Garnet
Garnet Global Training Center

GGT-PG-131

Power Generation & Utilities

Substation Design

تصميم المحطات الفرعية

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

Overview

Substation Design turns established good practice into step-by-step methods that participants rehearse in exercises and then apply at work. Operation and maintenance of power plants, grids and utility services. 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 Substation Design 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

Power plant engineers, operators, utility planners and grid specialists. Practitioners with one to five years of experience benefit most.

Key topics

- Thermodynamics and plant performance
- Boilers, turbines and generators
- Grid operation and dispatch
- Reliability and outage planning
- Emissions and environmental compliance
- Plant case studies

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 Substation Design: principles and standards
- Grid operation and dispatch
- Checklists and templates to take away

Day 2 Methods and tools in practice
- Reliability and outage planning
- Emissions and environmental compliance

Day 3 Diagnosis and problem solving
- Plant case studies
- Group discussion and peer review

Day 4 Quality, safety and documentation
- Thermodynamics and plant performance
- Measurement and reporting

Day 5 Workshop, assessment and action plan
- Boilers, turbines and generators
- Hands-on workshop on a workplace challenge

10-day outline

Day 1 Substation Design: principles and standards
- Grid operation and dispatch
- Checklists and templates to take away

Day 2 Methods and tools in practice
- Reliability and outage planning
- Emissions and environmental compliance

Day 3 Diagnosis and problem solving
- Plant case studies
- Group discussion and peer review

Day 4 Quality, safety and documentation
- Thermodynamics and plant performance
- Measurement and reporting

Day 5 Workshop, assessment and action plan
- Boilers, turbines and generators
- 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)
1–12 Feb 2027	10-day classroom	London	English	8,950
19–23 Apr 2027	5-day online	Live online	English	2,950
2–6 May 2027	5-day classroom	Riyadh	English	4,750
21–25 Jun 2027	5-day classroom	Dubai	English	4,750
3–14 Jan 2028	10-day online	Live online	Arabic	5,450
21 Feb – 3 Mar 2028	10-day classroom	Vienna	English	8,950
21–25 Aug 2028	5-day classroom	Kuala Lumpur	English	4,750
18–22 Dec 2028	5-day classroom	London	English	4,750
19–23 Feb 2029	5-day classroom	Dubai	Arabic	4,750
7–11 May 2029	5-day classroom	Paris	English	4,750

Dates	Format	City	Language	Fee (USD)
10–14 Sep 2029	5-day online	Live online	English	2,950
15–26 Oct 2029	10-day classroom	Vienna	English	8,950
21–25 Apr 2030	5-day classroom	Riyadh	Arabic	4,750
17–28 Jun 2030	10-day classroom	Paris	English	8,950
20–24 Oct 2030	5-day classroom	Manama	English	4,750
16–27 Dec 2030	10-day online	Live online	English	5,450

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