Elevora
Global Training

COURSE BROCHURE

HVAC Systems Design and Energy Optimisation

Mechanical & Rotating Equipment

Rising demand 2027

Code	Duration	Formats	Language	Certificate
ME-111	5 or 10 days	Classroom, live online, in-house, blended	English or Arabic	Certificate of completion

A practical mechanical and rotating equipment course covering HVAC fundamentals and psychrometrics, load calculation and system design and chillers, AHUs and controls. Run as a 5-day core or 10-day extended programme, in 16 cities, live online or in-house, and fully customisable for your team.

About this course

HVAC Systems Design and Energy Optimisation gives delegates a structured, practical understanding of HVAC fundamentals and psychrometrics and load calculation and system design, then builds the skills to apply chillers, AHUs and controls, energy optimisation and maintenance and commissioning in real work. Sessions are led by practitioners with at least 15 years in the field.

What you will learn

- HVAC fundamentals and psychrometrics
- Load calculation and system design
- Chillers, AHUs and controls
- Energy optimisation
- Maintenance and commissioning

Who should attend

Mechanical engineers, maintenance supervisors, technicians, inspectors and reliability staff.

5-day course outline

Day 1	**HVAC fundamentals and psychrometrics**	Concepts, standards and terminology, with a diagnostic exercise to baseline the group.
Day 2	**Load calculation and system design**	Methods and tools explained step by step, with worked examples from real operations.
Day 3	**Chillers, AHUs and controls**	Hands-on practice in small groups using realistic data, cases and templates.
Day 4	**Energy optimisation**	Case studies of successes and failures, and how to apply the lessons in your organisation.
Day 5	**Maintenance and commissioning**	Integration exercise, final knowledge check and a personal action plan.

10-day extended programme

Includes the full 5-day outline, plus a second week of applied work:

Day 6	**Applied workshop: HVAC fundamentals and psychrometrics** — Deeper practice with your own data or site examples.
Day 7	**Applied workshop: Load calculation and system design and chillers, AHUs and controls** — Group exercises that combine methods from week one.
Day 8	**Field case study: Energy optimisation** — A detailed industry case worked through from start to finish.
Day 9	**Advanced practice: Maintenance and commissioning** — Tools, templates and checklists to take back to work.
Day 10	**Assessed project and presentation** — Each delegate presents an improvement plan and completes the final assessment.

Upcoming classroom dates

More dates, cities and live online sessions on request.

Dates	City	Length	Fee per delegate
2 Nov 2026 to 13 Nov 2026	Kuala Lumpur	10 days	**$4,450**
7 Dec 2026 to 11 Dec 2026	London	5 days	**$3,450**
4 Jan 2027 to 8 Jan 2027	Dubai	5 days	**$2,450**
8 Feb 2027 to 12 Feb 2027	Amsterdam	5 days	**$3,450**
15 Mar 2027 to 26 Mar 2027	Barcelona	10 days	**$6,250**

Fees per delegate (2026 to 2027)

Format	5 days	10 days
Classroom: Dubai, Istanbul, Cairo, Kuala Lumpur	**$2,450**	**$4,450**
Classroom: London, Europe, Singapore	**$3,450**	**$6,250**
Live online	**$1,450**	**$2,650**
In-house, group of up to 15	**From $12,900**	**From $23,500**

Classroom fees include tuition, materials, lunch and refreshments, and a certificate. 10% group saving for 3 delegates, 15% for 5 or more.

Tailored to your team

Change the level, language, length (1 to 20 days) and format, add topics from other courses or entirely new topics, and include your own case studies, site visits or exam preparation. Build it online for an instant indicative fee.

Register or request an in-house proposal

Head office
Sharjah Publishing City, Sharjah, United Arab Emirates

Email
info@elevoratrainings.com
training@elevoratrainings.com

WhatsApp
+971 56 692 2928

Website
elevoratrainings.com