



# MSME-Tool Room, Guwahati

Tool Room & Training Centre, Guwahati



## Course Lesson Plan

**Course Name : Programmable Logic Controller(PLC) DURATION : 2 weeks /per day : 2 hrs**

**Eligibility:** ITI/Diploma/Degree/ in Electrical/Electronics/Instrumentation/Mechanical/any equivalent technical/engineering disciplines.

### **OBJECTIVES:**

**At the end of Session Participants will be able Know:**

- **Plc architecture.**
- **Plc software installation.**
- **Plc programming software tools.**
- **How to write PLC programs using different logic.**

### Day-wise course Plan

<b>DAY</b>	<b>CONTENTS</b>
<b>Day 1</b>	<ul style="list-style-type: none"><li>● Introduction to TRTC, GUWAHATI.</li><li>● Introduction to industrial automation.</li><li>● Advantage of automation system.</li><li>● Different parts of PLC.</li></ul>
<b>Day 2</b>	<ul style="list-style-type: none"><li>● PLC Software opening and setup the software for programming</li></ul>
<b>Day 3</b>	<ul style="list-style-type: none"><li>● Basics of NO-NC contacts.</li><li>● Types of Switches.</li><li>● How to use NO-NC for programming.</li></ul>
<b>Day 4</b>	<ul style="list-style-type: none"><li>● Programming practice using NO-NC contacts.</li></ul>
<b>Day 5</b>	<ul style="list-style-type: none"><li>● How and where to use Latching?.</li><li>● Advantage of latching circuits.</li><li>● Programming practice using latching concept.</li></ul>
<b>Day 6</b>	<ul style="list-style-type: none"><li>● How and where to use memory?.</li><li>● Programming practice using Memory block.</li></ul>
<b>Day 7</b>	<ul style="list-style-type: none"><li>● Concept of memory word and memory double word</li><li>● Use of move block.</li><li>● Programming practice using Move block.</li></ul>
<b>Day 8</b>	<ul style="list-style-type: none"><li>● Type of comparator.</li></ul>

	<ul style="list-style-type: none"> <li>• Use of Comparator Block.</li> <li>• Programming practice using Comparator.</li> </ul>
<b>Day 9</b>	<ul style="list-style-type: none"> <li>• Types of counter.</li> <li>• Application on counters.</li> <li>• Programming practice using Counter.</li> </ul>
<b>Day 10</b>	<ul style="list-style-type: none"> <li>• What is timer?.</li> <li>• How and where timers are used?.</li> <li>• Programming practice using Timers.</li> </ul>
<b>Day 11</b>	<ul style="list-style-type: none"> <li>• Properties and time diagram</li> <li>• Use and applications</li> </ul>
<b>Day 12</b>	<ul style="list-style-type: none"> <li>• Use of memory, counters, timers in the same problem</li> </ul>
<b>Day 13</b>	<ul style="list-style-type: none"> <li>• Plc based project demo videos display</li> </ul>
<b>Day 14</b>	<ul style="list-style-type: none"> <li>• Sample project, Review ,Feedback Session</li> </ul>

**N.B:**

\*Classes & Demonstration will be conducted every day for a time period of one hour & doubt clear Session of one hour with all day online/on-call support.

\***e- Certificate** will be sent to Participant's email address.

\*Each trainee can avail a free one-week Internship (Practical) training at our Centre after this pandemic situation get normalized.

You may contact with **course coordinator** for course related further information.

Course Coordinator: Deepak Singh.

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