ✓ | ✓ | ✓ |
| 44 | 17811A0444 | RUTHALA SRI LAKSHMI | ✓ | ✓ | ✓ | ✓ | ✓ |
| 45 | 17811A0445 | SHAIK SHAHINA PARVEEN | ✓ | ✓ | ✓ | ✓ | ✓ |
| 46 | 17811A0446 | SINGAMPALLI SAI | ✓ | ✓ | ✓ | ✓ | ✓ |
| 47 | 17811A0447 | SRISAILAPU NAGASAI | ✓ | ✓ | ✓ | ✓ | ✓ |
| 48 | 17811A0448 | THAVVA RUPA | ✓ | ✓ | ✓ | ✓ | ✓ |
| 49 | 17811A0449 | UGGINA SUGUNARANI | ✓ | ✓ | ✓ | ✓ | ✓ |
| 50 | 17811A0450 | UPPU SEETA SURYA KANTAMMA | ✓ | ✓ | ✓ | ✓ | ✓ |

| | | | | | | | |
|----|------------|-------------------------------|---|---|---|---|---|
| 51 | 17811A0451 | YANNAMSETTI VENNELA | ✓ | ✓ | ✓ | ✓ | ✓ |
| 52 | 18815A0401 | BOTSA PRASAD | ✓ | ✓ | ✓ | ✓ | ✓ |
| 53 | 18815A0402 | CHEPURI RAMANA GANESH | ✓ | ✓ | ✓ | ✓ | ✓ |
| 54 | 18815A0403 | GANUGULA KIRANKUMAR | ✓ | ✓ | ✓ | ✓ | ✓ |
| 55 | 18815A0404 | GUNDUMALLA SAI KUMAR | ✓ | ✓ | ✓ | ✓ | ✓ |
| 56 | 18815A0405 | KASIMSETTI HEMANTH | ✓ | ✓ | ✓ | ✓ | ✓ |
| 57 | 18815A0406 | KOTHADA SAI KUMAR | ✓ | ✓ | ✓ | ✓ | ✓ |
| 58 | 18815A0407 | KURELLA NAGA DURGA VASU | ✓ | ✓ | ✓ | ✓ | ✓ |
| 59 | 18815A0408 | LAKKOJU SRI JYOTHI | ✓ | ✓ | ✓ | ✓ | ✓ |
| 60 | 18815A0409 | NIHARIKA SINGH | ✓ | ✓ | ✓ | ✓ | ✓ |
| 61 | 18815A0410 | POTHAMSETTI RAMYA | ✓ | ✓ | ✓ | ✓ | ✓ |
| 62 | 18815A0411 | RAJANA RAMBABU | ✓ | ✓ | ✓ | ✓ | ✓ |
| 63 | 18815A0412 | SRIKAKULAPU SANTOSHI DIVYA | ✓ | ✓ | ✓ | ✓ | ✓ |
| 64 | 18815A0413 | UDUTA RANI | ✓ | ✓ | ✓ | ✓ | ✓ |
| 65 | 18815A0414 | VEERLA SUCHARITHA | ✓ | ✓ | ✓ | ✓ | ✓ |
| 66 | 18815A0415 | YERRA HEMANTH KUMAR | ✓ | ✓ | ✓ | ✓ | ✓ |


Coordinator


HOD

HEAD OF THE DEPARTMENT
DEPARTMENT OF ECE
Avanthi Institute of Engg. & Tech.
Makavarapalem, Visakhapatnam Dist-53° 113.



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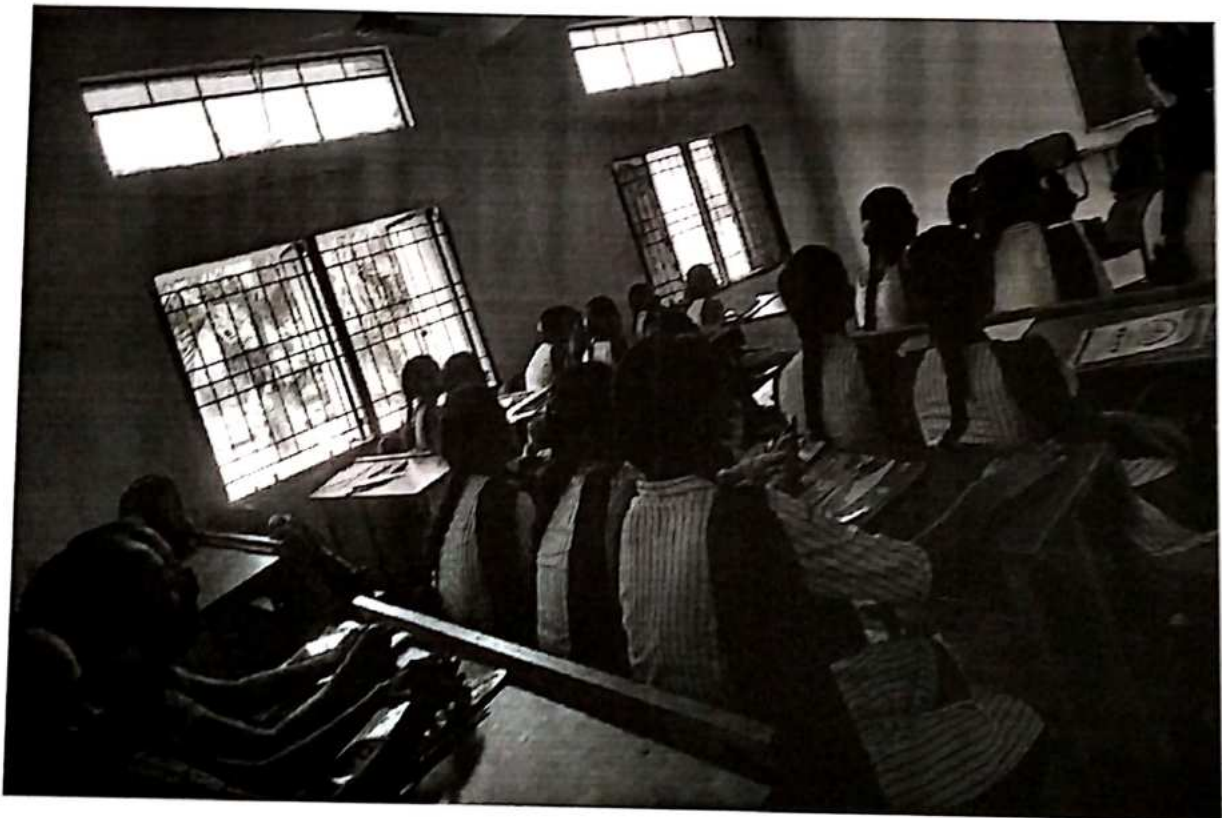
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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

A Course on

PLC

Dated :- 04/07/2018



P. Ashok Kumar
Coordinator

[Signature]
HOD

HEAD OF THE DEPARTMENT
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Avanathi Institute of Engg. & Tech.
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Department of electronics and communication Engineering

Dt: 16/07/2018

BRIEF REPORT

Avanathi Institute of Engineering and Technology had organized a certificate course on "PLC" From 4th JULY 2018 to 9th JULY 2018 in the Department of electronics and communication Engineering.

We had CH.SANTOSH KUMAR,APSSDC as the speaker to explain each and every detail about plc,that can continuously monitors the state of input devices and makes decisions based upon a custom program to control the state of output devices.he also provides plc flexibility of control that based on the programming and can excute simple logic expression which is being used in ladder diagram .

P. Ashokur
Coordinator

[Signature]
Head of the Department

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Certificate of Participation

This is to certify that Mr./Ms. _____ of _____ has participated in the Certificate Course entitled on *PLC* conducted from 04-07-2018 to 09-07-2018 was organized by the Department of ELECTRONICS AND COMMUNICATION ENGINEERING at Avanathi Institute of Engineering and Technology.

Coordinator

HOD

Principal