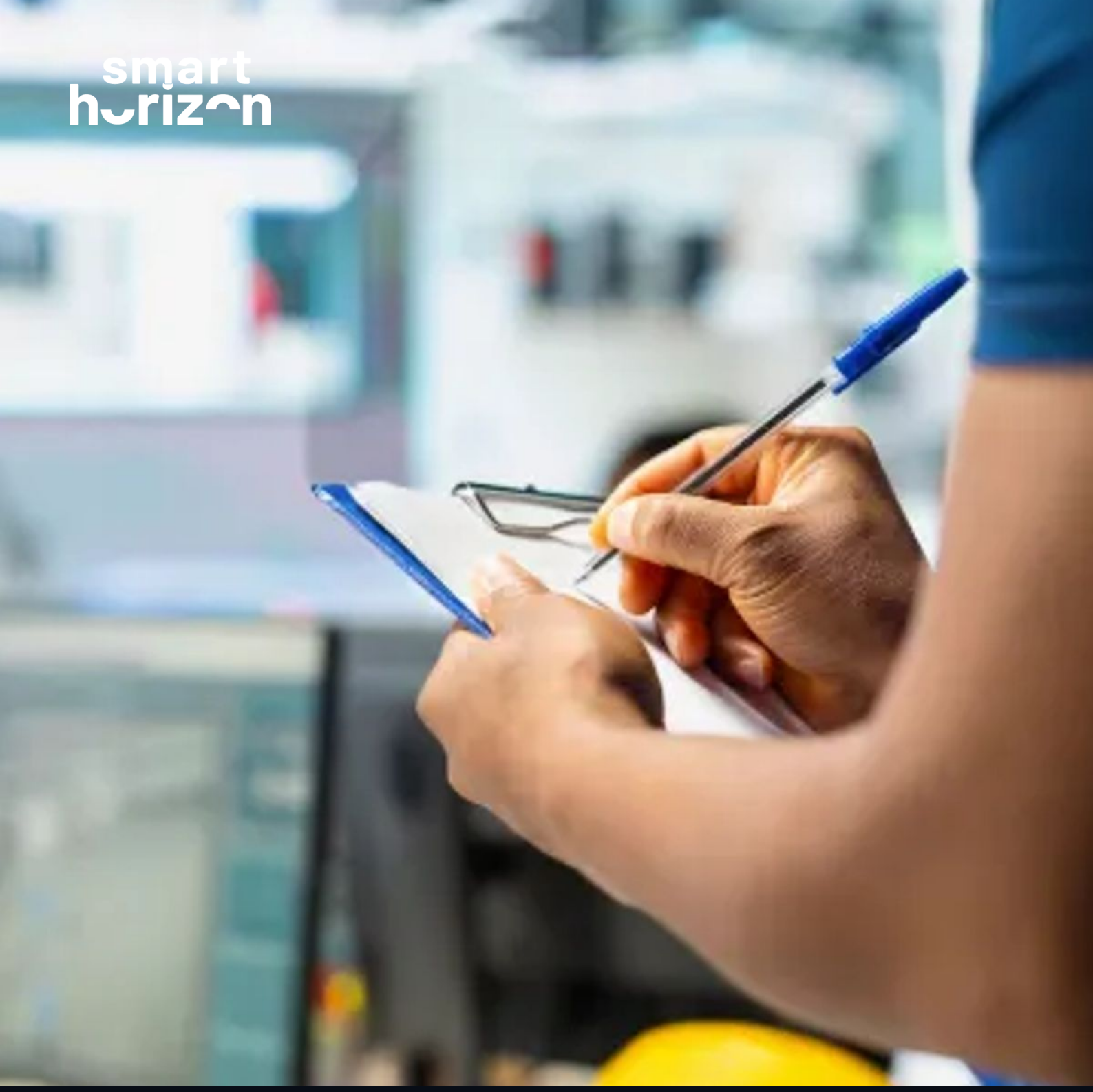


MAINTENANCE AND ENGINEERING | COURSE BROCHURE

Maintenance Planning, Scheduling and Control

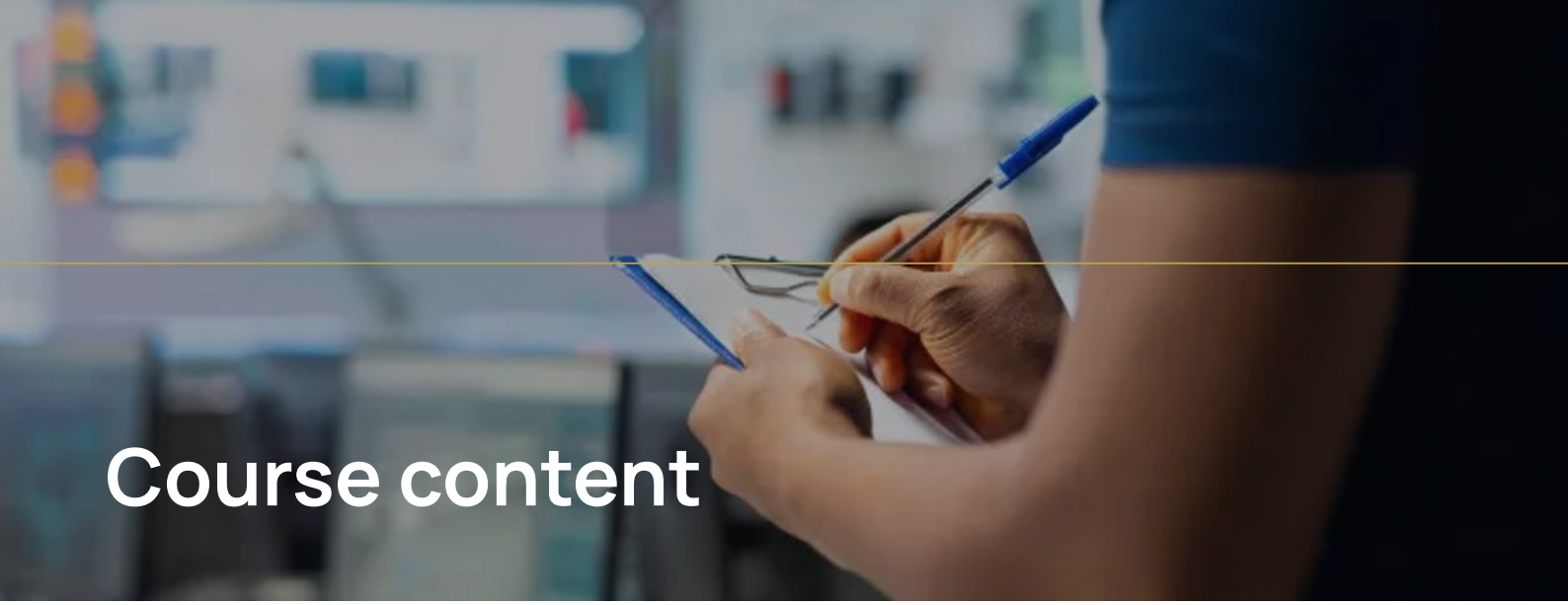
5 days | Classroom training | English

SMART HORIZON

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Amsterdam
The Netherlands

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Course content

Why attend

This course focuses on the principles and practices of maintenance planning, scheduling, and control within industrial settings. Participants will learn to optimise maintenance strategies, enhance equipment reliability, and improve operational efficiency through effective planning and scheduling techniques.

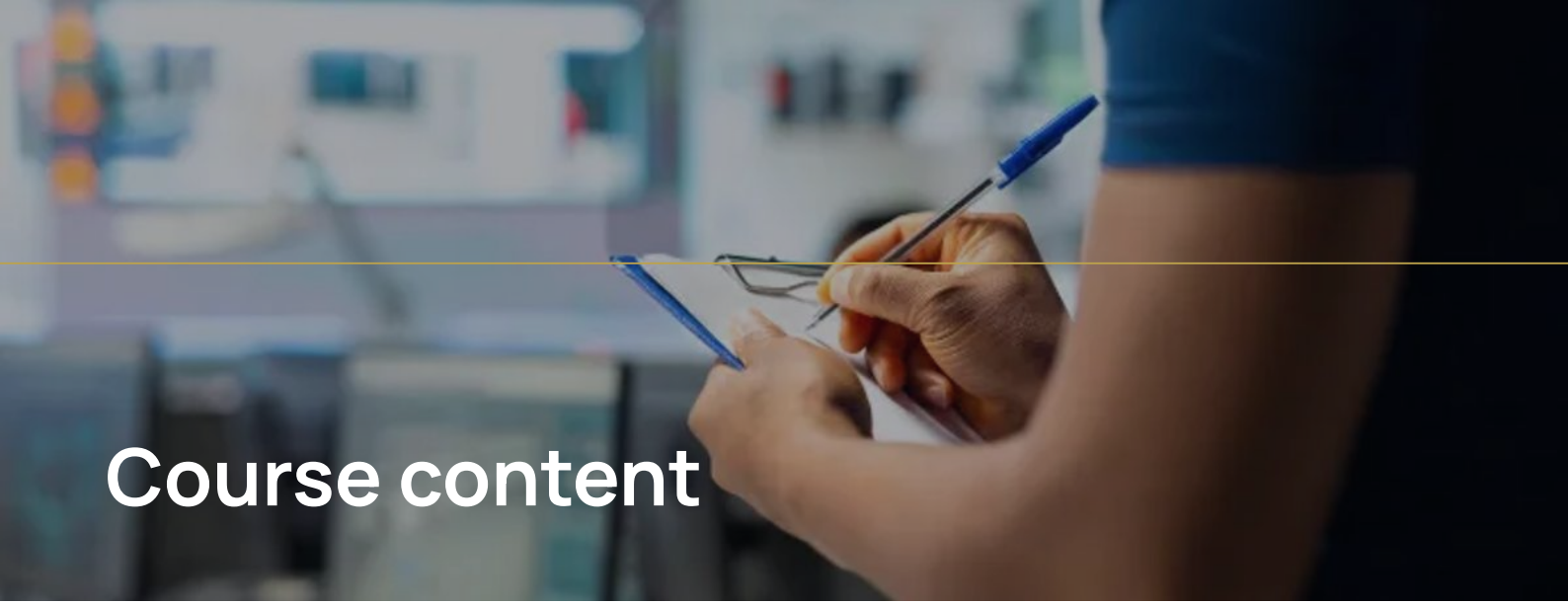
Maintenance planning and scheduling are critical for minimising downtime and maximising productivity in industrial operations. Participants often face challenges such as unexpected equipment failures, inefficient resource allocation, and inadequate maintenance strategies. Addressing these issues is essential for maintaining operational continuity, reducing costs, and ensuring compliance with safety regulations. By mastering these skills, participants will be better equipped to implement proactive maintenance practices that extend asset life and enhance overall performance, directly impacting the bottom line. Furthermore, effective maintenance planning enables organisations to allocate resources efficiently, thereby improving workforce productivity and reducing the risk of operational disruptions.
This course equips participants with the skills to analyse maintenance needs, develop effective schedules, and implement control measures. Participants will engage in practical exercises that simulate real-world scenarios, enabling them to make informed decisions about maintenance priorities, resource allocation, and performance metrics. By practising these capabilities, they will learn to balance maintenance activities with production demands, optimise workforce utilisation, and enhance communication across departments. Additionally, participants will explore the integration of technology in maintenance management, allowing them to leverage data analytics for predictive maintenance, ultimately leading to improved reliability and reduced operational costs.

Professional Problems This Course Is Designed to Solve

• Reactive maintenance disrupting operational availability.
• Maintenance schedules that overlook resources and asset priorities.
• Weak tracking of work completion, backlog and maintenance performance.

Course methodology

The course employs a blend of interactive workshops, case studies, and simulation exercises to build practical skills in maintenance planning and scheduling. Participants will work on real-world scenarios that require them to analyse maintenance data, develop schedules, and implement control measures. Specific exercises will include creating maintenance task lists, prioritising tasks based on risk assessments, and using software tools for scheduling. Participants will also engage in group discussions to share insights and best practices. Outputs will include maintenance plans, scheduling templates, and performance reports, providing tangible evidence of their learning and capability development. This practical focus ensures that participants leave with applicable skills and knowledge to enhance their maintenance operations.



Course content

Course objectives

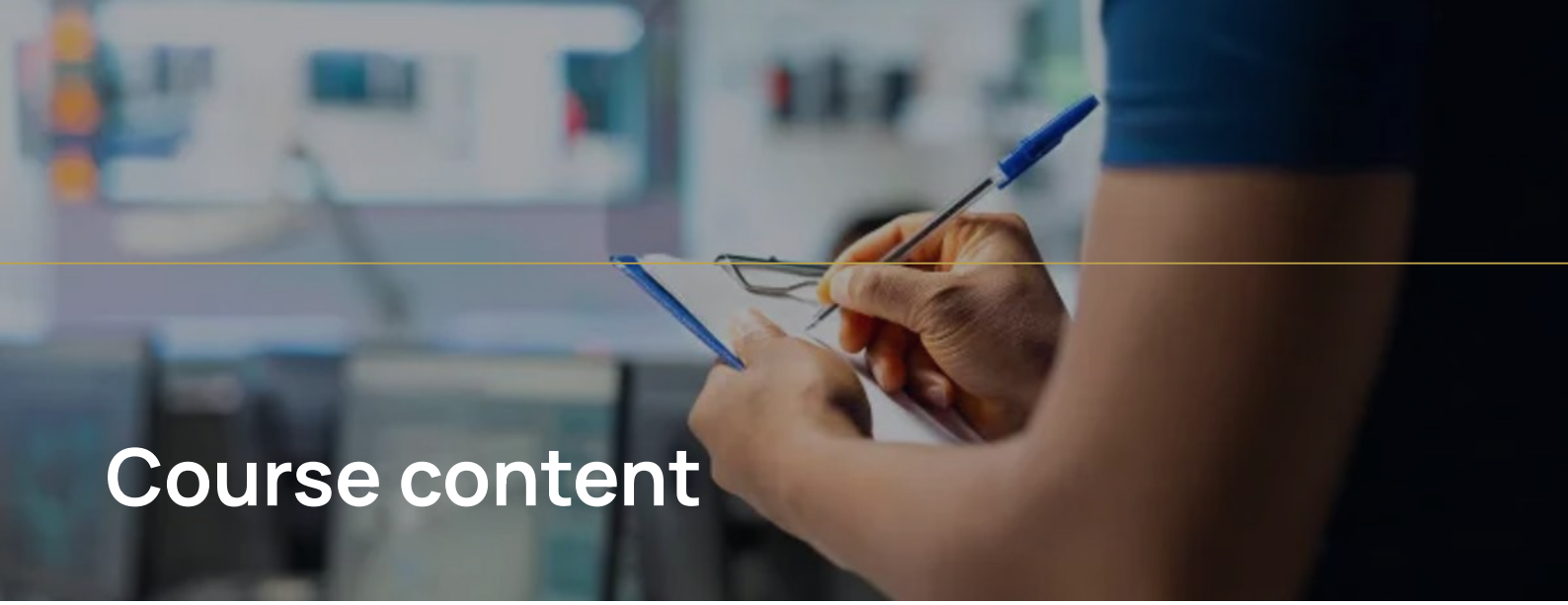
By the end of this course, participants will be able to:
• Analyse maintenance requirements to identify critical assets and their specific needs for optimal performance.
• Design a comprehensive maintenance plan that aligns with operational goals and improves equipment reliability.
• Calculate optimal maintenance schedules using industry-standard techniques to minimise downtime and resource waste.
• Prioritise maintenance tasks based on risk assessment and impact analysis to ensure critical operations are maintained.
• Assess the effectiveness of maintenance strategies through performance metrics and continuous improvement processes.
• Construct control measures to monitor and improve maintenance processes for enhanced operational efficiency.
• Evaluate the impact of maintenance decisions on overall operational efficiency and cost-effectiveness in the organisation.
• Develop contingency plans for unexpected maintenance issues and resource constraints to ensure operational continuity.

Target audience

This course is suitable for:
• Maintenance Managers responsible for overseeing maintenance operations and strategies.
• Maintenance Planners tasked with developing and implementing effective maintenance schedules.
• Operations Managers seeking to improve equipment reliability and reduce downtime in production.
• Asset Managers focused on optimising the lifecycle of physical assets and resources.

Target competencies

Participants will develop competencies in:
• Ability to analyse and interpret maintenance data effectively for informed decision-making.
• Skill in designing maintenance plans that enhance operational efficiency and reliability.
• Proficiency in scheduling techniques to minimise equipment downtime and resource conflicts.
• Capability to assess and prioritise maintenance tasks based on criticality and risk.
• Expertise in monitoring and controlling maintenance processes for continuous improvement.
• Understanding of performance metrics and their application in maintenance management practices.
• Competence in utilising software tools for effective maintenance planning and scheduling.
• Skill in developing contingency plans for maintenance-related disruptions and challenges.



Course content

Course outline

Day 1: Fundamentals of Maintenance Planning

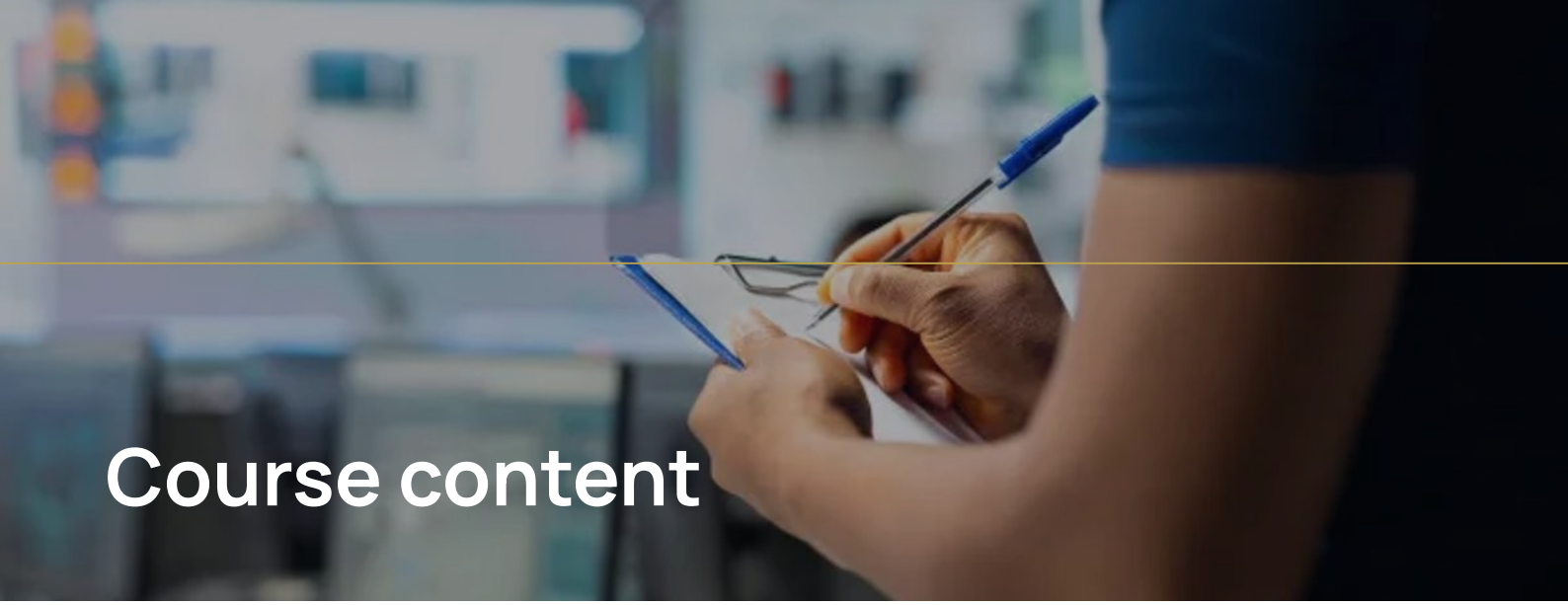
Applied activity: Participants will analyse a fictional facility's maintenance data to identify critical assets and their maintenance needs, using provided templates and tools. They will present their findings and recommendations to the group, discussing potential impacts on overall operations and resource allocation.
Output: A report detailing identified critical assets and recommended maintenance strategies.

09:00–09:54	Overview of maintenance strategies: reactive vs. proactive approaches and their implications.
09:54–10:48	Key concepts in maintenance planning and scheduling processes for effective operations.
10:48–11:00	Understanding equipment life cycles and their criticality in maintenance planning.
11:00–11:30	**Coffee break**
11:30–12:12	Understanding equipment life cycles and their criticality in maintenance planning. (continued)
12:12–13:06	Introduction to maintenance management systems and their functionalities in practice.
13:06–14:00	Role of data analytics in informed maintenance decision-making and strategy development.

Day 2: Developing Effective Maintenance Plans

Applied activity: Participants will create a detailed maintenance plan for a fictional production line, including task lists, schedules, and resource allocation based on operational goals and constraints. They will justify their choices based on risk assessments and potential impacts on production.
Output: A complete maintenance plan document for the fictional production line, including schedules.

09:00–09:54	Components of a comprehensive maintenance plan and its importance in operational success.
09:54–10:48	Aligning maintenance objectives with broader business goals and operational strategies.
10:48–11:00	Conducting risk assessments to inform maintenance planning decisions effectively.
11:00–11:30	**Coffee break**
11:30–12:12	Conducting risk assessments to inform maintenance planning decisions effectively. (continued)
12:12–13:06	Creating detailed maintenance task lists and effective schedules to optimise resources.
13:06–14:00	Utilising software tools for enhanced maintenance planning efficiency and accuracy.



Course content

Day 3: Scheduling Techniques for Maintenance

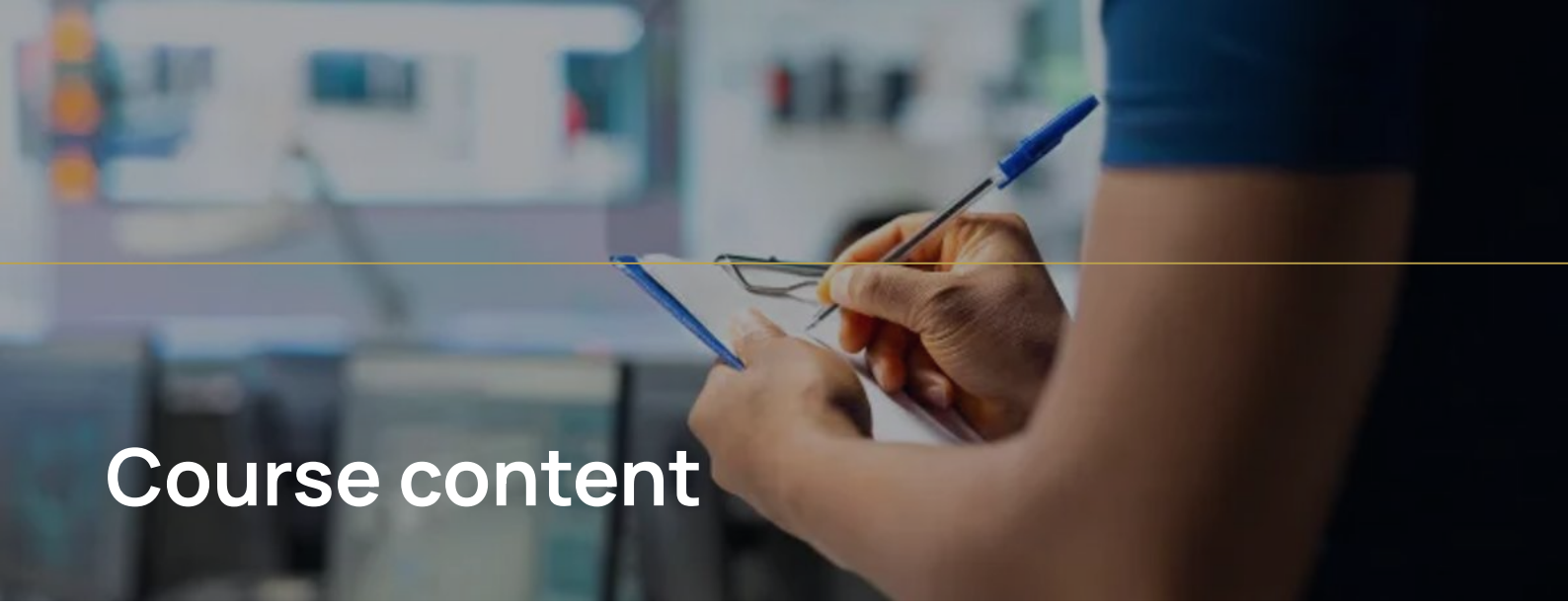
Applied activity: Using a provided case study, participants will develop a maintenance schedule for a complex system, considering resource constraints, production schedules, and maintenance priorities. They will present their schedule to the group for feedback and improvement suggestions.
Output: A Gantt chart illustrating the proposed maintenance schedule, including timelines.

09:00–09:54	Introduction to scheduling methodologies: Gantt charts, CPM, and PERT techniques for maintenance.
09:54–10:48	Calculating maintenance windows and effective resource allocation strategies for tasks.
10:48–11:00	Balancing maintenance schedules with production demands and operational constraints effectively.
11:00–11:30	**Coffee break**
11:30–12:12	Balancing maintenance schedules with production demands and operational constraints effectively. (continued)
12:12–13:06	Utilising software for effective scheduling and tracking maintenance progress over time.
13:06–14:00	Case studies on successful maintenance scheduling implementations and lessons learned.

Day 4: Monitoring and Controlling Maintenance Activities

Applied activity: Participants will assess the effectiveness of a fictional maintenance strategy using KPIs and propose control measures for improvement. They will collaborate to create a presentation summarising their findings and recommendations for enhancing maintenance performance.
Output: A performance assessment report with recommendations for control measures and improvements.

09:00–09:54	Key performance indicators (KPIs) for effective maintenance management and monitoring.
09:54–10:48	Techniques for monitoring maintenance effectiveness and performance over time.
10:48–11:00	Implementing control measures for continuous improvement in maintenance processes and outcomes.
11:00–11:30	**Coffee break**
11:30–12:12	Implementing control measures for continuous improvement in maintenance processes and outcomes. (continued)
12:12–13:06	Establishing feedback loops and their importance in maintenance management practices.
13:06–14:00	Case studies on successful maintenance control and monitoring strategies.



Course content

Day 5: Integrated Maintenance Management Practice

Applied activity: Participants will work in teams to develop an integrated maintenance management framework for a fictional organisation, incorporating planning, scheduling, and control elements. They will present their framework to the class for evaluation and feedback, discussing potential challenges and solutions.
Output: A comprehensive integrated maintenance management framework document for the fictional organisation.

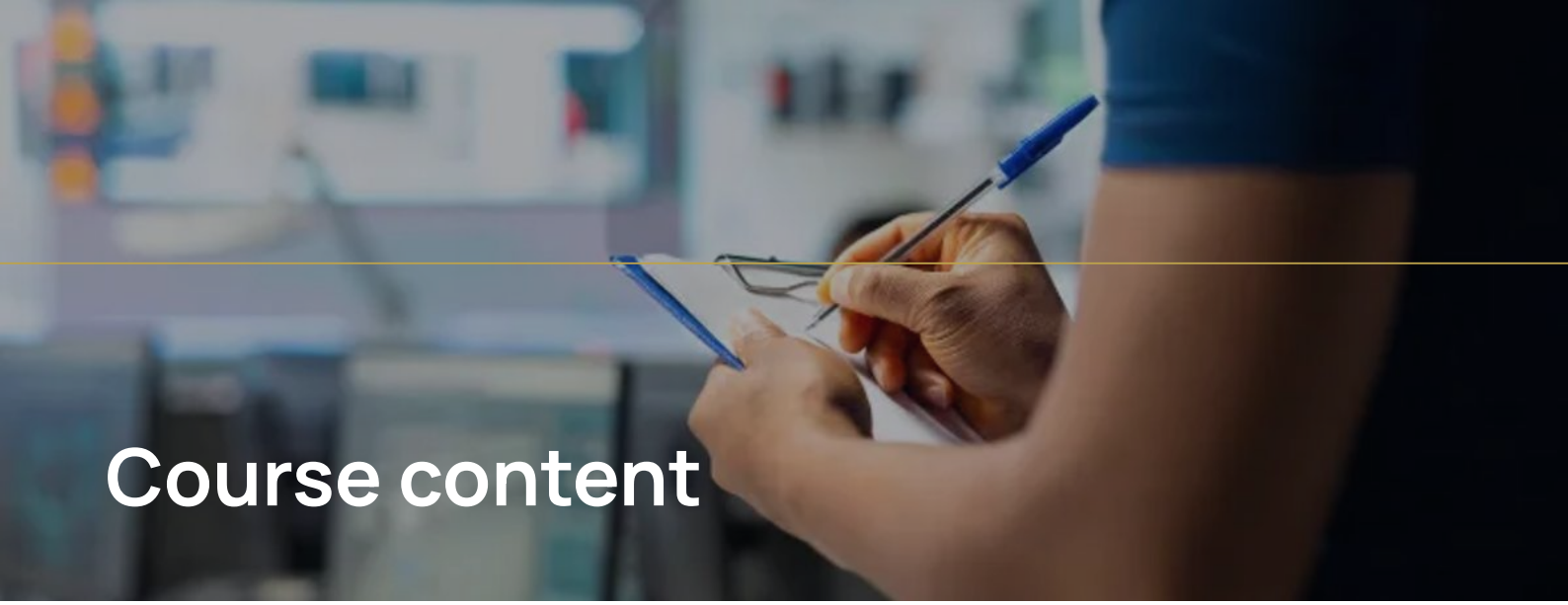
09:00–09:54	Combining planning, scheduling, and control for optimal maintenance outcomes in organisations.
09:54–10:48	Developing a comprehensive maintenance management framework for effective operations.
10:48–11:00	Collaborative approaches to maintenance across various departments and functions for success.
11:00–11:30	**Coffee break**
11:30–12:12	Collaborative approaches to maintenance across various departments and functions for success. (continued)
12:12–13:06	Utilising technology for integrated maintenance solutions and data sharing among teams.
13:06–14:00	Future trends in maintenance management and their implications for organisations.

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.

Dates, venues and fees

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

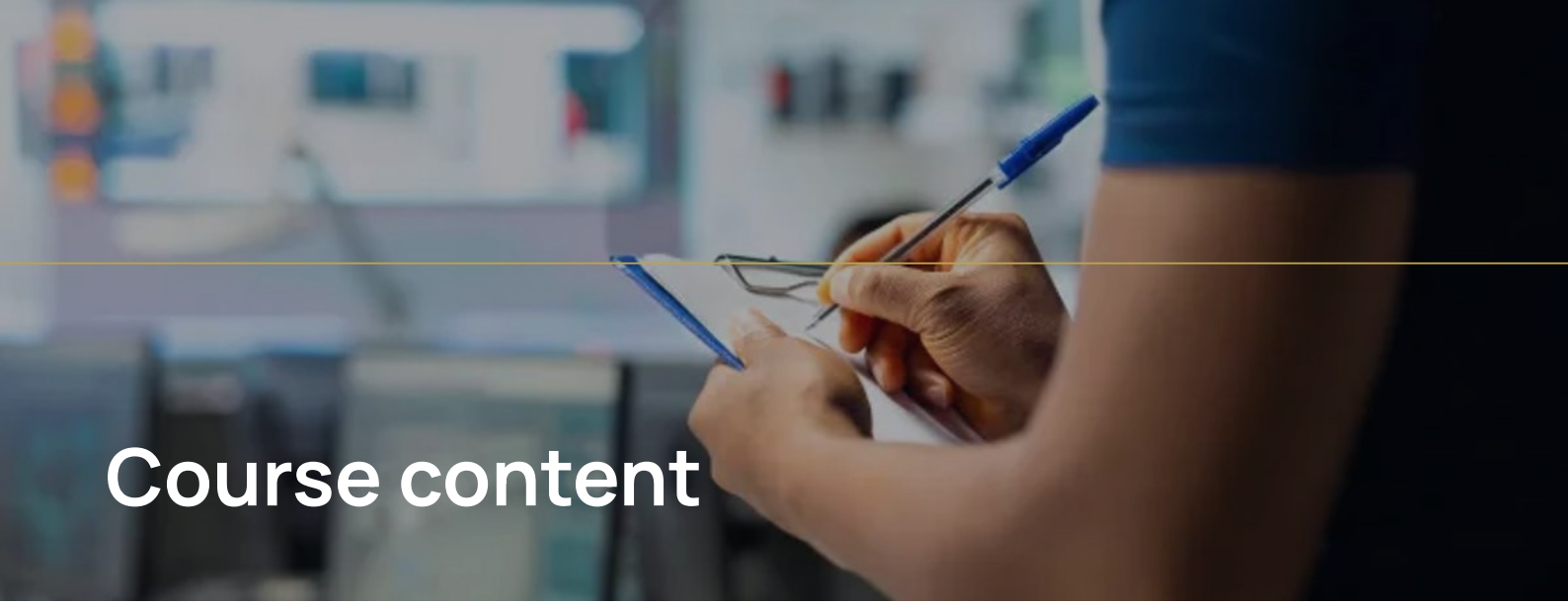
Venue	Start date	End date	Fee (EUR)
Singapore Confirmed dates	9 Nov 2026	13 Nov 2026	**€5,640.-**
Online Confirmed dates	9 Nov 2026	13 Nov 2026	**€1,250.-**
London Confirmed dates	23 Nov 2026	27 Nov 2026	**€4,900.-**



Course content

Dates, venues and fees (continued)

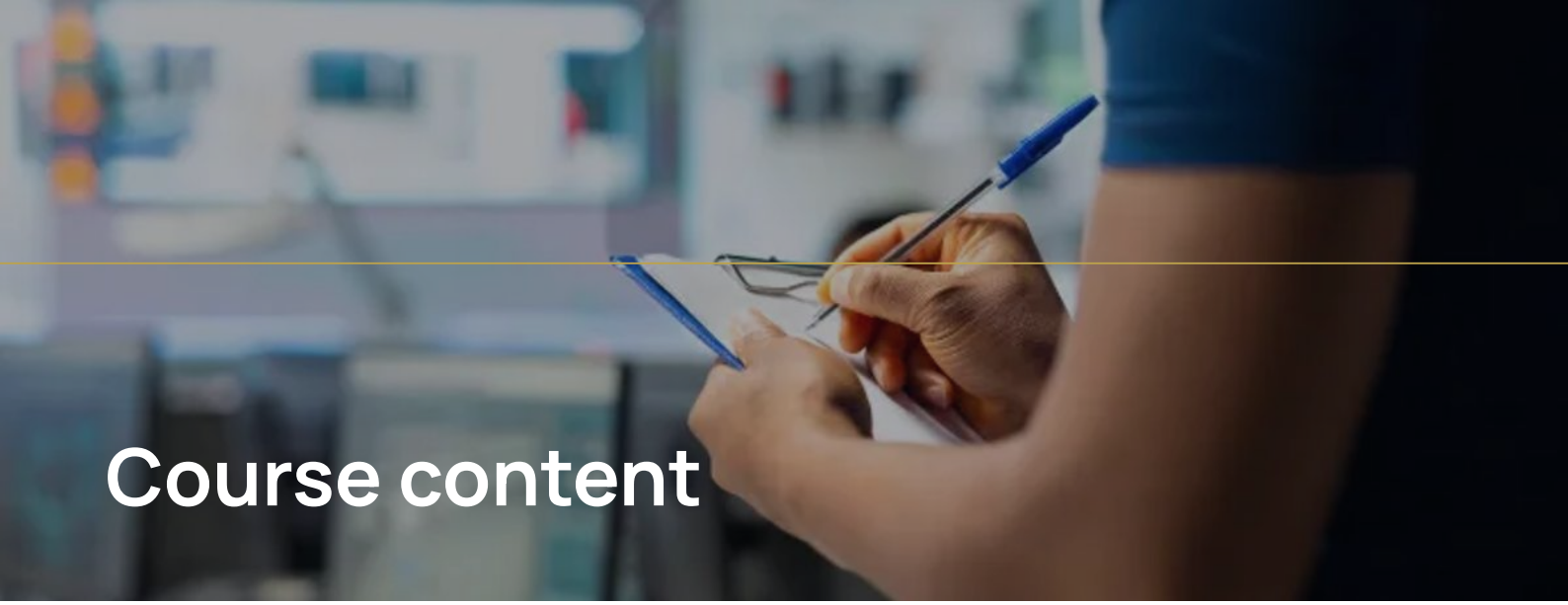
Venue	Start date	End date	Fee (EUR)
Online Confirmed dates	23 Nov 2026	27 Nov 2026	**€1,250.–**
Dubai Confirmed dates	7 Dec 2026	11 Dec 2026	**€6,300.–**
Online Confirmed dates	7 Dec 2026	11 Dec 2026	**€1,250.–**
Frankfurt Confirmed dates	14 Dec 2026	18 Dec 2026	**€5,300.–**
Online Confirmed dates	14 Dec 2026	18 Dec 2026	**€1,250.–**
Kuala Lumpur Confirmed dates	11 Jan 2027	15 Jan 2027	**€2,900.–**
Online Confirmed dates	11 Jan 2027	15 Jan 2027	**€1,250.–**
Paris Confirmed dates	25 Jan 2027	29 Jan 2027	**€5,720.–**
Online Confirmed dates	25 Jan 2027	29 Jan 2027	**€1,250.–**



Course content

Dates, venues and fees (continued)

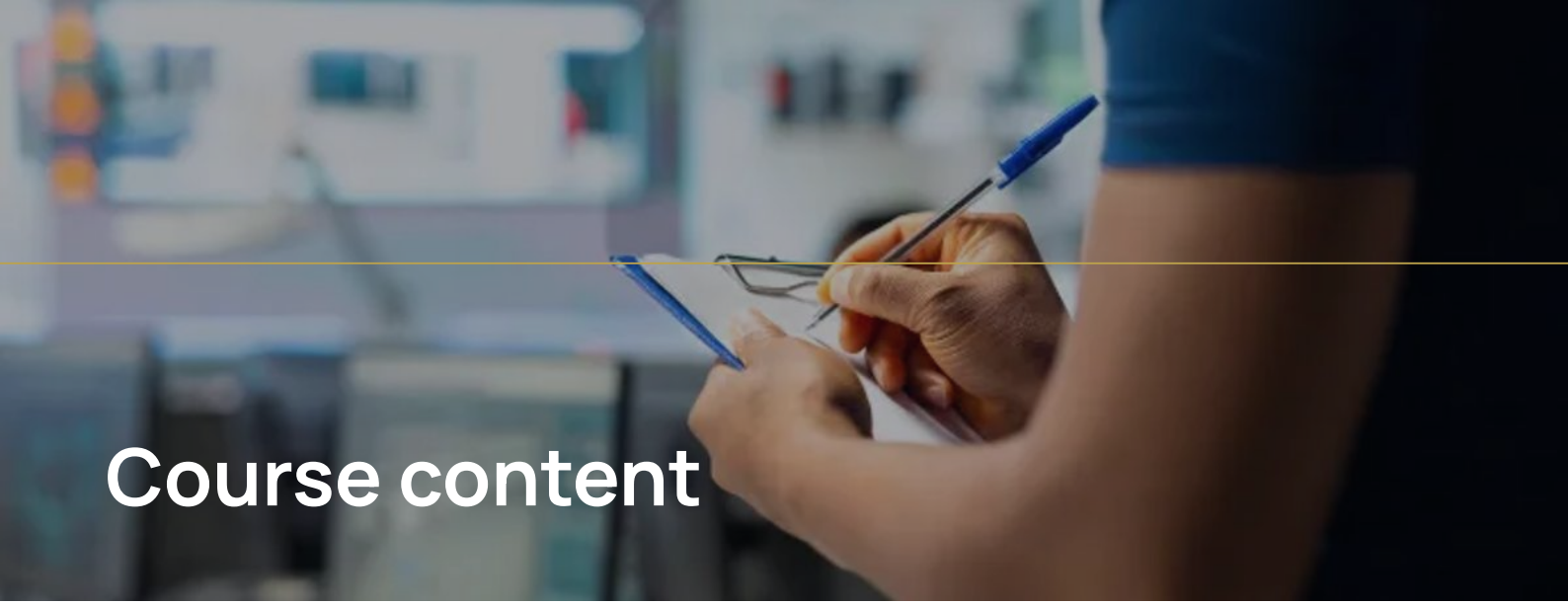
Venue	Start date	End date	Fee (EUR)
Rome Confirmed dates	1 Feb 2027	5 Feb 2027	**€4,900.-**
Online Confirmed dates	1 Feb 2027	5 Feb 2027	**€1,250.-**
Istanbul Confirmed dates	8 Feb 2027	12 Feb 2027	**€5,300.-**
Online Confirmed dates	8 Feb 2027	12 Feb 2027	**€1,250.-**
Amsterdam Confirmed dates	22 Feb 2027	26 Feb 2027	**€5,080.-**
Online Confirmed dates	22 Feb 2027	26 Feb 2027	**€1,250.-**
Singapore Confirmed dates	8 Mar 2027	12 Mar 2027	**€5,640.-**
Online Confirmed dates	8 Mar 2027	12 Mar 2027	**€1,250.-**
London Confirmed dates	22 Mar 2027	26 Mar 2027	**€4,900.-**



Course content

Dates, venues and fees (continued)

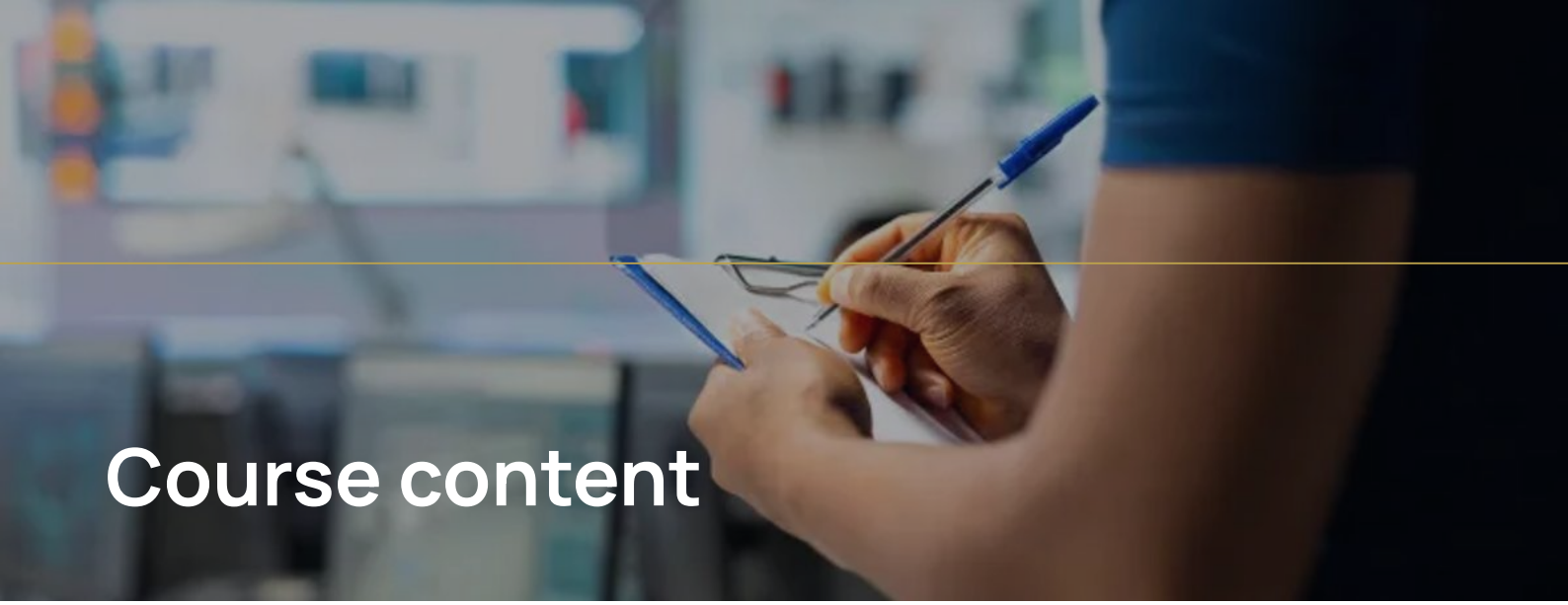
Venue	Start date	End date	Fee (EUR)
Online Confirmed dates	22 Mar 2027	26 Mar 2027	**€1,250.–**
Cape Town Confirmed dates	5 Apr 2027	9 Apr 2027	**€3,780.–**
Online Confirmed dates	5 Apr 2027	9 Apr 2027	**€1,250.–**
Dubai Confirmed dates	12 Apr 2027	16 Apr 2027	**€6,300.–**
Online Confirmed dates	12 Apr 2027	16 Apr 2027	**€1,250.–**
Frankfurt Confirmed dates	26 Apr 2027	30 Apr 2027	**€5,300.–**
Online Confirmed dates	26 Apr 2027	30 Apr 2027	**€1,250.–**
Kuala Lumpur Confirmed dates	10 May 2027	14 May 2027	**€2,900.–**
Online Confirmed dates	10 May 2027	14 May 2027	**€1,250.–**



Course content

Dates, venues and fees (continued)

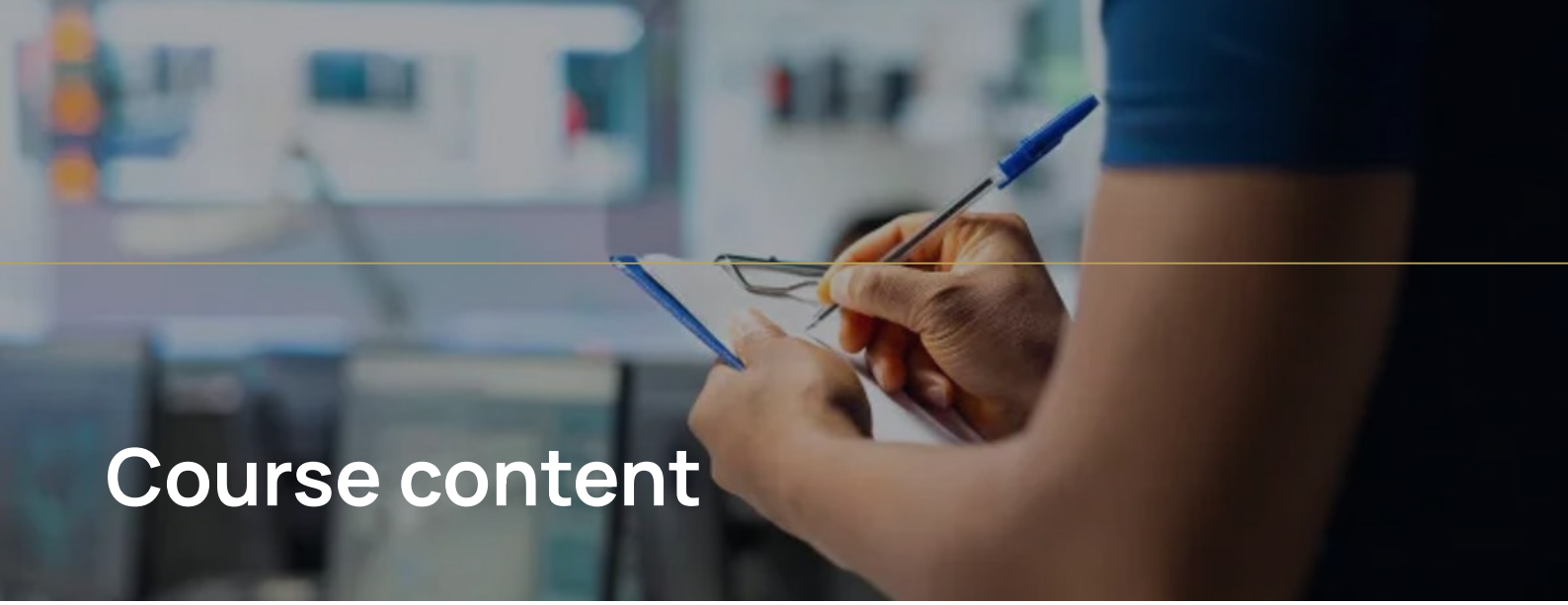
Venue	Start date	End date	Fee (EUR)
Paris Confirmed dates	24 May 2027	28 May 2027	**€5,720.–**
Online Confirmed dates	24 May 2027	28 May 2027	**€1,250.–**
Vienna Confirmed dates	31 May 2027	4 Jun 2027	**€5,880.–**
Online Confirmed dates	31 May 2027	4 Jun 2027	**€1,250.–**
Istanbul Confirmed dates	14 Jun 2027	18 Jun 2027	**€5,300.–**
Online Confirmed dates	14 Jun 2027	18 Jun 2027	**€1,250.–**
Amsterdam Confirmed dates	21 Jun 2027	25 Jun 2027	**€5,080.–**
Online Confirmed dates	21 Jun 2027	25 Jun 2027	**€1,250.–**
Singapore Confirmed dates	12 Jul 2027	16 Jul 2027	**€5,640.–**



Course content

Dates, venues and fees (continued)

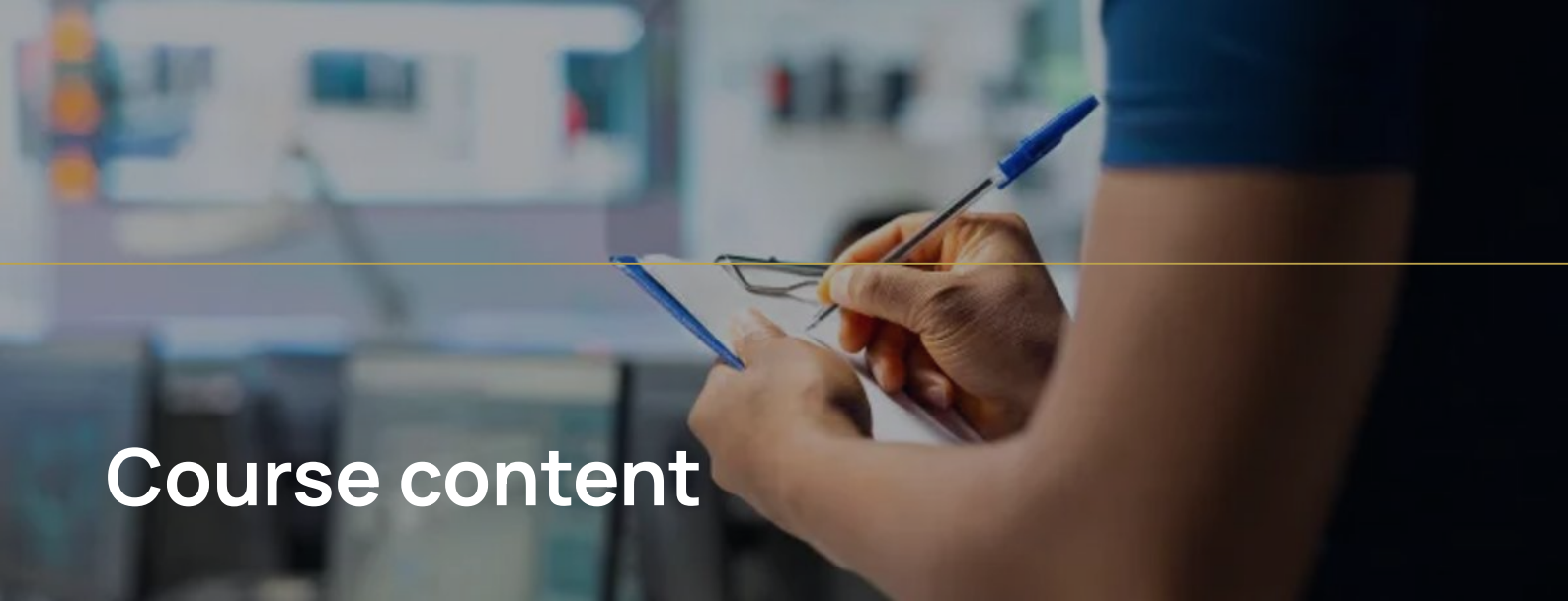
Venue	Start date	End date	Fee (EUR)
Online Confirmed dates	12 Jul 2027	16 Jul 2027	**€1,250.-**
London Confirmed dates	26 Jul 2027	30 Jul 2027	**€4,900.-**
Online Confirmed dates	26 Jul 2027	30 Jul 2027	**€1,250.-**
Cape Town Confirmed dates	2 Aug 2027	6 Aug 2027	**€3,780.-**
Online Confirmed dates	2 Aug 2027	6 Aug 2027	**€1,250.-**
Dubai Confirmed dates	9 Aug 2027	13 Aug 2027	**€6,300.-**
Online Confirmed dates	9 Aug 2027	13 Aug 2027	**€1,250.-**
Frankfurt Confirmed dates	23 Aug 2027	27 Aug 2027	**€5,300.-**
Online Confirmed dates	23 Aug 2027	27 Aug 2027	**€1,250.-**



Course content

Dates, venues and fees (continued)

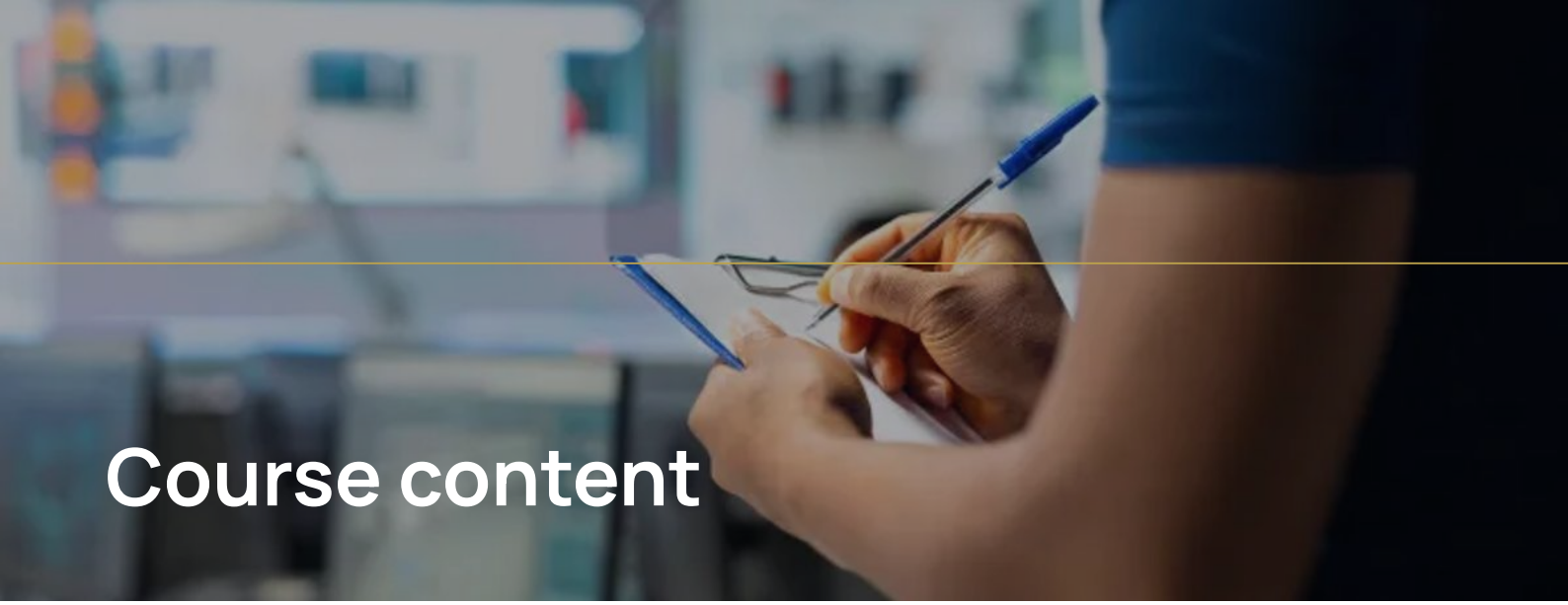
Venue	Start date	End date	Fee (EUR)
Kuala Lumpur Confirmed dates	13 Sept 2027	17 Sept 2027	**€2,900.–**
Online Confirmed dates	13 Sept 2027	17 Sept 2027	**€1,250.–**
Paris Confirmed dates	20 Sept 2027	24 Sept 2027	**€5,720.–**
Online Confirmed dates	20 Sept 2027	24 Sept 2027	**€1,250.–**
Barcelona Confirmed dates	4 Oct 2027	8 Oct 2027	**€5,680.–**
Online Confirmed dates	4 Oct 2027	8 Oct 2027	**€1,250.–**
Istanbul Confirmed dates	11 Oct 2027	15 Oct 2027	**€5,300.–**
Online Confirmed dates	11 Oct 2027	15 Oct 2027	**€1,250.–**
Amsterdam Confirmed dates	25 Oct 2027	29 Oct 2027	**€5,080.–**



Course content

Dates, venues and fees (continued)

Venue	Start date	End date	Fee (EUR)
Online Confirmed dates	25 Oct 2027	29 Oct 2027	**€1,250.-**
Singapore Confirmed dates	8 Nov 2027	12 Nov 2027	**€5,640.-**
Online Confirmed dates	8 Nov 2027	12 Nov 2027	**€1,250.-**
London Confirmed dates	22 Nov 2027	26 Nov 2027	**€4,900.-**
Online Confirmed dates	22 Nov 2027	26 Nov 2027	**€1,250.-**
Rome Confirmed dates	29 Nov 2027	3 Dec 2027	**€4,900.-**
Online Confirmed dates	29 Nov 2027	3 Dec 2027	**€1,250.-**
Dubai Confirmed dates	6 Dec 2027	10 Dec 2027	**€6,300.-**
Online Confirmed dates	6 Dec 2027	10 Dec 2027	**€1,250.-**



Course content

Dates, venues and fees (continued)

Venue	Start date	End date	Fee (EUR)
Frankfurt Confirmed dates	13 Dec 2027	17 Dec 2027	**€5,300.-**
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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