

MAINTENANCE AND ENGINEERING | COURSE BROCHURE

Valves: Selection, Operation and Maintenance

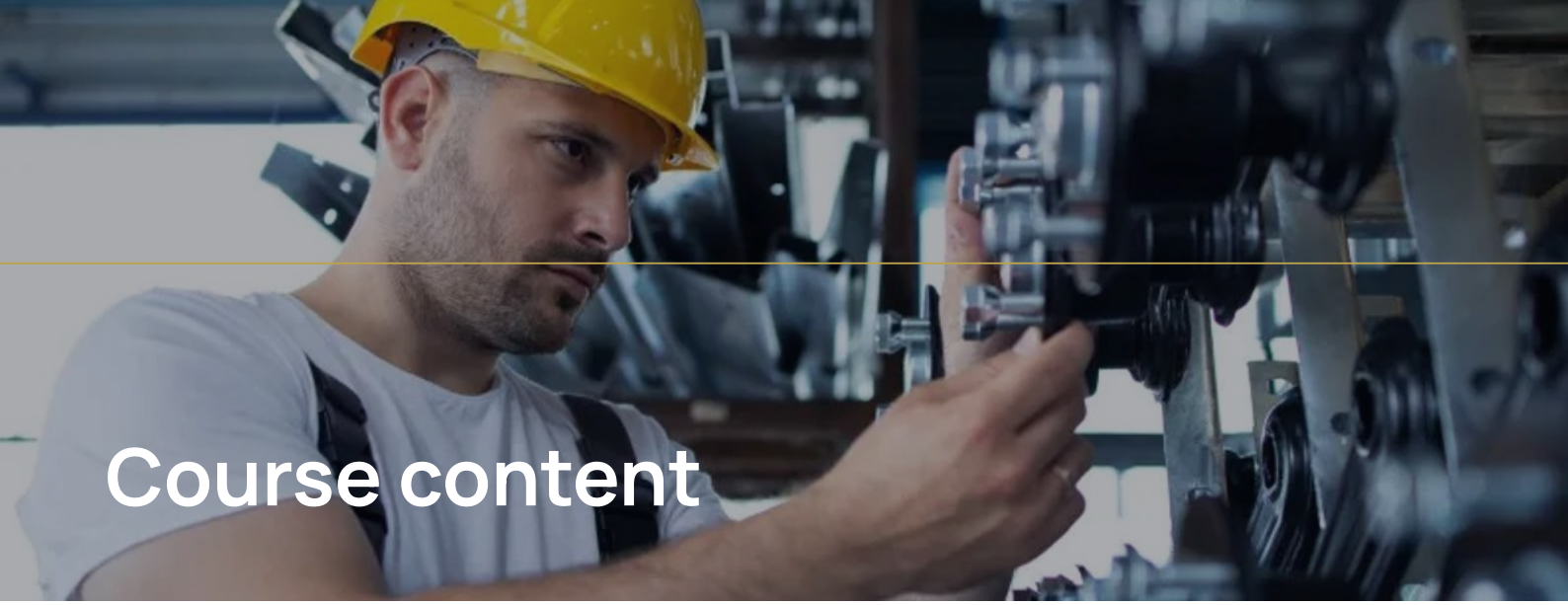
5 days | Classroom training | English

SMART HORIZON

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Amsterdam
The Netherlands

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https://smart-horizon.eu



Course content

Why attend

Valves control the flow of fluids throughout process plants, utilities and pipelines. This course covers valve types and applications, selection criteria, materials, actuation, sealing and leakage, inspection, testing, maintenance and troubleshooting.

Valve failures cause leaks, downtime and safety incidents. This course helps you select and maintain valves correctly.

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

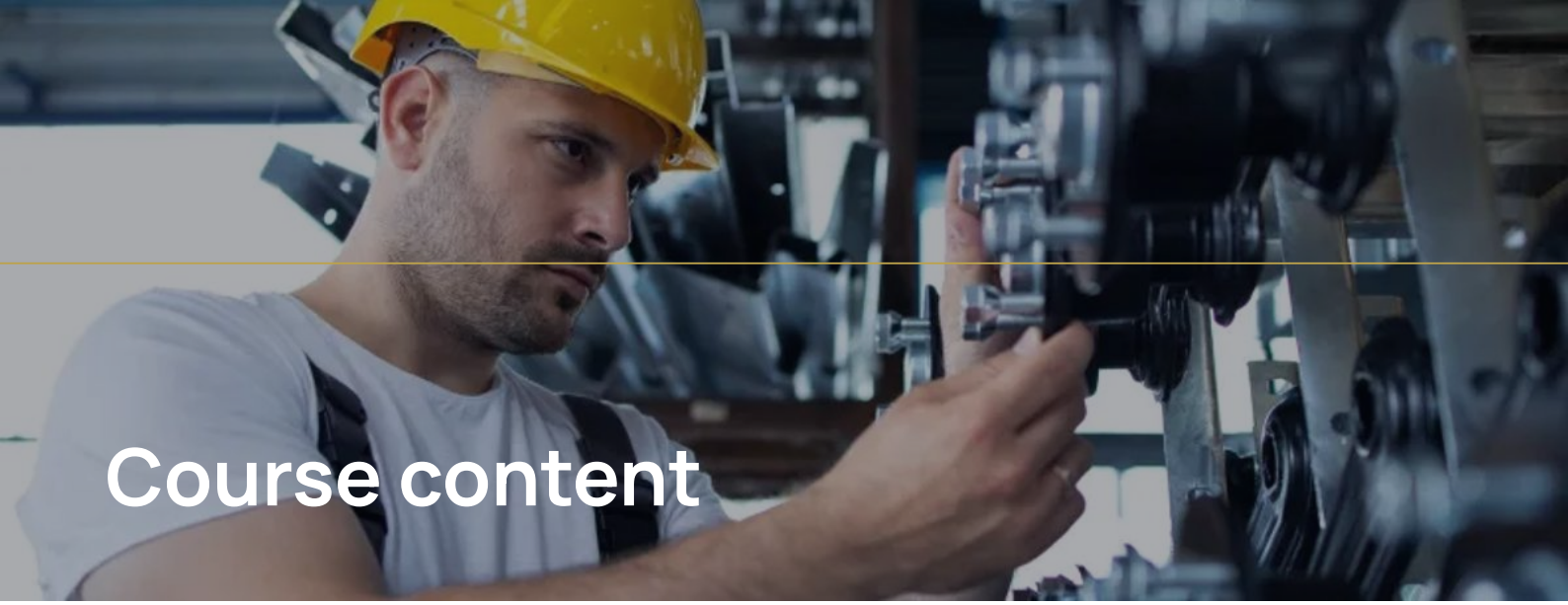
The course uses valve demonstrations, selection exercises, failure case studies and maintenance planning.

Course objectives

By the end of this course, participants will be able to:
• Identify valve types and their applications
• Select valves for service conditions
• Understand valve materials and standards
• Understand actuators and positioners
• Inspect, test and maintain valves
• Troubleshoot valve problems

Target audience

This course is suitable for:
• Mechanical and process engineers
• Maintenance technicians
• Piping engineers
• Procurement professionals buying valves
• Operators



Course content

Target competencies

Participants will develop competencies in:

- Valve types
- Valve selection
- Materials and standards
- Actuation
- Valve maintenance
- Troubleshooting

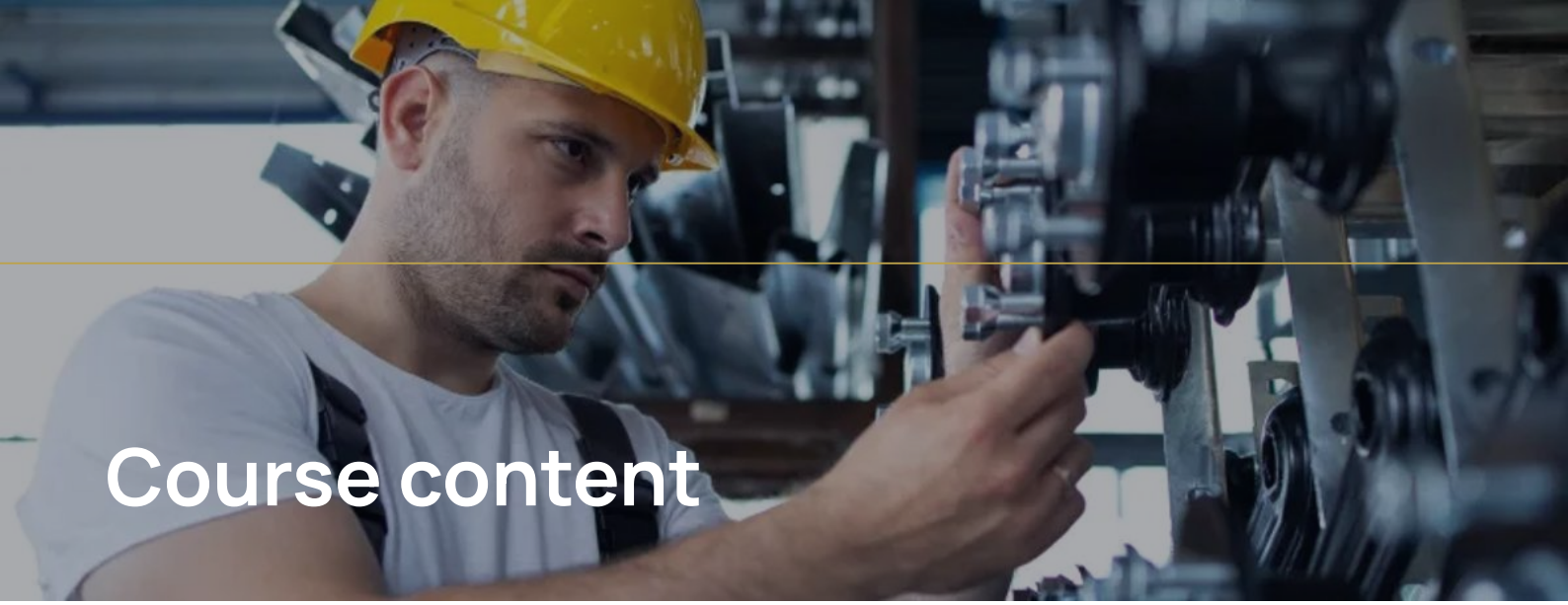
Course outline

Day 1: Valve Types

09:00–09:54	Isolation valves
09:54–10:48	Control valves
10:48–11:00	Check valves
11:00–11:30	**Coffee break**
11:30–12:12	Check valves (continued)
12:12–13:06	Safety relief valves
13:06–14:00	Exercise: Valve identification

Day 2: Selection

09:00–09:54	Service conditions
09:54–10:48	Materials
10:48–11:00	Standards and ratings
11:00–11:30	**Coffee break**
11:30–12:12	Standards and ratings (continued)
12:12–13:06	Sizing basics
13:06–14:00	Workshop: Valve selection



Course content

Day 3: Actuation and Sealing

09:00–09:54	Actuators
09:54–10:48	Positioners
10:48–11:00	Packing and seals
11:00–11:30	**Coffee break**
11:30–12:12	Packing and seals (continued)
12:12–13:06	Leakage classes
13:06–14:00	Demonstration: Actuators

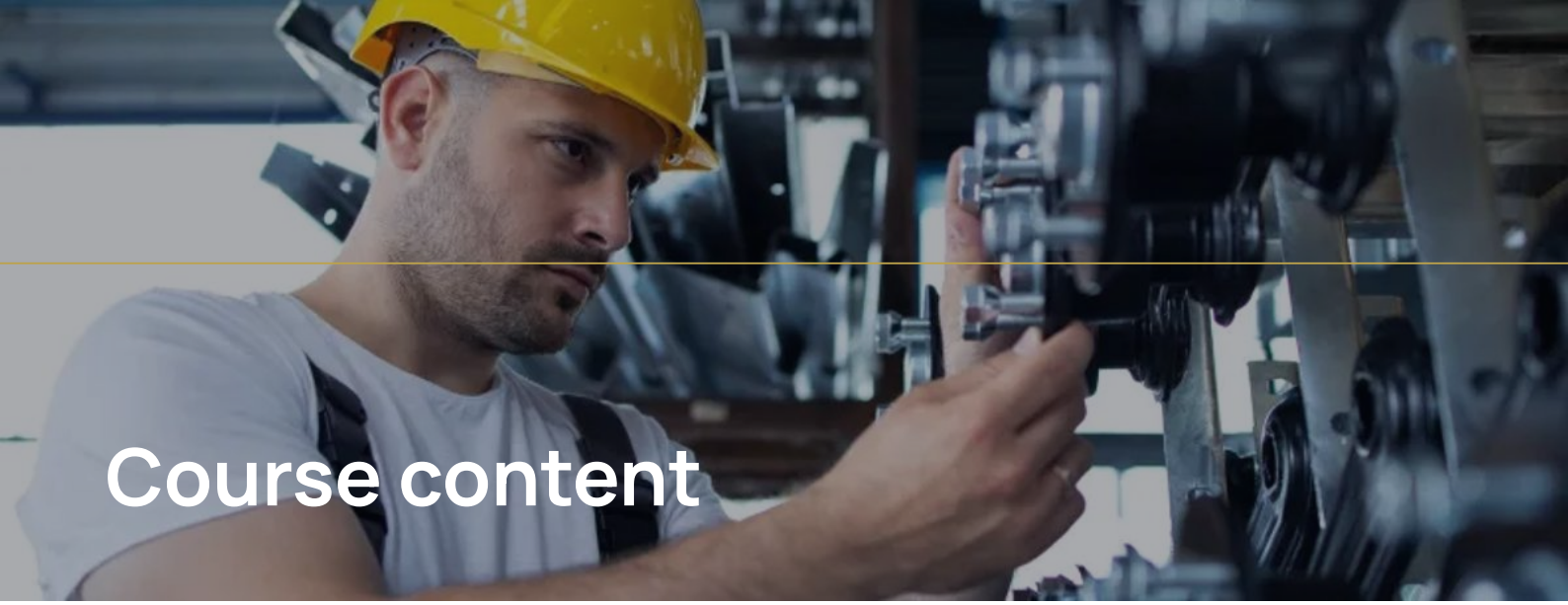
Day 4: Inspection and Maintenance

09:00–09:54	Inspection
09:54–10:48	Testing
10:48–11:00	Repair
11:00–11:30	**Coffee break**
11:30–12:12	Repair (continued)
12:12–13:06	Preventive maintenance
13:06–14:00	Case study: Valve failure

Day 5: Troubleshooting

09:00–09:54	Common problems
09:54–10:48	Root causes
10:48–11:00	Reliability improvement
11:00–11:30	**Coffee break**
11:30–12:12	Reliability improvement (continued)
12:12–13:06	Spare parts
13:06–14:00	Capstone: Valve maintenance plan

The timings provided are estimates and may vary depending on the number of participants and the discussions taking place during the



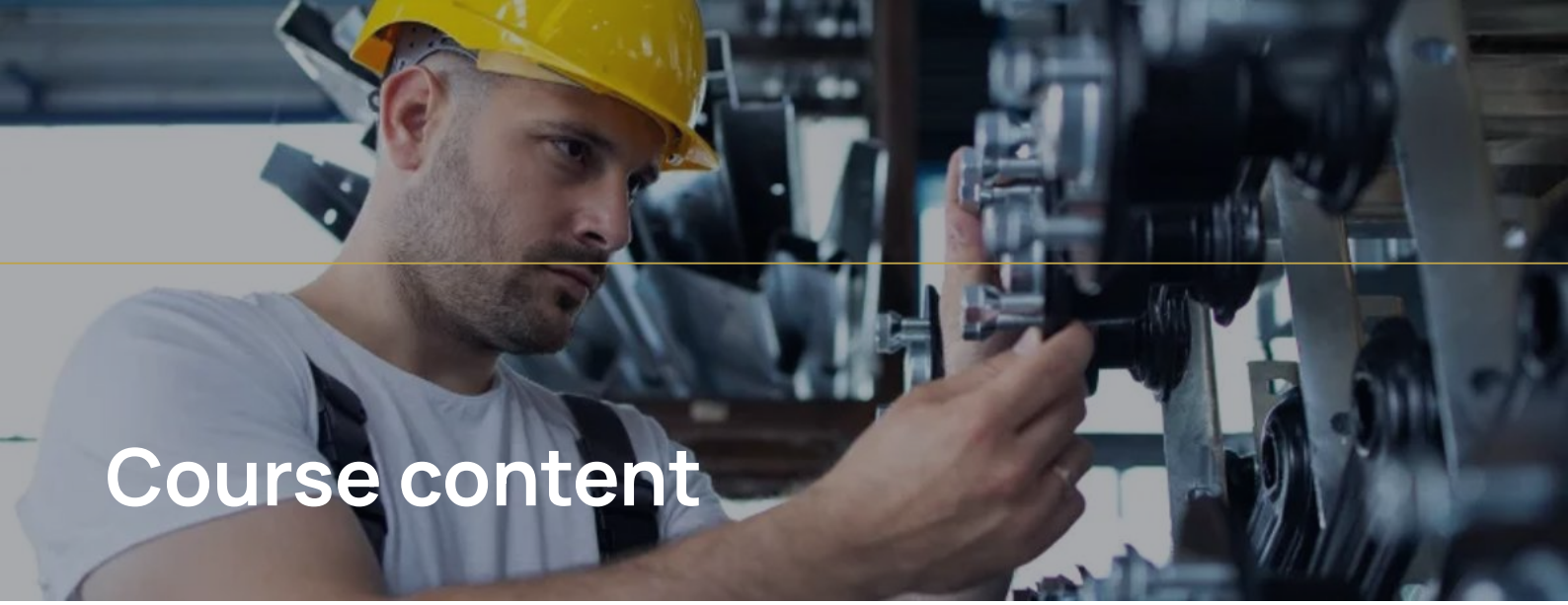
Course content

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.

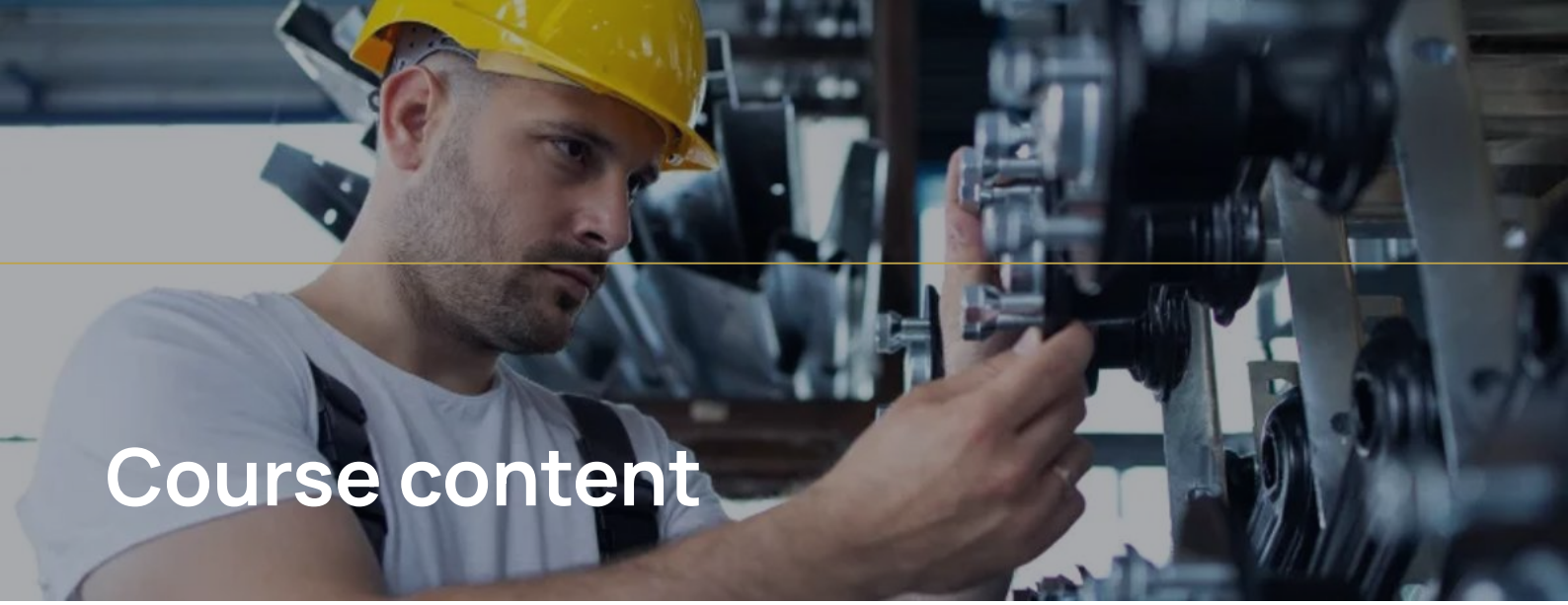
Venue	Start date	End date	Fee (EUR)
Dubai Confirmed dates	9 Nov 2026	13 Nov 2026	**€6,300.-**
Online Confirmed dates	9 Nov 2026	13 Nov 2026	**€1,250.-**
Vienna Confirmed dates	16 Nov 2026	20 Nov 2026	**€5,880.-**
Online Confirmed dates	16 Nov 2026	20 Nov 2026	**€1,250.-**
Frankfurt Confirmed dates	23 Nov 2026	27 Nov 2026	**€5,300.-**
Online Confirmed dates	23 Nov 2026	27 Nov 2026	**€1,250.-**
Kuala Lumpur Confirmed dates	7 Dec 2026	11 Dec 2026	**€2,900.-**
Online Confirmed dates	7 Dec 2026	11 Dec 2026	**€1,250.-**



Course content

Dates, venues and fees (continued)

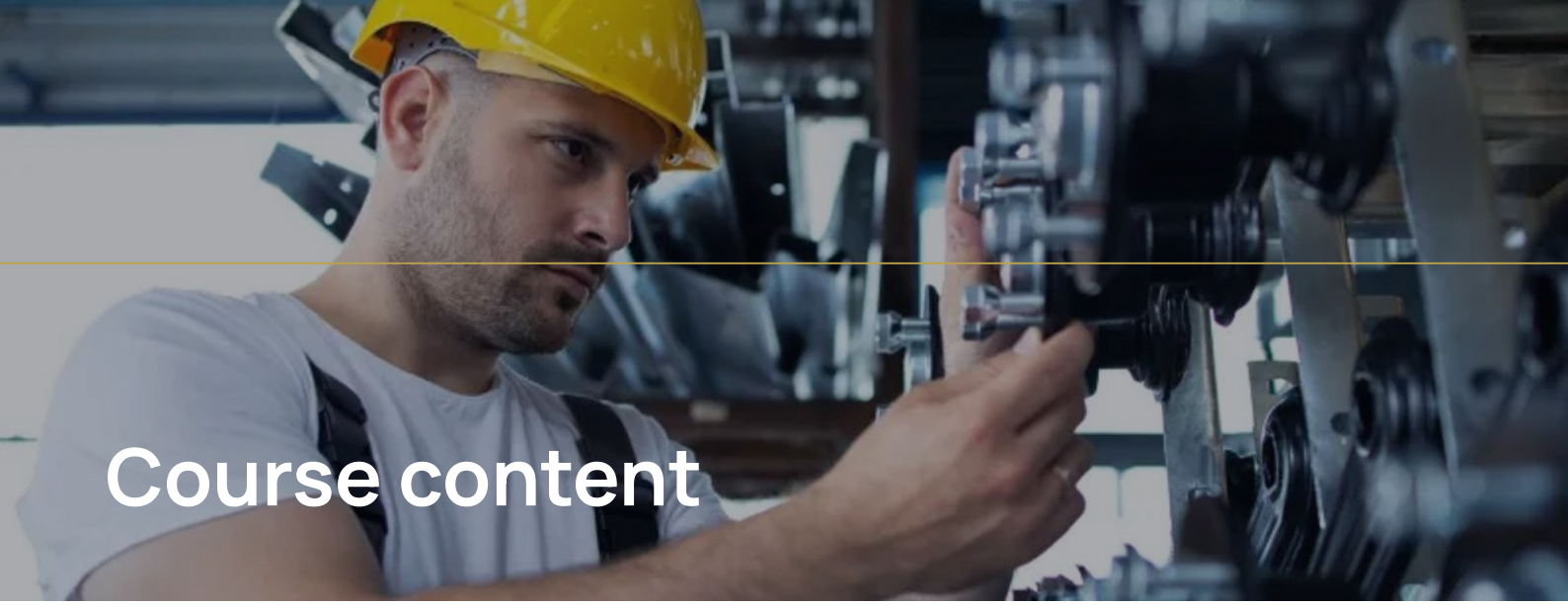
Venue	Start date	End date	Fee (EUR)
Paris Confirmed dates	14 Dec 2026	18 Dec 2026	**€5,720.-**
Online Confirmed dates	14 Dec 2026	18 Dec 2026	**€1,250.-**
Istanbul Confirmed dates	11 Jan 2027	15 Jan 2027	**€5,300.-**
Online Confirmed dates	11 Jan 2027	15 Jan 2027	**€1,250.-**
Amsterdam Confirmed dates	25 Jan 2027	29 Jan 2027	**€5,080.-**
Online Confirmed dates	25 Jan 2027	29 Jan 2027	**€1,250.-**
Singapore Confirmed dates	8 Feb 2027	12 Feb 2027	**€5,640.-**
Online Confirmed dates	8 Feb 2027	12 Feb 2027	**€1,250.-**
Rome Confirmed dates	15 Feb 2027	19 Feb 2027	**€4,900.-**



Course content

Dates, venues and fees (continued)

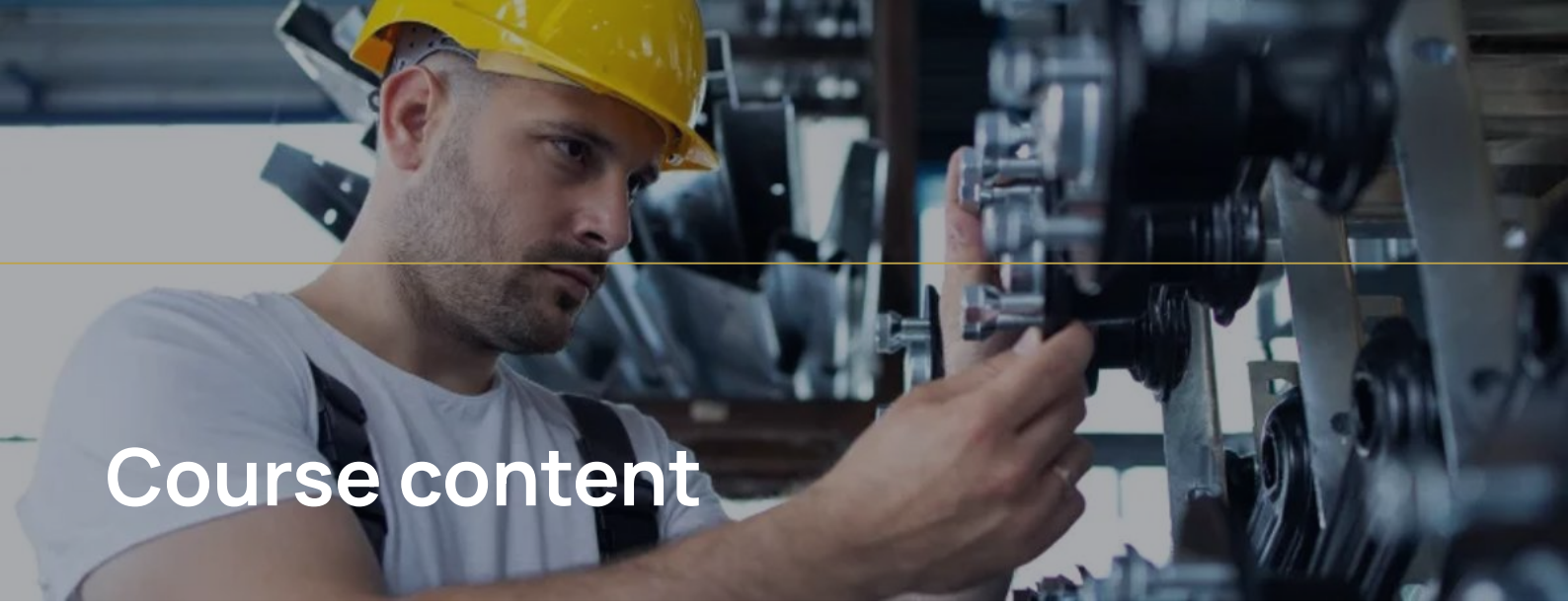
Venue	Start date	End date	Fee (EUR)
Online Confirmed dates	15 Feb 2027	19 Feb 2027	**€1,250.-**
London Confirmed dates	22 Feb 2027	26 Feb 2027	**€4,900.-**
Online Confirmed dates	22 Feb 2027	26 Feb 2027	**€1,250.-**
Dubai Confirmed dates	8 Mar 2027	12 Mar 2027	**€6,300.-**
Online Confirmed dates	8 Mar 2027	12 Mar 2027	**€1,250.-**
Frankfurt Confirmed dates	22 Mar 2027	26 Mar 2027	**€5,300.-**
Online Confirmed dates	22 Mar 2027	26 Mar 2027	**€1,250.-**
Kuala Lumpur Confirmed dates	12 Apr 2027	16 Apr 2027	**€2,900.-**
Online Confirmed dates	12 Apr 2027	16 Apr 2027	**€1,250.-**



Course content

Dates, venues and fees (continued)

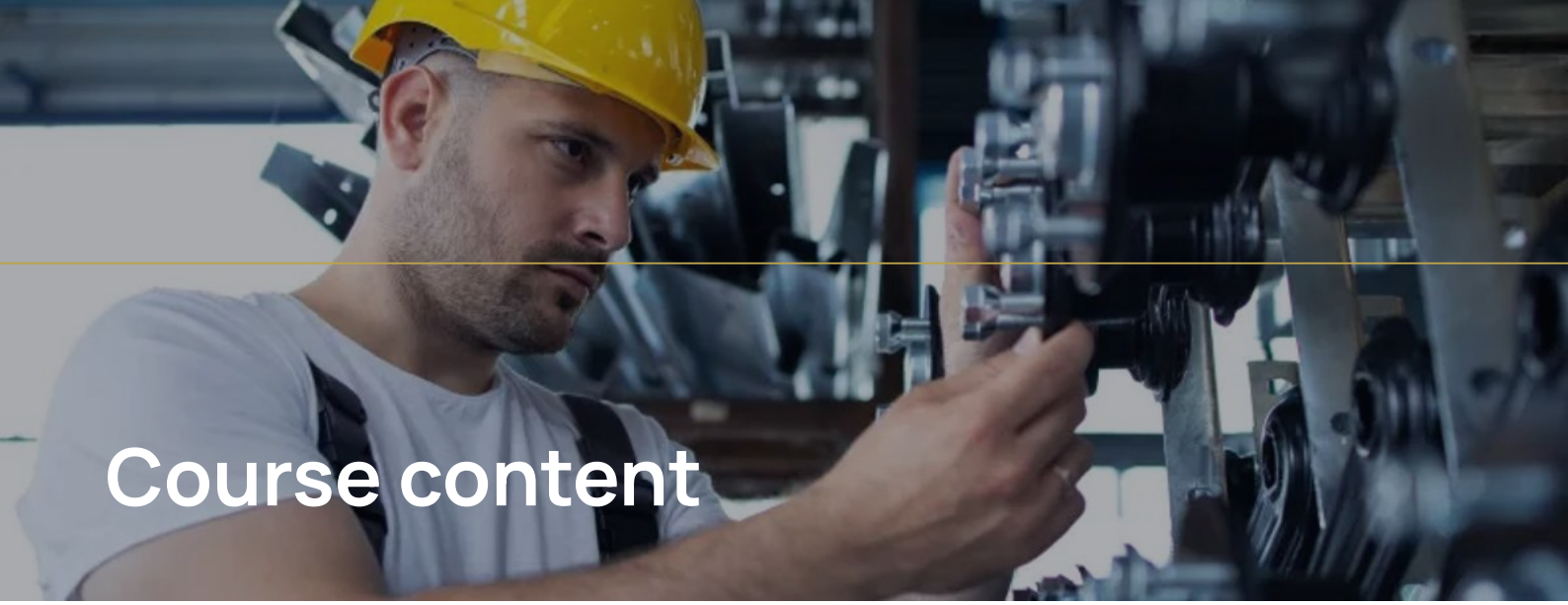
Venue	Start date	End date	Fee (EUR)
Barcelona Confirmed dates	19 Apr 2027	23 Apr 2027	**€5,680.-**
Online Confirmed dates	19 Apr 2027	23 Apr 2027	**€1,250.-**
Paris Confirmed dates	26 Apr 2027	30 Apr 2027	**€5,720.-**
Online Confirmed dates	26 Apr 2027	30 Apr 2027	**€1,250.-**
Istanbul Confirmed dates	10 May 2027	14 May 2027	**€5,300.-**
Online Confirmed dates	10 May 2027	14 May 2027	**€1,250.-**
Amsterdam Confirmed dates	24 May 2027	28 May 2027	**€5,080.-**
Online Confirmed dates	24 May 2027	28 May 2027	**€1,250.-**
Rome Confirmed dates	7 Jun 2027	11 Jun 2027	**€4,900.-**



Course content

Dates, venues and fees (continued)

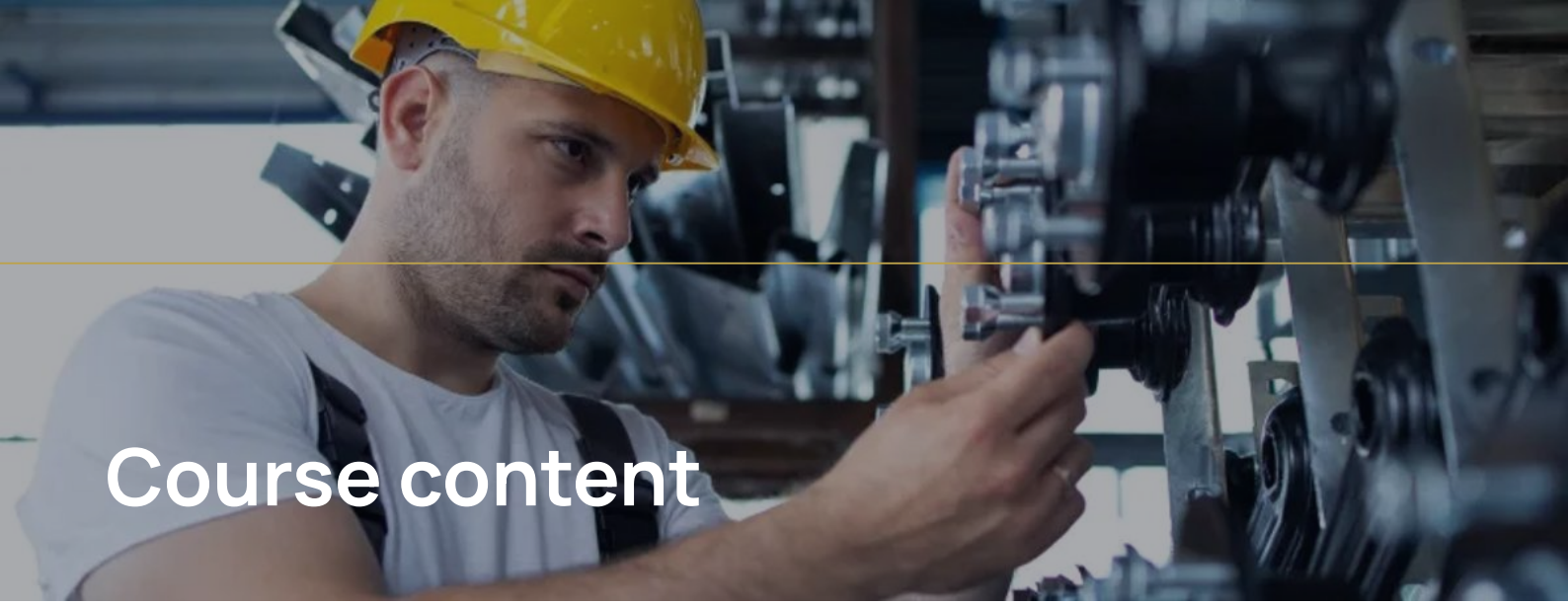
Venue	Start date	End date	Fee (EUR)
Online Confirmed dates	7 Jun 2027	11 Jun 2027	**€1,250.-**
Singapore Confirmed dates	14 Jun 2027	18 Jun 2027	**€5,640.-**
Online Confirmed dates	14 Jun 2027	18 Jun 2027	**€1,250.-**
London Confirmed dates	21 Jun 2027	25 Jun 2027	**€4,900.-**
Online Confirmed dates	21 Jun 2027	25 Jun 2027	**€1,250.-**
Dubai Confirmed dates	12 Jul 2027	16 Jul 2027	**€6,300.-**
Online Confirmed dates	12 Jul 2027	16 Jul 2027	**€1,250.-**
Frankfurt Confirmed dates	26 Jul 2027	30 Jul 2027	**€5,300.-**
Online Confirmed dates	26 Jul 2027	30 Jul 2027	**€1,250.-**



Course content

Dates, venues and fees (continued)

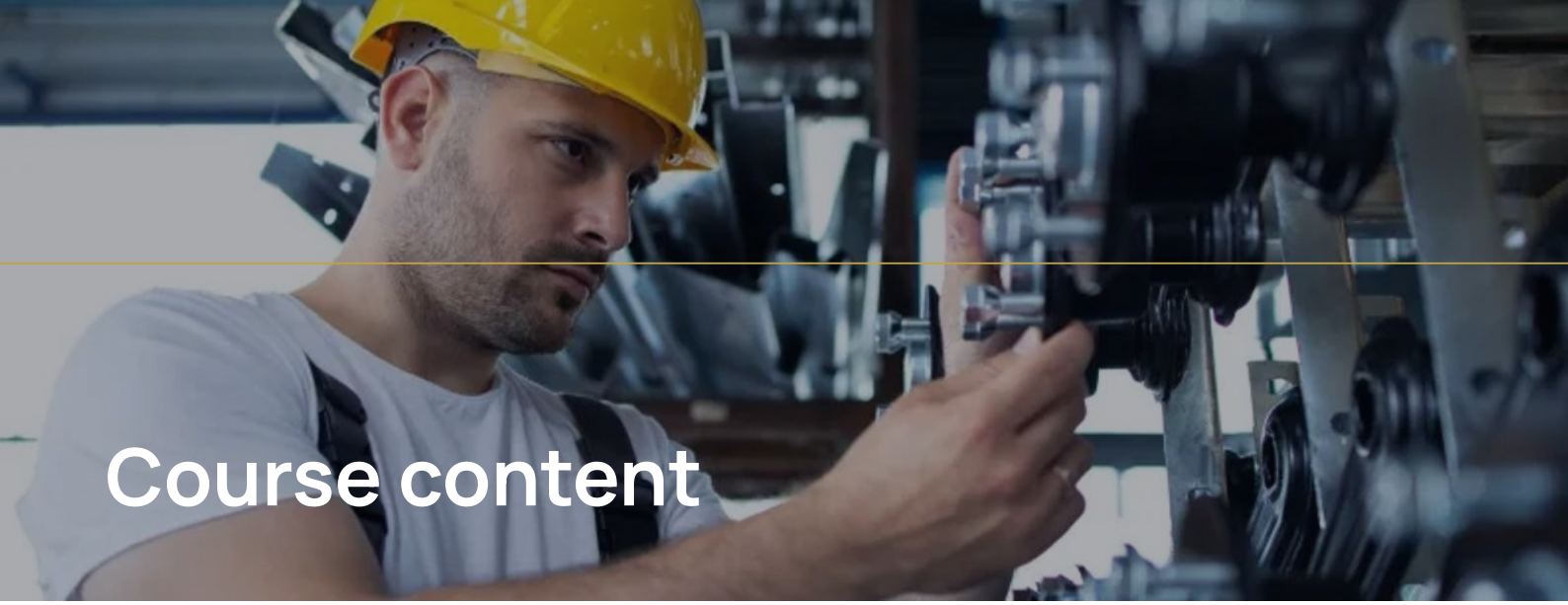
Venue	Start date	End date	Fee (EUR)
Kuala Lumpur Confirmed dates	9 Aug 2027	13 Aug 2027	**€2,900.-**
Online Confirmed dates	9 Aug 2027	13 Aug 2027	**€1,250.-**
Cape Town Confirmed dates	16 Aug 2027	20 Aug 2027	**€3,780.-**
Online Confirmed dates	16 Aug 2027	20 Aug 2027	**€1,250.-**
Paris Confirmed dates	23 Aug 2027	27 Aug 2027	**€5,720.-**
Online Confirmed dates	23 Aug 2027	27 Aug 2027	**€1,250.-**
Istanbul Confirmed dates	13 Sept 2027	17 Sept 2027	**€5,300.-**
Online Confirmed dates	13 Sept 2027	17 Sept 2027	**€1,250.-**
Amsterdam Confirmed dates	20 Sept 2027	24 Sept 2027	**€5,080.-**



Course content

Dates, venues and fees (continued)

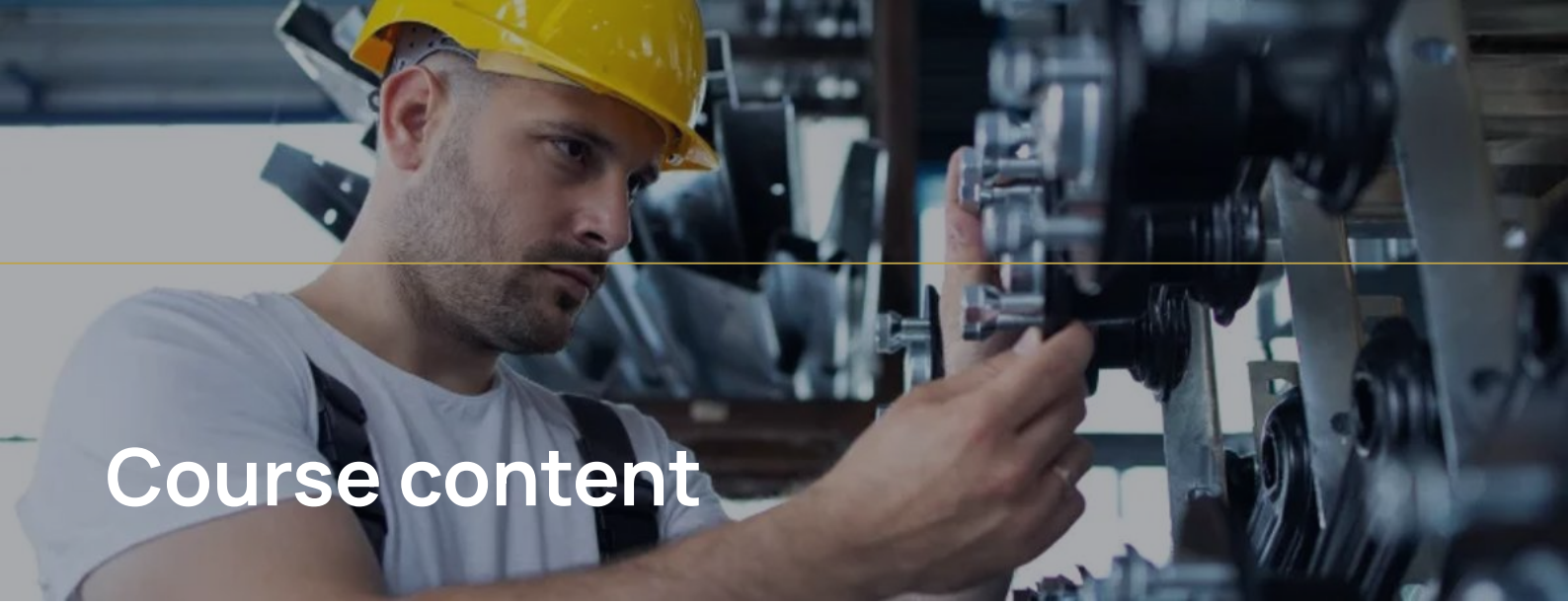
Venue	Start date	End date	Fee (EUR)
Online Confirmed dates	20 Sept 2027	24 Sept 2027	**€1,250.-**
Singapore Confirmed dates	11 Oct 2027	15 Oct 2027	**€5,640.-**
Online Confirmed dates	11 Oct 2027	15 Oct 2027	**€1,250.-**
Cape Town Confirmed dates	18 Oct 2027	22 Oct 2027	**€3,780.-**
Online Confirmed dates	18 Oct 2027	22 Oct 2027	**€1,250.-**
London Confirmed dates	25 Oct 2027	29 Oct 2027	**€4,900.-**
Online Confirmed dates	25 Oct 2027	29 Oct 2027	**€1,250.-**
Dubai Confirmed dates	8 Nov 2027	12 Nov 2027	**€6,300.-**
Online Confirmed dates	8 Nov 2027	12 Nov 2027	**€1,250.-**



Course content

Dates, venues and fees (continued)

Venue	Start date	End date	Fee (EUR)
Frankfurt Confirmed dates	22 Nov 2027	26 Nov 2027	**€5,300.–**
Online Confirmed dates	22 Nov 2027	26 Nov 2027	**€1,250.–**
Kuala Lumpur Confirmed dates	6 Dec 2027	10 Dec 2027	**€2,900.–**
Online Confirmed dates	6 Dec 2027	10 Dec 2027	**€1,250.–**
Paris Confirmed dates	13 Dec 2027	17 Dec 2027	**€5,720.–**
Online Confirmed dates	13 Dec 2027	17 Dec 2027	**€1,250.–**



Course content

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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