Garnet
Garnet Global Training Center

GGT-CR-118

Corrosion, Coatings & Materials

Failure Analysis of Metals

تحليل أعطال المعادن

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

Overview

Failure Analysis of Metals turns established good practice into step-by-step methods that participants rehearse in exercises and then apply at work. Understand why materials fail and how to protect assets with the right materials, coatings and cathodic protection. 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 Failure Analysis of Metals 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

Corrosion, materials, integrity and coating engineers, inspectors and maintenance staff. Practitioners with one to five years of experience benefit most.

Key topics

- Corrosion mechanisms
- Materials selection
- Coatings and linings
- Cathodic protection
- Monitoring and inspection
- Failure analysis cases

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 Failure Analysis of Metals: principles and standards

- Failure analysis cases
- Common mistakes and how to avoid them

Day 2 Methods and tools in practice

- Corrosion mechanisms
- Materials selection

Day 3 Diagnosis and problem solving

- Coatings and linings
- Regional and international case studies

Day 4 Quality, safety and documentation

- Cathodic protection
- Checklists and templates to take away

Day 5 Workshop, assessment and action plan

- Monitoring and inspection
- Group discussion and peer review

10-day outline

Day 1 Failure Analysis of Metals: principles and standards

- Failure analysis cases
- Common mistakes and how to avoid them

Day 2 Methods and tools in practice

- Corrosion mechanisms
- Materials selection

Day 3 Diagnosis and problem solving

- Coatings and linings
- Regional and international case studies

Day 4 Quality, safety and documentation

- Cathodic protection
- Checklists and templates to take away

Day 5 Workshop, assessment and action plan

- Monitoring and inspection
- Group discussion and peer review

Day 6 Advanced techniques and specialist practice

- Complex cases in depth
- Measurement and reporting

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
- Hands-on workshop on a workplace challenge

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)
17–21 Jan 2027	5-day classroom	Kuwait City	English	4,750
14–25 Jun 2027	10-day classroom	Paris	English	8,950
12–16 Jul 2027	5-day classroom	Istanbul	English	4,750
1–5 Nov 2027	5-day online	Live online	Arabic	2,950
12–23 Mar 2028	10-day classroom	Doha	Arabic	8,950
2–6 Jul 2028	5-day classroom	Jeddah	Arabic	4,750
14–18 Aug 2028	5-day classroom	Paris	English	4,750
9–20 Oct 2028	10-day online	Live online	English	5,450
21–25 May 2029	5-day online	Live online	Arabic	2,950

Dates	Format	City	Language	Fee (USD)
9–13 Jul 2029	5-day classroom	Geneva	English	4,750
14–18 Oct 2029	5-day classroom	Manama	English	4,750
10–21 Dec 2029	10-day classroom	Dubai	English	8,950
7–18 Jan 2030	10-day online	Live online	Arabic	5,450
15–19 Apr 2030	5-day classroom	Casablanca	Arabic	4,750
5–16 Aug 2030	10-day classroom	Istanbul	English	8,950
21–25 Oct 2030	5-day classroom	Abu Dhabi	English	4,750

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