Garnet
Garnet Global Training Center

GGT-CH-122

Chemical & Process Engineering

Process Control Fundamentals

أساسيات التحكم في العمليات

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

Overview

Process Control Fundamentals is designed for people who are new to the subject, or who need a structured refresher before taking on more responsibility. 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

- Explain the key concepts, terms and standards of Process Control Fundamentals.
- Read and use the documents, forms and data common in this field.
- Know when to escalate and who to involve.
- Communicate confidently with specialists and colleagues.
- Plan the next steps in your own learning.

Who should attend

Process and chemical engineers, plant operators and technical service teams. No prior experience is required; it also suits new hires, graduates and staff moving into this field.

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

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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 Introduction to Process Control Fundamentals
- Unit operations
- Common mistakes and how to avoid them

Day 2 Core concepts and terminology
- Process control
- Simulation and optimisation

Day 3 Basic methods and tools
- Catalysts and reactions
- Regional and international case studies

Day 4 Working safely and correctly
- Troubleshooting
- Checklists and templates to take away

Day 5 Practical exercises and review
- Mass and energy balances
- Group discussion and peer review

10-day outline

Day 1 Introduction to Process Control Fundamentals
- Unit operations
- Common mistakes and how to avoid them

Day 2 Core concepts and terminology
- Process control
- Simulation and optimisation

Day 3 Basic methods and tools
- Catalysts and reactions
- Regional and international case studies

Day 4 Working safely and correctly
- Troubleshooting
- Checklists and templates to take away

Day 5 Practical exercises and review
- Mass and energy balances
- Group discussion and peer review

Day 6 Advanced techniques and specialist practice
- Complex cases in depth
- Measurement and reporting

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
- Hands-on workshop on a workplace challenge

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)
11–15 Jan 2027	5-day classroom	Paris	English	4,750
17–28 May 2027	10-day classroom	Dubai	English	8,950
7–11 Jun 2027	5-day online	Live online	English	2,950
7–11 Nov 2027	5-day classroom	Muscat	Arabic	4,750
17–28 Jan 2028	10-day online	Live online	Arabic	5,450
19–30 Jun 2028	10-day classroom	Kuala Lumpur	English	8,950
17–21 Jul 2028	5-day classroom	Dubai	English	4,750
15–19 Oct 2028	5-day classroom	Riyadh	English	4,750
19–23 Feb 2029	5-day classroom	Amsterdam	English	4,750
4–8 Jun 2029	5-day classroom	Abu Dhabi	English	4,750

Dates	Format	City	Language	Fee (USD)
11–22 Nov 2029	10-day classroom	Cairo	English	8,950
3–7 Dec 2029	5-day online	Live online	English	2,950
17–28 Jun 2030	10-day classroom	Paris	English	8,950
2–13 Sep 2030	10-day online	Live online	English	5,450
21–25 Oct 2030	5-day classroom	Amsterdam	English	4,750
8–12 Dec 2030	5-day classroom	Doha	Arabic	4,750

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