Garnet
Garnet Global Training Center

GGT-CH-110

Chemical & Process Engineering **Rare specialisation**

Pinch Analysis & Energy Integration

تحليل Pinch وتكامل الطاقة

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

Overview

Pinch Analysis & Energy Integration 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 Pinch Analysis & Energy Integration to real tasks.
- Avoid the mistakes that most often cause rework or failure.
- Share good practice with your team.
- Use the right tools, checks and calculations step by step.
- Diagnose common problems and identify root causes.

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 Pinch Analysis & Energy Integration: principles and standards

- Catalysts and reactions
- Measurement and reporting

Day 2 Methods and tools in practice

- Troubleshooting
- Mass and energy balances

Day 3 Diagnosis and problem solving

- Unit operations
- Hands-on workshop on a workplace challenge

Day 4 Quality, safety and documentation

- Process control
- Common mistakes and how to avoid them

Day 5 Workshop, assessment and action plan

- Simulation and optimisation
- Regional and international case studies

10-day outline

Day 1 Pinch Analysis & Energy Integration: principles and standards

- Catalysts and reactions
- Measurement and reporting

Day 2 Methods and tools in practice

- Troubleshooting
- Mass and energy balances

Day 3 Diagnosis and problem solving

- Unit operations
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Day 4 Quality, safety and documentation

- Process control
- Common mistakes and how to avoid them

Day 5 Workshop, assessment and action plan

- Simulation and optimisation
- Regional and international case studies

Day 6 Advanced techniques and specialist practice

- Complex cases in depth
- Checklists and templates to take away

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
- Group discussion and peer review

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)
15–19 Feb 2027	5-day online	Live online	Arabic	2,950
17–28 May 2027	10-day classroom	Amsterdam	English	8,950
18–22 Jul 2027	5-day classroom	Muscat	Arabic	4,750
18–22 Oct 2027	5-day classroom	Dubai	Arabic	4,750
17–28 Jul 2028	10-day classroom	Abu Dhabi	English	8,950
7–18 Aug 2028	10-day online	Live online	English	5,450
8–12 Oct 2028	5-day classroom	Jeddah	Arabic	4,750
12–16 Nov 2028	5-day classroom	Muscat	English	4,750
8–12 Jan 2029	5-day online	Live online	Arabic	2,950

Dates	Format	City	Language	Fee (USD)
20–24 May 2029	5-day classroom	Riyadh	English	4,750
2–6 Jul 2029	5-day classroom	Abu Dhabi	Arabic	4,750
10–21 Dec 2029	10-day classroom	Istanbul	English	8,950
21 Jan – 1 Feb 2030	10-day online	Live online	English	5,450
1–5 Apr 2030	5-day classroom	Amsterdam	English	4,750
19–23 May 2030	5-day classroom	Cairo	Arabic	4,750
17–28 Jun 2030	10-day classroom	Vienna	English	8,950

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