Garnet
Garnet Global Training Center

GGT-MN-127

Mining, Metals & Cement

Pyrometallurgy & Smelting

المعالجة الحرارية للخامات والصهر

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

Overview

Pyrometallurgy & Smelting 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, maintenance and safety programs for mines, smelters and cement plants. It runs as a 5-day or 10-day program in English or Arabic, in classrooms in Dubai, Riyadh, Cairo, London, Istanbul and other cities, or live online, and can be delivered in-house.

What you will be able to do

- Apply the methods and standards of Pyrometallurgy & Smelting to real tasks.
- Diagnose common problems and identify root causes.
- Interpret data and results correctly and act on them.
- Follow safe, compliant and documented work practices.
- Avoid the mistakes that most often cause rework or failure.

Who should attend

Process and maintenance engineers, plant managers and safety leads in heavy industry. Practitioners with one to five years of experience benefit most.

Key topics

- Process flow and mass balance
- Kilns, mills and crushers
- Wear, refractories and reliability
- Energy and fuel efficiency
- Dust, emissions and safety
- Quality control

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 Pyrometallurgy & Smelting: principles and standards
- Kilns, mills and crushers
- Group discussion and peer review

Day 2 Methods and tools in practice
- Wear, refractories and reliability
- Energy and fuel efficiency

Day 3 Diagnosis and problem solving
- Dust, emissions and safety
- Measurement and reporting

Day 4 Quality, safety and documentation
- Quality control
- Hands-on workshop on a workplace challenge

Day 5 Workshop, assessment and action plan
- Process flow and mass balance
- Common mistakes and how to avoid them

10-day outline

Day 1 Pyrometallurgy & Smelting: principles and standards
- Kilns, mills and crushers
- Group discussion and peer review

Day 2 Methods and tools in practice
- Wear, refractories and reliability
- Energy and fuel efficiency

Day 3 Diagnosis and problem solving
- Dust, emissions and safety
- Measurement and reporting

Day 4 Quality, safety and documentation
- Quality control
- Hands-on workshop on a workplace challenge

Day 5 Workshop, assessment and action plan
- Process flow and mass balance
- Common mistakes and how to avoid them

Day 6 Advanced techniques and specialist practice
- Complex cases in depth
- Regional and international case studies

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
- Checklists and templates to take away

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)
1–5 Feb 2027	5-day online	Live online	Arabic	2,950
21 Mar – 1 Apr 2027	10-day classroom	Riyadh	Arabic	8,950
6–10 Sep 2027	5-day classroom	Abu Dhabi	Arabic	4,750
1–5 Nov 2027	5-day classroom	Dubai	English	4,750
9–20 Jan 2028	10-day classroom	Kuwait City	Arabic	8,950
13–17 Mar 2028	5-day classroom	Paris	English	4,750
10–14 Jul 2028	5-day classroom	Dubai	Arabic	4,750
21 Aug – 1 Sep 2028	10-day online	Live online	English	5,450
12–16 Feb 2029	5-day online	Live online	English	2,950

Dates	Format	City	Language	Fee (USD)
9–13 Jul 2029	5-day classroom	Abu Dhabi	Arabic	4,750
17–28 Sep 2029	10-day classroom	Dubai	Arabic	8,950
4–8 Nov 2029	5-day classroom	Riyadh	Arabic	4,750
20–31 Jan 2030	10-day classroom	Riyadh	English	8,950
15–19 Apr 2030	5-day classroom	Paris	English	4,750
20–24 May 2030	5-day classroom	Istanbul	English	4,750
11–22 Nov 2030	10-day online	Live online	Arabic	5,450

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