Garnet
Garnet Global Training Center

GGT-MN-104

Mining, Metals & Cement **Rare specialisation**

Refractory Materials & Maintenance

المواد الحرارية وصيانتها

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

Overview

Participants in Refractory Materials & Maintenance practise the methods, tools and standards they need to perform reliably and solve problems on the job. Process, maintenance and safety programs for mines, smelters and cement 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 Refractory Materials & Maintenance to real tasks.
- 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.
- Follow safe, compliant and documented work practices.

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

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 Refractory Materials & Maintenance: principles and standards

- Wear, refractories and reliability
- Checklists and templates to take away

Day 2 Methods and tools in practice

- Energy and fuel efficiency
- Dust, emissions and safety

Day 3 Diagnosis and problem solving

- Quality control
- Group discussion and peer review

Day 4 Quality, safety and documentation

- Process flow and mass balance
- Measurement and reporting

Day 5 Workshop, assessment and action plan

- Kilns, mills and crushers
- Hands-on workshop on a workplace challenge

10-day outline

Day 1 Refractory Materials & Maintenance: principles and standards

- Wear, refractories and reliability
- Checklists and templates to take away

Day 2 Methods and tools in practice

- Energy and fuel efficiency
- Dust, emissions and safety

Day 3 Diagnosis and problem solving

- Quality control
- Group discussion and peer review

Day 4 Quality, safety and documentation

- Process flow and mass balance
- Measurement and reporting

Day 5 Workshop, assessment and action plan

- Kilns, mills and crushers
- Hands-on workshop on a workplace challenge

Day 6 Advanced techniques and specialist practice

- Complex cases in depth
- Common mistakes and how to avoid them

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
- Regional and international case studies

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)
10–14 Jan 2027	5-day classroom	Kuwait City	English	4,750
15–19 Mar 2027	5-day online	Live online	Arabic	2,950
2–6 Aug 2027	5-day classroom	Paris	English	4,750
13–24 Dec 2027	10-day classroom	Vienna	English	8,950
14–25 Feb 2028	10-day classroom	Dubai	Arabic	8,950
9–13 Apr 2028	5-day classroom	Doha	Arabic	4,750
4–15 Sep 2028	10-day online	Live online	English	5,450
12–16 Nov 2028	5-day classroom	Muscat	English	4,750
19–30 Mar 2029	10-day classroom	Dubai	English	8,950

Dates	Format	City	Language	Fee (USD)
9–13 Apr 2029	5-day online	Live online	English	2,950
4–8 Jun 2029	5-day classroom	Amsterdam	English	4,750
13–17 Aug 2029	5-day classroom	Abu Dhabi	English	4,750
14–25 Jan 2030	10-day online	Live online	English	5,450
3–14 Mar 2030	10-day classroom	Kuwait City	Arabic	8,950
5–9 Aug 2030	5-day classroom	London	English	4,750
15–19 Sep 2030	5-day classroom	Doha	Arabic	4,750

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