

**Smt. Indira Gandhi College of Engineering**

**Estd. : 1993-94 (Approved by AICTE New Delhi & Govt. of Maharashtra, Affiliated to University of Mumbai) Academic Year- 2023-24**

**Industrial Visit At**

Milestone Institute of Technology

On 14<sup>th</sup> February 2024

Subject Incharge: Prof. N.B.Joshi

T.E. Electrical Engineering Department

Smt. Indira Gandhi College of Engineering

**ACKNOWLEDGEMENT**

We Students of Third Year, course of electrical engineering of Smt. Indira Gandhi College of Engineering, Ghansoli. It is indeed a matter of great pleasure and proud privilege to be able to attend this industrial visit at Milestone Institute of technology. This industrial visit was all successful with the help of our Industrial Automation faculty Mr. N.B. Joshi and Mr. Shivanand Konade we are highly indebted to them for their invaluable guidance and appreciation for this report. It is due to their enduring efforts, patience and enthusiasm, which has given a sense of direction and purposefulness to this industrial visit and ultimately made it a success. We would also like to thank our head of department Prof. Mr. Nishant Joshi for giving us this opportunity and guidance and encouragement. We would also like to express our deep regards and gratitude to our principal Dr. Sunil S. Chavan.

**ABSTRACT**

Milestone Institute of Technology is a training hub for IT-ITES, Architecture/Construction & Mechanical Sectors. To improve an individual's future prospects and opportunities by providing quality qualifications that are widely recognized and valued by employers and universities worldwide. Milestone trains students as per industrial requirement as milestone provides engineering design's services to global companies under Milestone PLM Solutions Pvt.Ltd. Milestone provides Master diploma courses for ITI, Diploma and Graduate Engineering students of Electrical, Mechanical, Civil, Architectural and Interior Stream.

**Objectives of Industrial Visit:**

1. To let students get basic information about different types of software used in the process of automation nowadays.
2. The importance of automation in the future due to Digital Bharat.
3. To evaluate each student's academic progress, through interactive sessions with the students, teacher in charge and program coordinator and help them clear out confusions about how automation works.

**Site of Industrial Visit:**

Milestone Institute of Technology, Thane a training hub for all the automation software which provides different software courses with placement. Milestone has been a successful project designer for different MNCs like L&T, Unilever etc. It's Also a certified partner of Autodesk due to the use of AutoCAD for automation purposes for the past 10 years.

**Highlights of things learned during visit:**

Since the strength of the electrical third year department is 73 students, for easier management students were split into two slots. The first slot had a strength of 35 students, while the second slot had the rest of the 38 students. The first slot had a reporting time of 10:30 am and the second slot had a reporting time of 1.30 pm at Milestone Institute of technology, Thane.

**Seminar-1**

The first seminar on AutoCAD automation software began at 10:40 am, which was conducted by Mr. Sachin Kamthe and Ms. Rupali Kamthe.

Here is a list of things learnt by students for AutoCAD 2D and AutoCAD 3D

AutoCAD 2D	Introduction to CAD
	2D Fundamentals
	Preparation of sketches: lines, circles, rectangular, etc

	Dimension Style
	Layer Overview, modifying layer attributes editing & modification of sketches
	Scaling objects, views
	Duplication using mirrors, copy, pattern
	Dimensioning techniques
	Creating & editing blocks
	Hatch, trim, extend, tables etc
	Use of Xref
	Tolerance symbols, Datum, Finish, welding symbols
	Power Diagram DOL starter
	Electronic Circuit Diagram
	Power Diagram Star Delta Starter
	Panel Layout
	Example of Vase in different views
AutoCAD 3D	Introduction to 3d
	Isometric snap
	Isometric concept
	Drawing Isometric objects
	Dimensioning
	Example of Hollow Vase

Students got a basic idea about the tools used to create 3D as well as 2D object and project layouts. Mr. Sachin Kamthe taught us how to make a 3D hollow vase design, Top-Bottom-Front View of a 3D object in 2D using AutoCAD for demonstration purposes.

All these designs are printed using a 3D printer which uses polylactic acid (PLA) filament to print models. Mr. Sachin showed us a model of Pen Stand, Statue of Chhatrapati Shivaji Maharaj which was 3D printed using the 3D printer equipment.



The second seminar was on the topic PLC SCADA system which began at 12:00 pm and was conducted by Mr. Umesh. PLC is an industrial computer that continuously monitors the state of input devices and makes decisions based on custom program to control the state of output devices. Almost any production line, machine, function or process can be greatly enhanced using PLC's. The biggest benefit in using a PLC is the ability to change & replicate the operation or process while collecting and communicating vital information.

Before beginning the seminar Mr. Umesh gave us basic idea about PLC, Architecture of PLC, Types of PLC, Classification of I/O field devices, Sinking/ Sourcing wiring concept

Here is a list of things students learnt by this seminar

Allen Bradley PLC (MicroLogix 1400)	Wiring diagram
	Families
	Features
	Addressing
	Introduction to RSLinx Software
	Introduction to RSLogix 500 Software
	Bit instructions, Ladder system
	Timer and Counters
	Input/output
	Compare instructions
	Compute/math instructions
	Move and Logical Instructions
	File Shift and sequencer Instructions
	Live example of Siemens PLC, SCADA
System	

Realtime Tripping master relay and relay panels were also shown to students for easier understanding.



### CONCLUSION:

We Third year electrical department would like to thank all the faculties for teaching us students about the importance of industrial automation and their working with Realtime examples.

One of things that was evident from this visit was the support the students received from the Milestone Placement program which played a vital role in placement of many of Smt. Indira Gandhi College of Engineering, Ghansoli

Thank you.

Regards,

Smt. Indira Gandhi college of Engineering, Ghansoli.