



Smart Grids & Digital Substations

Electrical Engineering

QGT-ELE-120 | Foundation | 5 or 10 days | Online, classroom, in-house

Course overview

Smart Grids & Digital Substations is an introduction that builds a solid working knowledge in Smart Grids & Digital Substations. It covers the principles, the requirements of IEC, IEEE and NFPA 70/70E, and the practical methods used on site, with case studies from operations in the Gulf, Africa and worldwide. Available online, in the classroom in 60 cities, or in-house.

What participants will be able to do

- Explain the principles, terminology and scope of Smart Grids & Digital Substations
- Apply the relevant requirements of IEC, IEEE and NFPA 70/70E
- Use practical tools, checklists and calculations with confidence
- Recognise common problems, risks and root causes and choose the right corrective action
- Prepare an improvement plan for their own site or organisation

Who should attend

Designed for electrical engineers, technicians, supervisors and authorised persons, new joiners and anyone who needs a solid grounding in the subject.

Course outline (5 days)

Day 1: Principles and terminology

Scope, key definitions and how Smart Grids & Digital Substations fits into daily operations

Day 2: Codes, standards and requirements

What IEC, IEEE and NFPA 70/70E require, and how to read them

Day 3: Methods, tools and calculations

Step-by-step methods, checklists and worked examples

Day 4: Operation, inspection and common problems

Typical failures, warning signs and what to do about them

Day 5: Case studies, workshop and assessment

Group exercise on real cases and a final knowledge check

What the 10-day edition adds

Day 6: Applied project, part 1 – Apply the week-one methods to a case from your organisation

Day 7: Data and digital tools – Software, spreadsheets and digital tools used in practice

Day 8: Lessons from incidents and audits – What investigations and audit findings teach

Day 9: Applied project, part 2 – Complete, test and refine your solution

Day 10: Presentations and final assessment – Present to the group and complete the final assessment

Fees (USD per participant)

Duration	Live online	Classroom	In-house
5 days	\$3,000	\$5,500	On quote
10 days	\$5,500	\$9,900	On quote

Fees include course material and certificate of completion; classroom fees include refreshments and lunch. In-house training is priced per group.

Dates and cities 2027–2030

Dates	City	Format	Duration	Fee
12–16 Apr 2027	Stockholm	Classroom	5 days	\$5,500
13–24 Jun 2027	Jeddah	Classroom	10 days	\$9,900
15–19 Aug 2027	Alexandria	Classroom	5 days	\$5,500
31 Oct – 11 Nov 2027	Algiers	Classroom	10 days	\$9,900
6–10 Dec 2027	Online (live)	Online (live)	5 days	\$3,000
27–31 Mar 2028	Vienna	Classroom	5 days	\$5,500
8–19 May 2028	Bangkok	Classroom	10 days	\$9,900
21–25 May 2028	Cairo	Classroom	5 days	\$5,500
25 Jun – 6 Jul 2028	Doha	Classroom	10 days	\$9,900
21–25 Aug 2028	Online (live)	Online (live)	5 days	\$3,000
19–23 Feb 2029	Madrid	Classroom	5 days	\$5,500
21 May – 1 Jun 2029	Sharjah	Classroom	10 days	\$9,900
23–27 Jul 2029	Barcelona	Classroom	5 days	\$5,500
1–12 Oct 2029	Toronto	Classroom	10 days	\$9,900
29 Oct – 2 Nov 2029	Online (live)	Online (live)	5 days	\$3,000
17–21 Feb 2030	Al Khobar	Classroom	5 days	\$5,500
20–31 May 2030	Houston	Classroom	10 days	\$9,900
29 Jul – 2 Aug 2030	Prague	Classroom	5 days	\$5,500
13–24 Oct 2030	Jeddah	Classroom	10 days	\$9,900
21–25 Oct 2030	Online (live)	Online (live)	5 days	\$3,000

How to register

Register online or scan the code

<https://qimmatrainig.com/courses/smart-grids-and-digital-substations/>

WhatsApp: +971 50 697 0908

Email: training@qimmatrainig.com

