Garnet
Garnet Global Training Center

GGT-EI-102

Electrical, Instrumentation & Control

Electrical Substation Operation & Maintenance

تشغيل وصيانة المحطات الكهربائية الفرعية

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

Overview

Participants in Electrical Substation Operation & Maintenance practise the methods, tools and standards they need to perform reliably and solve problems on the job. Power, protection and automation skills for plants, utilities and smart infrastructure. 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 Electrical Substation Operation & Maintenance 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

Electrical, instrumentation and control engineers, technicians and maintenance leads. Practitioners with one to five years of experience benefit most.

Key topics

- Power system fundamentals and studies
- Protection, earthing and safety
- Control system architecture
- Field devices and loop checking
- IEC and IEEE standards
- Troubleshooting with real fault records

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 Electrical Substation Operation & Maintenance: principles and standards

- Troubleshooting with real fault records
- Common mistakes and how to avoid them

Day 2 Methods and tools in practice

- Power system fundamentals and studies
- Protection, earthing and safety

Day 3 Diagnosis and problem solving

- Control system architecture
- Regional and international case studies

Day 4 Quality, safety and documentation

- Field devices and loop checking
- Checklists and templates to take away

Day 5 Workshop, assessment and action plan

- IEC and IEEE standards
- Group discussion and peer review

10-day outline

Day 1 Electrical Substation Operation & Maintenance: principles and standards

- Troubleshooting with real fault records
- Common mistakes and how to avoid them

Day 2 Methods and tools in practice

- Power system fundamentals and studies
- Protection, earthing and safety

Day 3 Diagnosis and problem solving

- Control system architecture
- Regional and international case studies

Day 4 Quality, safety and documentation

- Field devices and loop checking
- Checklists and templates to take away

Day 5 Workshop, assessment and action plan

- IEC and IEEE standards
- 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)
21–25 Mar 2027	5-day classroom	Riyadh	English	4,750
12–16 Apr 2027	5-day online	Live online	Arabic	2,950
9–13 May 2027	5-day classroom	Manama	Arabic	4,750
5–16 Sep 2027	10-day classroom	Muscat	Arabic	8,950
14–25 Feb 2028	10-day online	Live online	English	5,450
5–9 Mar 2028	5-day classroom	Manama	English	4,750
21 May – 1 Jun 2028	10-day classroom	Doha	English	8,950
7–11 Aug 2028	5-day classroom	Kuala Lumpur	English	4,750
12–16 Feb 2029	5-day classroom	Dubai	English	4,750

Dates	Format	City	Language	Fee (USD)
14–18 May 2029	5-day online	Live online	Arabic	2,950
4–15 Jun 2029	10-day classroom	Paris	English	8,950
11–15 Nov 2029	5-day classroom	Cairo	Arabic	4,750
1–5 Apr 2030	5-day classroom	Singapore	English	4,750
5–16 Aug 2030	10-day online	Live online	Arabic	5,450
2–6 Sep 2030	5-day classroom	Paris	English	4,750
14–25 Oct 2030	10-day classroom	Abu Dhabi	English	8,950

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