



# Industrial Automation Training & Research Centre

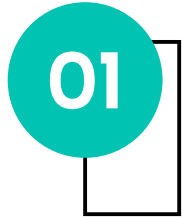
Training Division of Premium  
Industrial Solutions Pvt. Ltd. (PISPL)

IATRC

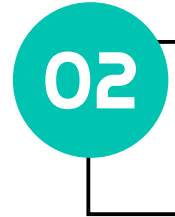
Website: <https://www.iatrc.co.in>



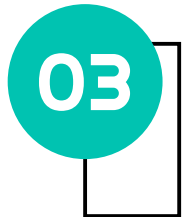
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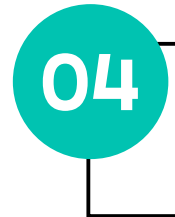
**COURSE DETAILS WITH  
FEES**



**TARGETED PARTICIPANT**

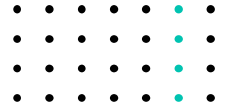


**CUSTOMIZED COURSE  
ON INDUSTRIAL  
AUTOMATION**



**FAQ**

# COURSE DETAILS WITH FEES

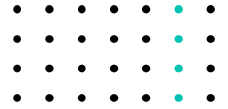


## 1. BASIC COURSE ON INDUSTRIAL AUTOMATION (VT)

Sl. No	COURSE NAME	COURSE CODE	FEES	TIME
1	Siemens S7-300 with V5.5	VT-PLC-300-01	RS. 3000	20 hrs
2	Siemens S7-1200 with V14	VT-PLC-1200-01	RS. 3000	20 hrs
3	DELTA PLC with ISP-SOFT	VT-PLC-DEL-01	RS. 3000	20 hrs
4	Allen Bradley Micrologix 1400	VT-PLC-AB-01	RS. 3000	20 hrs
5	ABB PLC with Automation Builder	VT-PLC-ABB-01	RS. 3000	20 hrs
6	WonderwareIntouch SCADA	VT-SCADA-INT-01	RS. 3000	20 hrs
7	Delta HMI with DOP-Soft	VT-HMI-DEL-01	RS. 3000	20 hrs
8	AC Drives-Delta	VT-VFD-DEL-01	RS. 3000	20 hrs
9	AUTOCAD 2D	VT-CAD-01	RS. 3000	20 hrs
10	Basics on Automation (Any one PLC & SCADA)	VT-AUTO-01	RS. 4000	30 hrs



# Course Content



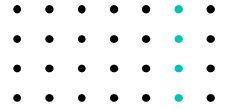
## 2. CUSTOMIZED COURSE ON INDUSTRIAL AUTOMATION(CT)

### SECTION: PLC

SI No	COURSE NAME	COURSE CODE	FEES	TIME
1	Siemens S7-300 with STEP7 V5.5	CT-PLC-300-02A	RS 5500	40 hrs
2	Siemens S7-300 with STEP7 V14	CT-PLC-300-02B	RS 5500	40 hrs
3	Siemens S7-1200 with STEP7 V14	CT-PLC-1200-02	RS 5500	40 hrs
4	ABB PLC with Automation Builder	CT-PLC-ABB-02	RS 5500	40 hrs
5	Allen Bradley Micrologix 1400	CT-PLC-AB-02	RS 5500	40 hrs
6	Delta PLC with ISP-SOFT	CT-PLC-DEL-02	RS 4500	30 hrs



# Course Content



## 2. CUSTOMIZED COURSE ON INDUSTRIAL AUTOMATION(CT)

### SECTION: SCADA

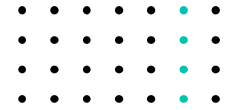
SI No	COURSE NAME	COURSE CODE	FEES	TIME
1	Siemens WINCC Explorer	CT-SCADA-SIE-02	RS 4500	30 hrs
2	Schneider WonderwareIntouch	CT-SCADA-INT-02	RS 4500	30 hrs
3	Delta Diaview	CT-SCADA-DEL-02	RS 4500	30 hrs

### SECTION: HMI

SI No	COURSE NAME	COURSE CODE	FEES	TIME
1	Siemens WINCC Flexible	CT-HMI-SIE-02	RS 3500	20 hrs
2	Delta DOPSOFT	CT-HMI-DEL-02	RS 3500	20 hrs
3	ABB Panel Builder	CT-HMI-ABB-02	RS 3500	20 hrs



# Course Content



## 2. CUSTOMIZED COURSE ON INDUSTRIAL AUTOMATION(CT)

### SECTION: DRIVES

SI No	COURSE NAME	COURSE CODE	FEES	TIME
1	Delta VFD	CT-VFD-DEL-02	RS 3500	20 hrs
2	ABB VFD	CT-VFD-ABB-02	RS 3500	20 hrs
3	CG VFD	CT-VFD-CG-02	RS 3500	20 hrs

### SECTION: PANEL DESIGN

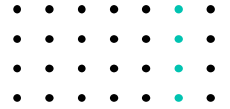
SI No	COURSE NAME	COURSE CODE	FEES	TIME
1	AUTOCAD 2D	CT-CAD-2D-02	RS 3500	30 hrs
2	AUTOCAD ELECTRICAL	CT-CAD-ECT-02	RS 3500	30 hrs
3	PANEL WIRING	CT-PANEL-02	RS 3500	30 hrs

### SECTION: COMBO

SI No	COURSE NAME	COURSE CODE	FEES	TIME
1	Siemens PLC+HMI+VFD	CT-COM-SIE-03	RS 12500	80 hrs
2	ABB PLC+HMI+VFD	CT-COM-ABB-03	RS 12500	80 hrs
3	DELTA PLC+HMI+VFD	CT-COM-DEL-03	RS 8500	60 hrs
4	AUTOCAD 2D+ ELECTRICAL	CT-COM-CAD-03	RS 6500	60 hrs



# Course Content



## 3. ADVANCED COURSE ON INDUSTRIAL AUTOMATION :(AT)

Suitable For : Professionals and experienced in automation industry

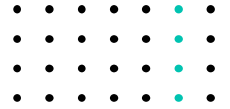
## 4. COMPLETE COURSE ON INDUSTRIAL AUTOMATION (FT) CODE: FT-AUTOMATION

Course Fees :Rs 25500 (Twenty Five Thousand Five Hundred Only)

Sl.No.	COURSE CONTENT	TIME
1	PLC – Siemens,ABB,Delta	25 Days
2	SCADA – WonderwareIntouch	10 Days
3	HMI - DELTA	5 Days
4	DRIVES – DELTA, ABB	6 Days
5	AUTOCAD 2D	6 Days
6	Panel Design Basic	3 Days
7	Basic Electrical , Electronics & Instrumentation	5 Days
	<b>TOTAL</b>	60 Days



# Course Content



## 5. ON-SITE TRAINING :

1. At Colleges :Rs 7000 per day (Number of student max 25 to 30)
2. At Plant/Industry :Rs 9000 per day (Number of participants max 10)

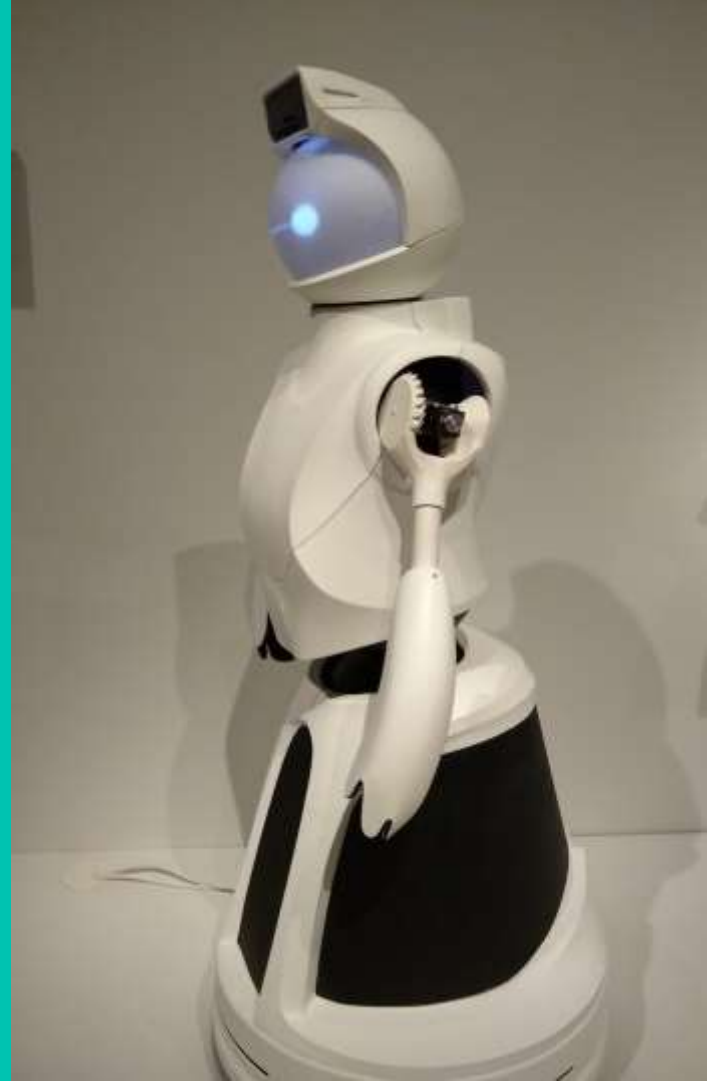
## 6. SEMINAR & WORKSHOP :

1. At colleges :Rs 5000 per day (Number of student max 50 in workshop)
2. At Industry :Rs 8000 per day (Number of participants max 25 in workshop)





# Targeted Participant & Objective



## ➤ BASIC COURSE ON INDUSTRIAL AUTOMATION (VT)

**TARGET PARTICIPANT:** Engineering students of B.Tech, Diploma of Electrical, Electronics, Instrumentation, Mechanical branch as vocational training.

**PREREQUISITES:** Basic of Electrical & Electronics components, Basic Software knowledge

### **OBJECTIVES:**

Upon completion of the course students will be able to :

- Understand the components, tools of industrial automation
- Configure PLC in software & simulate the PLC
- Communicate PLC with Software
- Design simple LADDER Logic
- Design basic animation in SCADA
- Basic commissioning of VFD

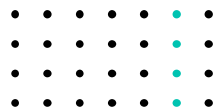


## **1. SIEMENS S7-300 WITH STEP7 V5.5 :**

**CODE: VT-PLC-300-01**

**CONTENTS :**

- S7-300 Hardware details , Module wiring, LED indicators
- Programming software in STEP7 V5.5
- Basic Bit logics, NO-NC concept
- Timer applications
- Counter Comparator applications
- Introduction to analog value processing



## **2. SIEMENS S7-1200 WITH STEP7 V14:**

**CODE: VT-PLC-1200-01**

**CONTENTS:**

- S7-1200 Hardware details , Module wiring, LED indicators
- Programming software in STEP7 V14 (TIA Portal)
- Basic Bit logics, NO-NC concept
- Timer applications
- Counter Comparator applications
- Introduction to analog value processing



### **3. DELTA PLC WITH ISP-SOFT :**

**CODE: VT-PLC-DEL-01**

#### **CONTENTS:**

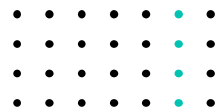
- Delta PLC Hardware details , Module wiring, LED indicators
- Programming software in ISP-SOFT
- Basic Bit logics, NO-NC concept
- Timer applications
- Counter Comparator applications
- Introduction to analog value processing

### **4. ALLEN BRADLEY WITH MICROLOGIX 1400 :**

**CODE: VT-PLC-AB-01**

#### **CONTENTS:**

- S7-1200 Hardware details , Module wiring, LED indicators
- Programming software in RS Logix
- Basic Bit logics, NO-NC concept
- Timer applications
- Counter Comparator applications
- Introduction to analog value processing

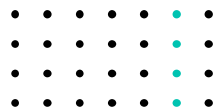


## 5. ABB PLC WITH AUTOMATION BUILDER :

CODE: VT-PLC-ABB-01

CONTENTS:

- ABB PLC Hardware details , Module wiring, LED indicators
- Programming software in Automation Builder
- Basic Bit logics, NO-NC concept
- Timer applications
- Counter Comparator applications
- Introduction to analog value processing



## 6. SCADA- WONDERWARE INTOUCH :

CODE: VT-SCADA-INT-01

CONTENTS:

- SCADA Software features, Benefit
- Introduction to Intouch project creation
- Basic animations
- Alarm Configuration
- Trend View- Real & Historical
- Communication with PLC

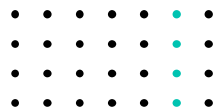


## **7. DELTA HMI WITH DOPSOFT :**

**CODE: VT-HMI-DEL-01**

**CONTENTS:**

- HMI Panel Hardware details
- Introduction to HMI development software DOP-Soft
- Basic animations in HMI screens
- Alarm Configuration
- Trend View
- Communication with PLC



## **8. AC DRIVES -DELTA :**

**CODE: VT-VFD-DEL-01**

**CONTENT:**

- AC Motor Basics- Types , Construction
- Basics of VFD-Block diagram, wiring
- Basic parameter settings
- Controlling motor through VFD in local mode
- 2-Wire , 3-Wire wiring, remote mode
- Speed control through potentiometer

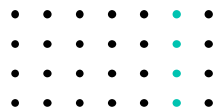


## 9. AUTOCAD-2D :

**CODE: VT-CAD-01**

**CONTENT:**

- Introduction to AUTOCAD software
- Basic page setup
- Scaling ,Units & Axis
- Basic tools & commands
- Schematic drawing & project development



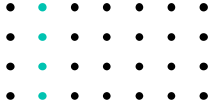
## 10. BASIC AUTOMATION :

**CODE: VT-AUTO-01**

**CONTENTS:**

- Introduction to Automation
- Industry 4.0
- PLC Hardware knowledge
- PLC Programming software
- Basic LAD design
- Basic animation design in SCADA





# CUSTOMIZED COURSE ON INDUSTRIAL AUTOMATION

-IATRC

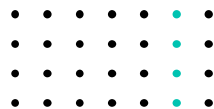




# CUSTOMIZED COURSE ON INDUSTRIAL AUTOMATION

SECTION: DRIVES: (ABB/DELTA/CG)

CODE: CT-VFD-DEL/ABB/CG -02



- **TARGET PARTICIPANT** : Developers, Users, Commissioning/Maintenance/Service Engineers, Freshers
- **OBJECTIVES:**
  - ✓ Making users familiar with motors,
  - ✓ Making users familiar with VFD,
  - ✓ Product range & selection of VFD,
  - ✓ Basic commissioning of drives,
  - ✓ PLC, VFD communication.

## CONTENTS:

- AC Motor basics- Construction, Principle of operation, T-N characteristics
- Basics of VFD- Block diagram, Working principle, 4Q Principle
- Controlling motor through VFD in Local & Remote mode
- Advantages & applications of drives
- VFD Selection criteria
- Parameter settings of VFD
- DBR- Applications & Selections
- Analog Scaling in VFD
- Controlling VFD through PLC



**COMBO: SIEMENS PLC + HMI +VFD**

**CODE: CT-COM-SIE-03**

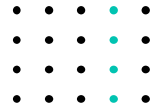
**TARGET PARTICIPANT :** Developers, Users, Commissioning/Maintenance/Service Engineers, Freshers

**OBJECTIVES:**

Making users familiar with PLC,HMI,SCADA  
 Making users familiar with VFD,  
 Product range & selection of PLC,VFD,HMI  
 Design of PLC ladder logic, program development  
 Design of HMI/SCADA  
 Basic commissioning of drives,  
 PLC, VFD, HMI communication.  
 Complete idea of automation

**CONTENT:**

PLC	SCADA/HMI	DRIVES
<ul style="list-style-type: none"> <li>Basics of PLC</li> <li>S7-300 Hardware details</li> <li>Module powering &amp; wiring</li> <li>Introduction to programming software with STEP7 V5.5/V14</li> <li>NO-NC concept</li> <li>LAD Design</li> <li>Timer applications</li> <li>Counter applications</li> <li>Math functions</li> <li>Structured programming</li> <li>FC,FB,DB</li> <li>Different OBs</li> <li>Analog value processing</li> <li>Fault diagnostic</li> <li>Archiving &amp; documentation</li> <li>Communication with SCADA</li> </ul>	<ul style="list-style-type: none"> <li>SCADA features</li> <li>Project development</li> <li>Creating animations</li> <li>Alarm configuration</li> <li>Trend view-Real &amp; Historical</li> <li>Communication with PLC</li> <li>Database connectivity</li> <li>Recipe management</li> <li>Security</li> <li>Networking</li> </ul>	<ul style="list-style-type: none"> <li>AC Motor basics- Construction, Principle of operation, T-N characteristics</li> <li>Basics of VFD- Block diagram, Working principle,4Q Principle</li> <li>Controlling motor through VFD in Local &amp; Remote mode</li> <li>Advantages &amp; applications of drives</li> <li>VFD Selection criteria</li> <li>Parameter settings of VFD</li> <li>DBR- Applications &amp; Selections</li> <li>Analog Scaling in VFD</li> <li>Controlling VFD through PLC</li> </ul>
<ul style="list-style-type: none"> <li>PLC, HMI, Drives Communication</li> <li>Project development with PLC,SCADA/HMI design</li> <li>Basic introduction of Servo drive</li> </ul>		



**COMBO: ABB PLC +HMI +VFD**

**CODE: CT-COM-ABB-03**

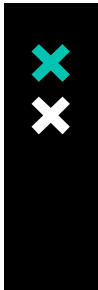
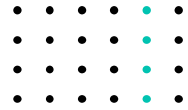
**TARGET PARTICIPANT :** Developers, Users, Commissioning/Maintenance/Service Engineers, Freshers

**OBJECTIVES:**

- Making users familiar with PLC,HMI,SCADA
- Making users familiar with VFD,
- Product range & selection of PLC,VFD,HMI
- Design of PLC ladder logic, program development
- Design of HMI/SCADA
- Basic commissioning of drives,
- PLC, VFD, HMI communication.
- Complete idea of automation component

**CONTENT:**

PLC	SCADA/HMI	DRIVES
<ul style="list-style-type: none"> <li>• Basics of PLC</li> <li>• ABB PLC Hardware details</li> <li>• Module powering &amp; wiring</li> <li>• Introduction to programming software with Automation Builder</li> <li>• NO-NC concept</li> <li>• LAD Design</li> <li>• Timer applications</li> <li>• Counter applications</li> <li>• Math functions</li> <li>• Structured programming</li> <li>• FC,FB</li> <li>• Analog value processing</li> <li>• Fault diagnostic</li> <li>• Archiving &amp; documentation</li> <li>• Communication with SCADA</li> </ul>	<ul style="list-style-type: none"> <li>• SCADA features</li> <li>• Project development</li> <li>• Creating animations</li> <li>• Alarm configuration</li> <li>• Trend view-Real &amp; Historical</li> <li>• Communication with PLC</li> <li>• Database connectivity</li> <li>• Recipe management</li> <li>• Security</li> <li>• Networking</li> </ul>	<ul style="list-style-type: none"> <li>• AC Motor basics- Construction, Principle of operation, T-N characteristics</li> <li>• Basics of VFD- Block diagram, Working principle,4Q Principle</li> <li>• Controlling motor through VFD in Local &amp; Remote mode</li> <li>• Advantages &amp; applications of drives</li> <li>• VFD Selection criteria</li> <li>• Parameter settings of VFD</li> <li>• DBR- Applications &amp; Selections</li> <li>• Analog Scaling in VFD</li> <li>• Controlling VFD through PLC</li> </ul>
<ul style="list-style-type: none"> <li>• PLC, HMI, Drives Communication</li> <li>• Project development with PLC,SCADA/HMI design</li> <li>• Basic introduction of Servo drive</li> </ul>		



• **CONTENTS :**

**COMBO: (DELTA PLC +HMI+VFD)**

**COURSE CODE: CT-COM-DEL-03**

**TARGET PARTICIPANT :** Developers, Users, Commissioning/Maintenance/Service Engineers, Freshers

**OBJECTIVES:**

Making users familiar with PLC,HMI,SCADA

Making users familiar with VFD,

Product range & selection of PLC,VFD,HMI

Design of PLC ladder logic, program development

Design of HMI/SCADA

Basic commissioning of drives,

PLC,VFD, HMI communication.

Complete idea of automation component

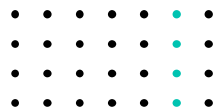
PLC	SCADA/HMI	DRIVES
<ul style="list-style-type: none"> <li>Basics of PLC</li> <li>Delta Hardware details</li> <li>Module powering &amp; wiring</li> <li>Introduction to programming software with ISP-Soft</li> <li>NO-NC concept</li> <li>LAD Design</li> <li>Timer applications</li> <li>Counter applications</li> <li>Math functions</li> <li>Structured programming</li> <li>FC,FB</li> <li>Analog value processing</li> <li>Fault diagnostic</li> <li>Archiving &amp;documentation</li> <li>Communication with SCADA</li> </ul>	<ul style="list-style-type: none"> <li>SCADA features</li> <li>Project development</li> <li>Creating animations</li> <li>Alarm configuration</li> <li>Trend view-Real &amp; Historical</li> <li>Communication with PLC</li> <li>Database connectivity</li> <li>Recipe management</li> <li>Security</li> <li>Networking</li> </ul>	<ul style="list-style-type: none"> <li>ACMotor basics- Construction, Principle of operation, T-N characteristics</li> <li>Basics of VFD- Block diagram, Working principle,4Q Principle</li> <li>Controlling motor through VFD in Local &amp; Remote mode</li> <li>Advantages &amp; applications of drives</li> <li>VFD Selection criteria</li> <li>Parameter settings of VFD</li> <li>DBR- Applications &amp; Selections</li> <li>Analog Scaling in VFD</li> <li>Controlling VFD through PLC</li> </ul>
<ul style="list-style-type: none"> <li>PLC, HMI, Drives Communication</li> <li>Project development with PLC,SCADA/HMI design</li> <li>Basic introduction of Servo drive</li> </ul>		

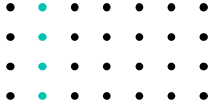


## COMPLETE COURSE ON INDUSTRIAL AUTOMATION (FT)

### COURSE CODE : FT-AUTOMATON

- **TARGET PARTICIPANT :** Developers, Users, Commissioning/Maintenance/Service Engineers, Freshers, Job seekers in Industrial Automation field
- **OBJECTIVES:**
  - ✓ Making users familiar with PLC, HMI, SCADA
  - ✓ Making users familiar with VFD,
  - ✓ Making users familiar with AutoCAD, Panel Design
  - ✓ Product range & selection of PLC, VFD, HMI
  - ✓ Design of PLC ladder logic, program development
  - ✓ Design of HMI/SCADA
  - ✓ Basic commissioning of drives,
  - ✓ PLC, VFD, HMI communication.
  - ✓ Complete idea of automation component
  - ✓ To make someone industry ready
- **CONTENTS :**
  - PLC :** Siemens, ABB, AB, Delta
  - SCADA:** Wonderware Intouch
  - HMI :** Delta DOP Soft
  - VFD:** ABB, Delta
  - Autocad:** Autocad 2D, Electrical
  - Panel Design:**
  - Basic Electrical & Electronics :**





FAQ

-IATRC



# Frequently Asked Question

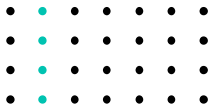
## Why automation is necessary in Industry?

Ans: automation in industry increase productivity, accuracy, less man power, less maintenance at the end of the increase profitability.



## Why automation course is necessary for students?

Ans: Now a days almost all the running by automation. But in our course curriculum automation is not included properly. So there is huge gap between college education and industry. In industry demand of automation engineer too much high so it will increase your skill and help you to get a job in core sector.

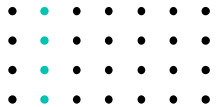


# Frequently Asked Question

## Why automation is necessary for Industry professional?

**Ans:** To upgrade knowledge & skill in the field of automation. As industry runs on automation so

✘ we need to upgrade ourselves as per demanding requirement.



## Who can pursue this training?

**Ans:** Engineering students with Electrical, Electronics, Mechanical, Instrumentation background both diploma & B.Tech. working professionals with production, maintenance, Service Engineers of any plant, End user of industrial automation product.

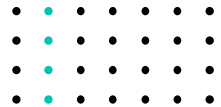
✘



# Frequently Asked Question

## What about course fees:

Ans : Vocational training fees start from Rs 3000, customized course start from Rs 5000 and complete course is about Rs 25500.



## Which course is suitable for me?

Ans: for 2<sup>nd</sup>& 3<sup>rd</sup> year students vocation training is suitable For freshers & final year students complete course is best as we provide placement assistantship after completion of training. For professionals customized training of specific product or process is more suitable.



# Frequently Asked Question

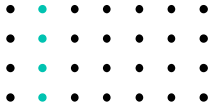
## About course timings :

Ans : Vocational course approx. 20 hrs, customized course approx. 60 hours and complete course approx. 120 hours



## About class schedule:

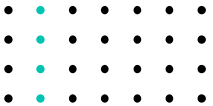
Ans : we provide both online & offline mode of training. Online classes 2hrs per day and for offline class 4 hrs per day weekly 4 days. Schedule for industry professionals are flexible.



# Frequently Asked Question

## Job location after getting job :

Ans : Varies from company to company



## Placement assistance :

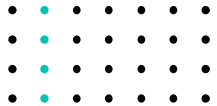
Ans : We provide placement assistance after completion of full term course only. Mainly in automation sector as Service engineer, maintenance engineer, commissioning engineer



# Frequently Asked Question

## Expected packages :

Ans : it depends upon respective company salary structure. For freshers initially 2 to 3 lakhs per annum and for professionals it varies according to experience.



Industrial Automation  
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# THANKS!

Do you have any questions?

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