

MAINTENANCE AND ENGINEERING | COURSE BROCHURE

Industrial Automation Maintenance

5 days | Classroom training | English

SMART HORIZON

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Amsterdam
The Netherlands

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Course content

Why attend

Automated production lines combine PLCs, drives, sensors, robots and networks. This course covers maintenance of industrial automation: system architecture, sensors and actuators, PLC and HMI diagnostics, industrial networks, robots and motion control, backups and version control, cybersecurity and fault-finding methods.

Automation faults can stop entire lines. You will learn systematic methods to keep automated systems running.

Professional Problems This Course Is Designed to Solve

- Difficulty translating subject knowledge into practical workplace decisions.
- Inconsistent approaches to the activities covered in the course outline.
- Lack of a structured plan for applying and reviewing new skills.

Course methodology

Diagnostic exercises, fault-finding scenarios, demonstrations and maintenance planning.

Course objectives

By the end of this course, participants will be able to:
- Explain industrial automation architectures
- Maintain sensors and actuators
- Diagnose PLC and HMI faults
- Troubleshoot industrial networks
- Maintain robots and motion systems
- Manage backups, versions and cybersecurity

Target audience

This course is suitable for:
- Automation and electrical technicians
- Maintenance engineers
- Control engineers
- Production engineers
- Maintenance supervisors



Course content

Target competencies

Participants will develop competencies in:

- System understanding
- Diagnostics
- Network troubleshooting
- Backup management
- Cyber awareness

Course outline

Day 1: Automation Systems

09:00–10:08	Architecture
10:08–11:00	Components
11:00–11:30	**Coffee break**
11:30–11:45	Components (continued)
11:45–12:53	Failure points
12:53–14:00	Exercise

Day 2: Sensors and Actuators

09:00–10:08	Sensor types
10:08–11:00	Pneumatics and actuators
11:00–11:30	**Coffee break**
11:30–11:45	Pneumatics and actuators (continued)
11:45–12:53	Maintenance
12:53–14:00	Workshop

Day 3: PLCs, HMIs and Networks

09:00–10:08	Diagnostics
10:08–11:00	Industrial networks
11:00–11:30	**Coffee break**



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11:30–11:45	Industrial networks (continued)
11:45–12:53	Fault finding
12:53–14:00	Exercise

Day 4: Robots and Motion

09:00–10:08	Robot maintenance
10:08–11:00	Servo systems
11:00–11:30	**Coffee break**
11:30–11:45	Servo systems (continued)
11:45–12:53	Safety
12:53–14:00	Case study

Day 5: Data and Security

09:00–10:08	Backups and version control
10:08–11:00	Cybersecurity
11:00–11:30	**Coffee break**
11:30–11:45	Cybersecurity (continued)
11:45–12:53	Maintenance plans
12:53–14:00	Action plan

The timings provided are estimates and may vary depending on the number of participants and the discussions taking place during the sessions. They are indicative only and do not constitute a binding commitment.



Course content

Dates, venues and fees

Current published course plans. Fees are per participant in EUR, excluding unconfirmed taxes.

Venue	Start date	End date	Fee (EUR)
Rome Confirmed dates	23 Nov 2026	27 Nov 2026	**€4,900.-**
Online Confirmed dates	23 Nov 2026	27 Nov 2026	**€1,250.-**
Cape Town Confirmed dates	14 Dec 2026	18 Dec 2026	**€3,780.-**
Online Confirmed dates	14 Dec 2026	18 Dec 2026	**€1,250.-**
Rome Confirmed dates	11 Jan 2027	15 Jan 2027	**€4,900.-**
Online Confirmed dates	11 Jan 2027	15 Jan 2027	**€1,250.-**
Cape Town Confirmed dates	1 Feb 2027	5 Feb 2027	**€3,780.-**
Online Confirmed dates	1 Feb 2027	5 Feb 2027	**€1,250.-**
London Confirmed dates	22 Feb 2027	26 Feb 2027	**€4,900.-**



Course content

Dates, venues and fees (continued)

Venue	Start date	End date	Fee (EUR)
Online Confirmed dates	22 Feb 2027	26 Feb 2027	**€1,250.–**
Kuala Lumpur Confirmed dates	15 Mar 2027	19 Mar 2027	**€2,900.–**
Online Confirmed dates	15 Mar 2027	19 Mar 2027	**€1,250.–**
Barcelona Confirmed dates	5 Apr 2027	9 Apr 2027	**€5,680.–**
Online Confirmed dates	5 Apr 2027	9 Apr 2027	**€1,250.–**
London Confirmed dates	19 Apr 2027	23 Apr 2027	**€4,900.–**
Online Confirmed dates	19 Apr 2027	23 Apr 2027	**€1,250.–**
Frankfurt Confirmed dates	10 May 2027	14 May 2027	**€5,300.–**
Online Confirmed dates	10 May 2027	14 May 2027	**€1,250.–**



Course content

Dates, venues and fees (continued)

Venue	Start date	End date	Fee (EUR)
Dubai Confirmed dates	31 May 2027	4 Jun 2027	**€6,300.-**
Online Confirmed dates	31 May 2027	4 Jun 2027	**€1,250.-**
Vienna Confirmed dates	21 Jun 2027	25 Jun 2027	**€5,880.-**
Online Confirmed dates	21 Jun 2027	25 Jun 2027	**€1,250.-**
Istanbul Confirmed dates	12 Jul 2027	16 Jul 2027	**€5,300.-**
Online Confirmed dates	12 Jul 2027	16 Jul 2027	**€1,250.-**
Rome Confirmed dates	26 Jul 2027	30 Jul 2027	**€4,900.-**
Online Confirmed dates	26 Jul 2027	30 Jul 2027	**€1,250.-**
Paris Confirmed dates	16 Aug 2027	20 Aug 2027	**€5,720.-**



Course content

Dates, venues and fees (continued)

Venue	Start date	End date	Fee (EUR)
Online Confirmed dates	16 Aug 2027	20 Aug 2027	**€1,250.-**
Vienna Confirmed dates	6 Sept 2027	10 Sept 2027	**€5,880.-**
Online Confirmed dates	6 Sept 2027	10 Sept 2027	**€1,250.-**
Cape Town Confirmed dates	27 Sept 2027	1 Oct 2027	**€3,780.-**
Online Confirmed dates	27 Sept 2027	1 Oct 2027	**€1,250.-**
Dubai Confirmed dates	18 Oct 2027	22 Oct 2027	**€6,300.-**
Online Confirmed dates	18 Oct 2027	22 Oct 2027	**€1,250.-**
Amsterdam Confirmed dates	1 Nov 2027	5 Nov 2027	**€5,080.-**
Online Confirmed dates	1 Nov 2027	5 Nov 2027	**€1,250.-**



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Dates, venues and fees (continued)

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Dubai Confirmed dates	22 Nov 2027	26 Nov 2027	**€6,300.-**
Online Confirmed dates	22 Nov 2027	26 Nov 2027	**€1,250.-**
Barcelona Confirmed dates	13 Dec 2027	17 Dec 2027	**€5,680.-**
Online Confirmed dates	13 Dec 2027	17 Dec 2027	**€1,250.-**

Plan your next step

Dates, availability, exact venue, taxes, inclusions and payment terms require written confirmation. This brochure is not a quotation, registration, booking confirmation or visa invitation. Participants receive a Smart Horizon certificate of attendance; programmes are not externally accredited and do not award a professional qualification or designation. Confirm arrangements before booking travel.

For group or in-house training, contact our learning team to discuss your objectives and delivery arrangements.

Contact Smart Horizon

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View the latest course details online