Garnet
Garnet Global Training Center

GGT-CH-109

Chemical & Process Engineering

Process Design & Equipment Sizing

تصميم العمليات وتحديد مقاسات المعدات

Duration	Language	Formats	Hours	Level
5 or 10 days	**English or Arabic**	**Classroom, online, in-house**	**35 / 70**	**Intermediate (practitioner)**

Overview

Process Design & Equipment Sizing focuses on how the work is actually done: the methods, checks and decisions practitioners use every day, illustrated with real cases from the region. Process design, control and optimisation for chemical, petrochemical and fertiliser plants. You can join a public session in one of 20 cities or live online, in English or Arabic, or bring the course in-house with examples from your own operations.

What you will be able to do

- Apply the methods and standards of Process Design & Equipment Sizing to real tasks.
- Share good practice with your team.
- Use the right tools, checks and calculations step by step.
- Diagnose common problems and identify root causes.
- Interpret data and results correctly and act on them.

Who should attend

Process and chemical engineers, plant operators and technical service teams. Practitioners with one to five years of experience benefit most.

Key topics

- Mass and energy balances
- Unit operations
- Process control
- Simulation and optimisation
- Catalysts and reactions
- Troubleshooting

Formats and fees

5-day classroom	**USD 4,750**
5-day online	**USD 2,950**
10-day classroom	**USD 8,950**
10-day online	**USD 5,450**
In-house	**Quotation per group**

Fees per participant, excluding VAT.

Register or ask

WhatsApp: +971 56 674 7382

Email: info@garnettrainings.com

Training: training@garnettrainings.com

Web: garnettrainings.com

Sharjah Publishing City Free Zone, Sharjah, UAE

Certificate

Participants who attend at least 90% of sessions and complete the final assessment receive a certificate of completion stating 35 contact hours (5-day) or 70 contact hours (10-day).

5-day outline

Day 1 Process Design & Equipment Sizing: principles and standards

- Troubleshooting
- Hands-on workshop on a workplace challenge

Day 2 Methods and tools in practice

- Mass and energy balances
- Unit operations

Day 3 Diagnosis and problem solving

- Process control
- Common mistakes and how to avoid them

Day 4 Quality, safety and documentation

- Simulation and optimisation
- Regional and international case studies

Day 5 Workshop, assessment and action plan

- Catalysts and reactions
- Checklists and templates to take away

10-day outline

Day 1 Process Design & Equipment Sizing: principles and standards

- Troubleshooting
- Hands-on workshop on a workplace challenge

Day 2 Methods and tools in practice

- Mass and energy balances
- Unit operations

Day 3 Diagnosis and problem solving

- Process control
- Common mistakes and how to avoid them

Day 4 Quality, safety and documentation

- Simulation and optimisation
- Regional and international case studies

Day 5 Workshop, assessment and action plan

- Catalysts and reactions
- Checklists and templates to take away

Day 6 Advanced techniques and specialist practice

- Complex cases in depth
- Group discussion and peer review

Day 7 Digital tools, data and automation

- Analysis tools and software
- Using AI in this field

Day 8 Benchmarking against international practice

- Global performance benchmarks
- Measurement and reporting

Day 9 Capstone project

- Analyse a real challenge from your organisation
- Build the solution and implementation plan

Day 10 Presentations, final assessment and certificates

- Project presentations and review
- Final exam and certificate award

Schedule 2027–2030

Dates	Format	City	Language	Fee (USD)
18–22 Jan 2027	5-day online	Live online	English	2,950
21 Feb – 4 Mar 2027	10-day classroom	Jeddah	English	8,950
16–20 Aug 2027	5-day classroom	Barcelona	English	4,750
20–24 Sep 2027	5-day classroom	London	English	4,750
21–25 May 2028	5-day classroom	Kuwait City	English	4,750
11–22 Jun 2028	10-day classroom	Cairo	English	8,950
7–18 Aug 2028	10-day online	Live online	Arabic	5,450
16–20 Oct 2028	5-day classroom	Amsterdam	English	4,750
2–6 Apr 2029	5-day classroom	Singapore	English	4,750

Dates	Format	City	Language	Fee (USD)
8–19 Jul 2029	10-day classroom	Muscat	Arabic	8,950
8–12 Oct 2029	5-day classroom	Dubai	Arabic	4,750
5–9 Nov 2029	5-day online	Live online	English	2,950
11–15 Mar 2030	5-day classroom	Dubai	Arabic	4,750
20–31 May 2030	10-day online	Live online	English	5,450
9–13 Jun 2030	5-day classroom	Kuwait City	Arabic	4,750
8–19 Jul 2030	10-day classroom	Abu Dhabi	Arabic	8,950

Customised and in-house versions of this course are available on request. garnettrainings.com/en/customise/