



Mass & Energy Balance

Process & Chemical Engineering

QGT-PRC-109 | Foundation | 5 or 10 days | Online, classroom, in-house

Course overview

Mass & Energy Balance is an introduction that builds a solid working knowledge in Mass & Energy Balance. It covers the principles, the requirements of API, AIChE/CCPS guidelines and licensor practice, and the practical methods used on site, with case studies from operations in the Gulf, Africa and worldwide. Available online, in the classroom in 60 cities, or in-house.

What participants will be able to do

- Explain the principles, terminology and scope of Mass & Energy Balance
- Apply the relevant requirements of API, AIChE/CCPS guidelines and licensor practice
- Use practical tools, checklists and calculations with confidence
- Recognise common problems, risks and root causes and choose the right corrective action
- Prepare an improvement plan for their own site or organisation

Who should attend

Designed for process engineers, chemical engineers, operators and laboratory staff, new joiners and anyone who needs a solid grounding in the subject.

Course outline (5 days)

Day 1: Principles and terminology

Scope, key definitions and how Mass & Energy Balance fits into daily operations

Day 2: Codes, standards and requirements

What API, AIChE/CCPS guidelines and licensor practice require, and how to read them

Day 3: Methods, tools and calculations

Step-by-step methods, checklists and worked examples

Day 4: Operation, inspection and common problems

Typical failures, warning signs and what to do about them

Day 5: Case studies, workshop and assessment

Group exercise on real cases and a final knowledge check

What the 10-day edition adds

Day 6: Applied project, part 1 – Apply the week-one methods to a case from your organisation

Day 7: Data and digital tools – Software, spreadsheets and digital tools used in practice

Day 8: Lessons from incidents and audits – What investigations and audit findings teach

Day 9: Applied project, part 2 – Complete, test and refine your solution

Day 10: Presentations and final assessment – Present to the group and complete the final assessment

Fees (USD per participant)

Duration	Live online	Classroom	In-house
5 days	\$3,000	\$5,500	On quote
10 days	\$5,500	\$9,900	On quote

Fees include course material and certificate of completion; classroom fees include refreshments and lunch. In-house training is priced per group.

Dates and cities 2027–2030

Dates	City	Format	Duration	Fee
17–21 Jan 2027	Muscat	Classroom	5 days	\$5,500
8–19 Feb 2027	Sharjah	Classroom	10 days	\$9,900
22–26 Feb 2027	Dubai	Classroom	5 days	\$5,500
11–22 Jul 2027	Amman	Classroom	10 days	\$9,900
1–5 Nov 2027	Online (live)	Online (live)	5 days	\$3,000
20–24 Feb 2028	Doha	Classroom	5 days	\$5,500
15–26 May 2028	Bangkok	Classroom	10 days	\$9,900
28 May – 1 Jun 2028	Erbil	Classroom	5 days	\$5,500
10–21 Jul 2028	Stockholm	Classroom	10 days	\$9,900
23–27 Oct 2028	Online (live)	Online (live)	5 days	\$3,000
8–12 Jan 2029	Budapest	Classroom	5 days	\$5,500
29 Apr – 10 May 2029	Jeddah	Classroom	10 days	\$9,900
11–15 Jun 2029	Edinburgh	Classroom	5 days	\$5,500
20–31 Aug 2029	Madrid	Classroom	10 days	\$9,900
19–23 Nov 2029	Online (live)	Online (live)	5 days	\$3,000
4–8 Feb 2030	Cape Town	Classroom	5 days	\$5,500
23 Jun – 4 Jul 2030	Amman	Classroom	10 days	\$9,900
1–5 Jul 2030	Lagos	Classroom	5 days	\$5,500
14–25 Jul 2030	Jeddah	Classroom	10 days	\$9,900
12–16 Aug 2030	Online (live)	Online (live)	5 days	\$3,000

How to register

Register online or scan the code

<https://qimmatrainig.com/courses/mass-and-energy-balance/>

WhatsApp: +971 50 697 0908

Email: training@qimmatrainig.com

