Garnet
Garnet Global Training Center

GGT-MN-112

Mining, Metals & Cement **Rare specialisation** **New from 2029**

Critical Minerals & Battery Metals

المعادن الحرجة ومعادن البطاريات

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

Overview

Critical Minerals & Battery Metals turns established good practice into step-by-step methods that participants rehearse in exercises and then apply at work. Process, maintenance and safety programs for mines, smelters and cement plants. Choose 5 or 10 days, classroom or live online, English or Arabic; organisations can also run it in-house and adapt the examples to their own work.

What you will be able to do

- Apply the methods and standards of Critical Minerals & Battery Metals 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

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 Critical Minerals & Battery Metals: principles and standards

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

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
- Common mistakes and how to avoid them

Day 4 Quality, safety and documentation

- Quality control
- Regional and international case studies

Day 5 Workshop, assessment and action plan

- Process flow and mass balance
- Checklists and templates to take away

10-day outline

Day 1 Critical Minerals & Battery Metals: principles and standards

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

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
- Common mistakes and how to avoid them

Day 4 Quality, safety and documentation

- Quality control
- Regional and international case studies

Day 5 Workshop, assessment and action plan

- Process flow and mass balance
- 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)
12–16 Mar 2029	5-day online	Live online	Arabic	2,950
14–18 May 2029	5-day classroom	Kuala Lumpur	English	4,750
14–25 Oct 2029	10-day classroom	Jeddah	English	8,950
10–14 Dec 2029	5-day classroom	Barcelona	English	4,750
10–14 Mar 2030	5-day classroom	Cairo	Arabic	4,750
15–26 Jul 2030	10-day online	Live online	English	5,450
19–30 Aug 2030	10-day classroom	Dubai	English	8,950
7–11 Oct 2030	5-day classroom	London	English	4,750

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