Garnet
Garnet Global Training Center

GGT-MN-126

Mining, Metals & Cement **Rare specialisation**

# Hydrometallurgy

استخلاص المعادن بالمحاليل

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

## Overview

Hydrometallurgy 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. 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 Hydrometallurgy 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 Hydrometallurgy: principles and standards**
- Energy and fuel efficiency
- Regional and international case studies

**Day 2 Methods and tools in practice**
- Dust, emissions and safety
- Quality control

**Day 3 Diagnosis and problem solving**
- Process flow and mass balance
- Checklists and templates to take away

**Day 4 Quality, safety and documentation**
- Kilns, mills and crushers
- Group discussion and peer review

**Day 5 Workshop, assessment and action plan**
- Wear, refractories and reliability
- Measurement and reporting

## 10-day outline

**Day 1 Hydrometallurgy: principles and standards**
- Energy and fuel efficiency
- Regional and international case studies

**Day 2 Methods and tools in practice**
- Dust, emissions and safety
- Quality control

**Day 3 Diagnosis and problem solving**
- Process flow and mass balance
- Checklists and templates to take away

**Day 4 Quality, safety and documentation**
- Kilns, mills and crushers
- Group discussion and peer review

**Day 5 Workshop, assessment and action plan**
- Wear, refractories and reliability
- Measurement and reporting

**Day 6 Advanced techniques and specialist practice**
- Complex cases in depth
- Hands-on workshop on a workplace challenge

**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
- Common mistakes and how to avoid them

**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) |
|---|---|---|---|---|
| 11–22 Jan 2027 | 10-day classroom | Barcelona | English | 8,950 |
| 16–20 May 2027 | 5-day classroom | Jeddah | Arabic | 4,750 |
| 18–22 Jul 2027 | 5-day classroom | Kuwait City | English | 4,750 |
| 8–12 Nov 2027 | 5-day online | Live online | Arabic | 2,950 |
| 12–16 Mar 2028 | 5-day classroom | Jeddah | Arabic | 4,750 |
| 8–19 May 2028 | 10-day online | Live online | English | 5,450 |
| 10–21 Sep 2028 | 10-day classroom | Kuwait City | Arabic | 8,950 |
| 9–13 Oct 2028 | 5-day classroom | London | English | 4,750 |
| 14–18 Jan 2029 | 5-day classroom | Amman | English | 4,750 |
| 7–11 May 2029 | 5-day online | Live online | English | 2,950 |

| Dates | Format | City | Language | Fee (USD) |
|---|---|---|---|---|
| 15–26 Oct 2029 | 10-day classroom | Abu Dhabi | English | 8,950 |
| 16–20 Dec 2029 | 5-day classroom | Muscat | Arabic | 4,750 |
| 8–19 Apr 2030 | 10-day online | Live online | Arabic | 5,450 |
| 2–13 Jun 2030 | 10-day classroom | Jeddah | Arabic | 8,950 |
| 1–5 Jul 2030 | 5-day classroom | London | English | 4,750 |
| 17–21 Nov 2030 | 5-day classroom | Manama | Arabic | 4,750 |

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