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Certificate Course

#### PLC and SCADA

From 12th NOV 2018 TO 17th NOV 2018



#### 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 ANDELECTRONICS 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

PLC or Programmable Logic Controller is a computing system used to control electromechanical processes.

SCADA stands for supervisory control and data acquisition. It is a type of industrial control system that is used to monitor and control facilities and infrastructure in industries

The main objective of PLC & SCADA workshop is to make aspiring engineers acquainted with the conceptual and practical knowledge of the industrial automation

and latest technologies being used to achieve industrial automation. The idea of organizing this workshop is to inculcate the basic fundamental of automation in the students and provide them with a platform to work on, in the near future.

#### TOPICS TO BE COVERED

DAY-1: Presentation on Recent Trends in Industrial Automation & PLC-SCADA

DAY-2: Detail study of PLC

DAY-3: Detail study of SCADA

DAY-4: PLC I/Os Basics, Burning & Interfacing Concepts

DAY-5: Downloading A Ladder Program In PLC Using RSLinx and how to take Input from Panel

DAY-6: Hands on PLC Training Kit

For any further information Contact Mr K. NARAYANA RAO, Assistant Professor, EEE, and Mr. P. ANIL KUMAR Assistant Professor, EEE

#### 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

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

#### COORDINATORS

P Anil Kumar Asst. Professor & K Narayana Rao Asst. Professor



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# DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING CIRCULAR

Dt. 10th Nov. 2018

A Short term Course on *PLC and SCADA* for all the III Year II Semester students of Electrical & Electronics Engineering Department is scheduled from 12<sup>th</sup> Nov 2018 to 17<sup>th</sup> Nov 2018. All the students should attend the course without fail. For any further information Contact Course Coordinators Mr.P.Anil Kumar and K Narayana Rao, Assistant Professor, EEE Department.

### Resource person Details:

- Sri N. Surya Naryana Multi Skill Trainer APSSDC.
- Smt G. Sireesha Multi Skill Trainer APSSDC.

Dr T. Srinivasarao

Head of the Department

EEE

Copy to: Principal, AIET

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



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#### PLC and SCADA

Duration:12-11-2018 to 17-11-2018

## **SYLLABUS**

DAY-1: Presentation on Recent Trends in Industrial Automation & PLC-SCADA

DAY-2: Detail study of PLC

DAY-3: Detail study of SCADA

DAY-4: PLC I/Os Basics, Burning & Interfacing Concepts

DAY-5: Downloading A Ladder Program In PLC Using RSLinx and how to take Input from

Panel

DAY-6: Hands on PLC Training Kit

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Head of the Department
Department of Electrical & Electronics Engg.
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### PLC and SCADA

Duration: 12-11-2018 to 17-11-2018

#### **SCHEDULE**

DAY/DATE	Session - 1 09.00 AM to 12Noon	Session - 2 1.00 PM to 4.00 PM				
Monday 12/11/2018	Introduction to Automation and different type Of industrial control mechanisms	Motor drives introduction & their Need and Sensors introduction & their Need				
Tuesday 13/11/2018	Detailed explanation of PLC	Explanation of some programs on PLC				
Wednesday 14/11/2018	Detailed explanation of SCADA	Explanation of some programs on SCAD				
Thursday 15/11/2018	Brief description to Input/ Output Pins Of Micrologix-1000 and Ladder diagram basics	Allen Bradley & Rockwell Automation's details and Introduction to RSLogix				
Friday 16/11/2018	Introduction to RSLogix and Downloading a Ladder Program in PLC Using RSLogix	How to take Input from Panel and how to give Output To Panel				
Saturday 17/11/2018	Hands on PLC Training Kit	Hands on PLC Training Kit				

P. Anil Kuman COORDINATOR Head of the Department
Department of Electrical & Electronics Engg.
Avanthi Institute of Engg & Tech.
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# PLC and SCADA

From 12th Nov 2018 to 17th Nov 2018

# 3rd Year Students Attendance

s.no	ROLL NUMBER	STUDENT NAME	Nov	13 Nov	14 Nov	15 Nov	16 Nov	17 Nov				
1	16811A0201	ANTHARVEDI LAKSHMI BHAVANI SOWMYA		~	_	~	/					
2	16811A0202	CHEKURI HEMANTH KUMAR	×	~	~	~	~	/				
3	16811A0203	CHODAY BHANU TEJASWINI	~	/	~	_	~	~				
4	16811A0204	KALAGA VARAHA VENKATA RAM PRASAD	~	~	/	/	_	/				
5	16811A0205	KARANAM SREENU	/	/	/	/	/	~				
6	16811A0206	MOLUGU BHARADHWAJ	_	_	X	/	/	~				
7	16811A0207	NEELAGIRI LOKESH VENKATA SAI GANESH	/	/	/	~	/	/				
8	16811A0208	PASALAPUDI MOHANA PRIYA	/	_	~	/	/	~				
9	16811A0209	PEDAPATI HARIKRISHNA	/	/	/	/	~	V				
10	16811A0210	PETLA VISHNU VARDHAN	~	/	/	/	V	V				
11	16811A0211	PYLA RAMESH	~	/	~	_	/	/				
12	16811A0212	SHAIK KHAJA BASHEER	/	×	<b>/</b>		~	/				
13	16811A0213	VANUGU RENU PRASANTH KUMAR	/	~	/	~	/	~				
14	16811A0214	YAKA SALMANRAJU	/	/	V	/	/	~				
15	17815A0201	BAINA SATYA GIREESH	/	/	/	/	/	/				
16	17815A0202	CHITIKELA MANASA	/	/	/	V	/	×				
17	17815A0203	DANIMIREDDI NOOKESH	/	_	/	/	~	~				
18	17815A0204	EARLA V S G RAMARAO	/	~	~	~	/	/				
19	17815A0205	GANDREDDY LAZAR	/	/	/	/	~	~				
20	17815A0206	GOPISETTI LAKSHMI VINOJ KUMAR	~	/	~	×	/	~				
21	17815A0207	KAARUKONDA TARUN KUMAR	~	~	~	~	~	~				
22	17815A0208	KALLA SRAVANI	~	/	/	~	~	/				
23	17815A0209	KILAPARTHI PRASAD	~	/	1	/	/	~				

24	17815A0210	KUNDRAPU REVATHI	/	1	/	/	/	/
25	17815A0211	LAGUDU PRASAD	_	/	/	/	/	/
26	17815A0212	LEKKALA SRI RAM SIVA KUMAR	V	/	V	/	/	~
27	17815A0213	MADDU CHANDRA SEKHAR	/	/	/	~	/	/
28	17815A0214	MAKIREDDI AYYAPPASWAMY	/	/	/	×	/	_
29	17815A0215	MAMIDI SIVAJI	/	/	/	~	/	/
30	17815A0216	MOTURI BHAVAN ANII.	~	/	/	~	/	/
31	17815A0217	NEELI PAVAN KALYAN	V	V	./	/	~	~
32	17815A0218	PASUPULETI BHASKARA SIVA GANESH				/	_	_
33	17815A0219	PATCHARA NAGESWARARAO	1./	~	./	/	/	~
34	17815A0220	PINAMAREDDI OOHA	~	/	/	/	~	~
35	17815A0221	POLUPARTHI GANGA BABU	/	~	/	V	~	V
36	17815A0222	RAVADA SREENU	1/	/	/	~	~	V

P. Anil Keman Coordinator

Head of the Department
Department of Electrical & Electronics Engg.
Avanthi Institute of Engg & Tech.
Makavarapalam, Visakhapatham - 531113.



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# DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

A 5days course on

# PLC & SCADA

From 12th Nov to 17th Nov 2018





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Head of the Department
Department Economics Control of the Department Economics Control of the Department Control of the D



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Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-531113

# Certificate of Participation

Th	is i	s to	certi	fy	that	Mr./	Ms.									of
					has	part:	icipa	ated	in	the	Certi	fica	ite	Course	enti	tled
on	PLC	AND	SCADA	du	ring	from	12 <sup>TH</sup>	NOV	20	18 t	o 17 <sup>TH</sup>	NOV	20:	18 was	organ	ised
by	the	De	epartme	ent	of	ELEC	CTRIC	CAL	AND	ELEC	CTRONI	CS E	NGI	NEERIN	G at	
Ava	anthi	In	stitute	e (	of Er	gine	ering	g an	d Te	echno	ology.					

Coordinator HOD Principal

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Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-531113

### Department of Electrical and Electronics Engineering

Dt: 21-11-2018

#### **BRIEF REPORT**

Department of Electrical and Electronics Engineering, Avanthi Institute of Engineering and Technology had organized a certificate course on "PLC and SCADA" during from 12-11-2018 to 17-11-2018

We had Sri N. Surya Narayana (Multi Skill Trainer APSSDC) as a resource person has been discussed regarding familiar with the practical knowledge of the Industrial Automation and recent technologies being utilized to accomplish modern Industrial Automation. He also told that organizing this course is to impart the basics of electrical automation in the understudies and give them a stage to deal with, in the near future. He also gave an explanation on the most utilized guiding force behind a computerized modern plant is a "Programmable Logic Controller" also known as a PLC and also give brief explanation on PLCs alongside certain other essential fixings like Sensors, Motors, Actuators, Valves, Conveyors, Boilers, SCADA Systems.. This course gives a brief exposure to students on industrial and process automation, introduction to PLC and SCADA and hands on experience on PLC.

P. Anil Kuman

Head of the Department

Head of the Department
Department of Electrical & Electronics Enga.
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