



Concept:

PLC and SCADA are used extensively in oil and gas facilities, mineral processing, chemical, factory automation, brewing, water and sewage treatment plants, they are used for flexibility, modularity and reliability. There are specific features of PLC's that make them the preferred choice for industries that rely on these systems, such as:

- Easy to program
- Unified programming environment
- They collect robust data
- They can be used for predictive maintenance

Currently, there is a short supply of technicians and engineers with skills and competency in selection, installation, fault finding, commission and maintaining PLC's. PMV uses, and trains students in Allan Bradley Micrologix 1000 controllers and RSlogix Micro-starter lite software, Siemens S7 200, 300 and 1200 (TIA complaint) hardware and Siemens KT600 Human Machine Interface with WinCC SCADA software, Rockwell Automation MicroLogix 500 and 5000 and Wonderware Intouch SCADA software.

Objective:

The objective of this course is to enable students to enhance their knowledge about automation in industries using various automation tools like PLC, SCADA, HMI, etc. also student will interact with various instructions and commands used in PLC and SCADA and can able to design ladder logic program and SCADA window program for industrial automation. The course is best suited for the students who want to explore their career as a PLC programmer or as a maintenance engineer.

Outcomes

Course Outcome PLC/SCADA/DCS Engineers to meet the requirements of

- configuring, programming, installing and operating of industrial automation systems.
- Qualified PLC/HMI programming engineers to meet the requirements of designing appropriate industrial automation systems.
- On completion of these modules, Engineers are ready to take on any Machine, Process or Plant Automation assignment



Evaluation criterion:

S.No	Student Name	Review 1	Review 2	Project Exhibition



Vishwaniketan's Institute of Management Entrepreneurship and Engineering Technology
Department of Electrical Engineering
Survey No-52 Off Mumbai-Pune Expressway Kumbhivali, Tal- Khalapur, Maharashtra 410202.

NOTICE -1

DATE: 10/01/2023

All student of TE Electrical Engineering student are here by informed that, your Even semester Value Addition Program (VAP) for academic year 2022-23 is schedule on “Advanced PLC and SCADA” by Mr Omprakash Barure, all students are instructed to attend the VAP.

VAP CO-ORDINATOR

Prof. Mandar Dixit

HOD

Dr. Sharvari Sane



NOTICE -2

DATE: 06/01/2023

All student of TE Electrical Engineering student are here by informed that, your Even semester Value Addition Program (VAP) for academic year 2022-23 is scheduled from 23/01/2023 to 27/01/2023 on "Advanced PLC and SCADA" by Mr Omprakash Barure, all registered students are instructed to attend the VAP.

VAP CO-ORDINATOR

Prof. Rinky Maity

HOD

Dr. Sharvari Sane



DEPARTMENT OF ELECTRICAL ENGINEERING

TIME TABLE VAP

S.No	Sem	Technology	Start Date	End Date	Venue	Trainer
1	V	Advanced PLC SCADA	23/01/23	27/03/23	D103	Mr, Omprakash Barure



Vishwaniketan's Institute of Management Entrepreneurship and Engineering Technology

Department of Electrical Engineering

Survey No-52 Off Mumbai-Pune Expressway Kumbhivali, Tal- Khalapur, Maharashtra 410202.

DEPARTMENT OF ELECTRICAL ENGINEERING

Glimpses of VAP



Vishwaniketan's Institute of Management Entrepreneurship and Engineering Technology

Department of Electrical Engineering

Survey No-52 Off Mumbai-Pune Expressway Kumbhivali, Tal- Khalapur, Maharashtra 410202.

DEPARTMENT OF ELECTRICAL ENGINEERING

NOTICE -3

DATE:

All student of **TE and BE** Electrical Engineering student are here by informed that, Review - I for your odd semester Value Addition Program (VAP) on "Electrical AutoCAD " for academic year 2021-22 is scheduled on **03/08/21** from 10: 00 am – 5 :00 pm , all students are instructed to attend the Review -I.

Venue: **Comp Lab** D 103

VAP CO-ORDINATOR

Prof. Rinky Maity

HOD

Dr. Sharvari Sane



Evaluation criterion Review –I:

S.No	Group Number	Project Undertaken	Difficulty Level	Work Done so far	Individual Contribution



Vishwaniketan's Institute of Management Entrepreneurship and Engineering Technology

Department of Electrical Engineering

Survey No-52 Off Mumbai-Pune Expressway Kumbhivali, Tal- Khalapur, Maharashtra 410202.

DEPARTMENT OF ELECTRICAL ENGINEERING

NOTICE -4

DATE:

All student of **TE and BE** Electrical Engineering student are here by informed that, Review - II for your odd semester Value Addition Program (VAP) on "Electrical AutoCAD " for academic year 2021-22 is scheduled on **03/08/21** from 10: 00 am – 5 :00 pm , all students are instructed to attend the Review -II.

Venue: **Comp Lab** D 103

VAP CO-ORDINATOR

Prof. Rinky Maity

HOD

Dr. Sharvari Sane



Evaluation criterion Review –II:

S.No	Group Number	Project Undertaken	Difficulty Level	Work Done so far	Individual Contribution



Vishwaniketan's Institute of Management Entrepreneurship and Engineering Technology

Department of Electrical Engineering

Survey No-52 Off Mumbai-Pune Expressway Kumbhivali, Tal- Khalapur, Maharashtra 410202.

Outcomes of the Course

Following are the outcomes of VAP “.....” conducted for SE/TE/BE students.

No of students completed project

Students Achievements and Awards

SEM:V

Prof. Mandar Dixit

VAP Technology: Advanced PLC SCADA

2022-23



Vishwaniketan's Institute of Management Entrepreneurship and Engineering Technology

Department of Electrical Engineering

Survey No-52 Off Mumbai-Pune Expressway Kumbhivali, Tal- Khalapur, Maharashtra 410202.

Summary of VAP

SEM:V

Prof. Mandar Dixit

VAP Technology: Advanced PLC SCADA

2022-23



Title of Event	: VAP ON
Organization	: Vishwaniketan's i MEET
Class	: SE/TE/BE
Coordinator	:

We at Vishwaniketan prepare students for their life. This includes development of hard skills and soft skills. This is done by inculcating various activities in regular academic period in each semester. One of the novel concept is Value Addition Programme called as VAP. It is one of the flagship programme of Vishwaniketan. VAP cycle is explained by following figure where in each semester student is trained on future technology by an expert from industry for 35-40 hours. During this training the trainer allots project to each group and at the end of semester student display their project in an exhibition where authorities from industry visit and judge the students. In between two reviews are arranged for students with trainer so that student can ask for doubts and their progress can be reviewed.

Comment [L1]:
 Comment [L2]:
 Comment [L3]:

This cycle is repeated in each semester till 6th semester and makes student confident for undertaking Major project and becomes ready to serve after graduating from college.

This Year a VAP was organised for SE/TE/BE students of Electrical Engineering Department on Technology. The Trainer was

First Review was scheduled on...

Second Review was scheduled on...

Project exhibition was scheduled on

And the winners were....

Summary of VAP 2022-23

Title of Event	: VAP ON Advanced PLC and SCADA
-----------------------	---------------------------------

Organization	:	Vishwaniketan's i MEET
Class	:	TE Electrical
Coordinator	:	Prof. Mandar M. Dixit
Date of VAP	:	23/01/2023 to 27/01/2023

We at Vishwaniketan prepare students for their life. This includes development of hard skills and soft skills. This is done by inculcating various activities in regular academic period in each semester. One of the novel concept is Value Addition Programme called as VAP. It is one of the flagship programme of Vishwaniketan. VAP cycle is explained by following figure where in each semester student is trained on future technology by an expert from industry for 35-40 hours. During this training the trainer allots project to each group and at the end of semester student display their project in an exhibition where authorities from industry visit and judge the students. In between two reviews are arranged for students with trainer so that student can ask for doubts and their progress can be reviewed.

Comment [L4]:

Comment [L5]:

This Year a VAP was organised for TE students of Electrical Engineering Department on Advanced PLC and SCADA Technology. The Trainer was Mr. O. Barure from Ditap-V Automation BITC 2104, Pune

The students were enhanced their knowledge about automation in industries using various automation tools like PLC, SCADA, HMI, etc. also student interacted with various instructions and commands used in PLC and SCADA and were able to design ladder logic program and SCADA window program for industrial automation. Total 34 students from TE Electrical participated in VAP. First Review was conducted in Online mode on 03/03/2023. Second Review was conducted in Online mode on 11/04/2023.

Project exhibition was scheduled on 21/04/2023. And the winners were

1. Kunal Jaujale
2. Chetan Mhatre
3. Gaurav Ghase
4. Devarsh Rane

Project Title : Raw material handling in Steel plant