Garnet
Garnet Global Training Center

GGT-EI-135

Electrical, Instrumentation & Control **Rare specialisation**

IEC 61850 Substation Automation

أتمتة المحطات الفرعية وفق IEC 61850

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

Overview

Participants in IEC 61850 Substation Automation 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. 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 IEC 61850 Substation Automation to real tasks.
- Avoid the mistakes that most often cause rework or failure.
- Share good practice with your team.
- Use the right tools, checks and calculations step by step.
- Diagnose common problems and identify root causes.

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

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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 IEC 61850 Substation Automation: principles and standards

- Protection, earthing and safety
- Group discussion and peer review

Day 2 Methods and tools in practice

- Control system architecture
- Field devices and loop checking

Day 3 Diagnosis and problem solving

- IEC and IEEE standards
- Measurement and reporting

Day 4 Quality, safety and documentation

- Troubleshooting with real fault records
- Hands-on workshop on a workplace challenge

Day 5 Workshop, assessment and action plan

- Power system fundamentals and studies
- Common mistakes and how to avoid them

10-day outline

Day 1 IEC 61850 Substation Automation: principles and standards

- Protection, earthing and safety
- Group discussion and peer review

Day 2 Methods and tools in practice

- Control system architecture
- Field devices and loop checking

Day 3 Diagnosis and problem solving

- IEC and IEEE standards
- Measurement and reporting

Day 4 Quality, safety and documentation

- Troubleshooting with real fault records
- Hands-on workshop on a workplace challenge

Day 5 Workshop, assessment and action plan

- Power system fundamentals and studies
- Common mistakes and how to avoid them

Day 6 Advanced techniques and specialist practice

- Complex cases in depth
- Regional and international case studies

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
- Checklists and templates to take away

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)
8–19 Feb 2027	10-day classroom	Geneva	English	8,950
1–5 Mar 2027	5-day classroom	Kuala Lumpur	English	4,750
4–8 Apr 2027	5-day classroom	Jeddah	English	4,750
15–19 Nov 2027	5-day online	Live online	English	2,950
21–25 May 2028	5-day classroom	Doha	English	4,750
21 Aug – 1 Sep 2028	10-day online	Live online	English	5,450
10–21 Sep 2028	10-day classroom	Amman	English	8,950
15–19 Oct 2028	5-day classroom	Jeddah	Arabic	4,750
18–22 Feb 2029	5-day classroom	Kuwait City	English	4,750

Dates	Format	City	Language	Fee (USD)
2–6 Apr 2029	5-day online	Live online	English	2,950
17–21 Jun 2029	5-day classroom	Cairo	Arabic	4,750
6–17 Aug 2029	10-day classroom	Barcelona	English	8,950
1–12 Apr 2030	10-day classroom	Dubai	Arabic	8,950
10–14 Jun 2030	5-day classroom	Kuala Lumpur	English	4,750
15–19 Jul 2030	5-day classroom	Paris	English	4,750
16–27 Sep 2030	10-day online	Live online	Arabic	5,450

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