

## Industrial Automation Training on PLC and HMI

**Venue:** NCRA, NUST College of E&ME

**Min No of participants per batch:** 15 Students

**Fee per participants:** PKR 15,000 \*

### Industrial Automation Training In collaboration with NCRA | 5 Days

Days	Topics
Day 1	<ul style="list-style-type: none"> <li>• Introduction to Microcontroller, Relay Logic and Logic Gates</li> <li>• Introduction to PLC</li> <li>• Introduction to Ladder Logic</li> <li>• Introduction to HMI, SCADA &amp; DCS</li> <li>• Introduction to Architecture/Internal Structure</li> <li>• Introduction to PLC Vendors</li> </ul>
Day 2	<ul style="list-style-type: none"> <li>• PLC Programming(Ladder Logic)</li> <li>• Introduction to Siemens TIA Portal</li> <li>• Introduction to Siemens TIA Portal</li> <li>• Introduction to Siemens TIA Portal</li> <li>• Introduction to Siemens S7-1200</li> </ul>

<b>Day 3</b>	<ul style="list-style-type: none"> <li>• Introduction to HMI Development</li> <li>• Basics of Instrumentation</li> <li>• Practical (Limit Switch Types and Programming)</li> <li>• Practical (Relay Connection and its controlling via PLC)</li> <li>• Compare, Analogue Scaling</li> <li>• Practical (Temp and Pressure Control)</li> <li>• Task Assignment</li> </ul>
<b>Day 4</b>	<ul style="list-style-type: none"> <li>• Introduction to Conversion Operators</li> <li>• Analog to Digital Converter and Vice Versa</li> <li>• Practice (Cooling system programming via fan)</li> <li>• Motor Control by VFD</li> <li>• Motor Control by programming</li> <li>• Task Assignment</li> </ul>
<b>Day 5</b>	<ul style="list-style-type: none"> <li>• Introduction to other PLC Programming Languages</li> <li>• Topic: HMI and PLC Interface</li> <li>• Practice</li> <li>• Evaluation</li> <li>• Task/Project</li> </ul>

**Point of Contact:**

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