Garnet
Garnet Global Training Center

GGT-EI-122

Electrical, Instrumentation & Control

Electrical Load Calculation & Sizing

حساب الأحمال الكهربائية وتحديد المقاسات

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

Overview

Electrical Load Calculation & Sizing focuses on how the work is actually done: the methods, checks and decisions practitioners use every day, illustrated with real cases from the region. 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 Load Calculation & Sizing to real tasks.
- 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.
- Share good practice with your team.

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 Load Calculation & Sizing: principles and standards

- Control system architecture
- Checklists and templates to take away

Day 2 Methods and tools in practice

- Field devices and loop checking
- IEC and IEEE standards

Day 3 Diagnosis and problem solving

- Troubleshooting with real fault records
- Group discussion and peer review

Day 4 Quality, safety and documentation

- Power system fundamentals and studies
- Measurement and reporting

Day 5 Workshop, assessment and action plan

- Protection, earthing and safety
- Hands-on workshop on a workplace challenge

10-day outline

Day 1 Electrical Load Calculation & Sizing: principles and standards

- Control system architecture
- Checklists and templates to take away

Day 2 Methods and tools in practice

- Field devices and loop checking
- IEC and IEEE standards

Day 3 Diagnosis and problem solving

- Troubleshooting with real fault records
- Group discussion and peer review

Day 4 Quality, safety and documentation

- Power system fundamentals and studies
- Measurement and reporting

Day 5 Workshop, assessment and action plan

- Protection, earthing and safety
- Hands-on workshop on a workplace challenge

Day 6 Advanced techniques and specialist practice

- Complex cases in depth
- Common mistakes and how to avoid them

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
- Regional and international case studies

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)
14–25 Jun 2027	10-day classroom	Istanbul	English	8,950
9–13 Aug 2027	5-day classroom	Abu Dhabi	Arabic	4,750
6–10 Sep 2027	5-day online	Live online	Arabic	2,950
19–23 Dec 2027	5-day classroom	Cairo	English	4,750
17–21 Jan 2028	5-day classroom	Dubai	Arabic	4,750
13–24 Mar 2028	10-day online	Live online	Arabic	5,450
3–14 Jul 2028	10-day classroom	Paris	English	8,950
12–16 Nov 2028	5-day classroom	Jeddah	English	4,750
20–24 May 2029	5-day classroom	Doha	Arabic	4,750

Dates	Format	City	Language	Fee (USD)
3–7 Sep 2029	5-day online	Live online	English	2,950
5–16 Nov 2029	10-day classroom	Amsterdam	English	8,950
3–7 Dec 2029	5-day classroom	Barcelona	English	4,750
13–17 Jan 2030	5-day classroom	Kuwait City	Arabic	4,750
10–21 Feb 2030	10-day classroom	Cairo	Arabic	8,950
19–23 May 2030	5-day classroom	Doha	Arabic	4,750
14–25 Oct 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/