Garnet
Garnet Global Training Center

GGT-PG-113

Power Generation & Utilities

Power System Analysis: Load Flow & Short Circuit

تحليل أنظمة القوى: سريان الأحمال وقصر الدائرة

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

Overview

Participants in Power System Analysis: Load Flow & Short Circuit practise the methods, tools and standards they need to perform reliably and solve problems on the job. Operation and maintenance of power plants, grids and utility services. Choose 5 or 10 days, classroom or live online, English or Arabic; organisations can also run it in-house and adapt the examples to their own work.

What you will be able to do

- Apply the methods and standards of Power System Analysis: Load Flow & Short Circuit 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

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 Power System Analysis: Load Flow & Short Circuit: principles and standards

- Emissions and environmental compliance
- Measurement and reporting

Day 2 Methods and tools in practice

- Plant case studies
- Thermodynamics and plant performance

Day 3 Diagnosis and problem solving

- Boilers, turbines and generators
- Hands-on workshop on a workplace challenge

Day 4 Quality, safety and documentation

- Grid operation and dispatch
- Common mistakes and how to avoid them

Day 5 Workshop, assessment and action plan

- Reliability and outage planning
- Regional and international case studies

10-day outline

Day 1 Power System Analysis: Load Flow & Short Circuit: principles and standards

- Emissions and environmental compliance
- Measurement and reporting

Day 2 Methods and tools in practice

- Plant case studies
- Thermodynamics and plant performance

Day 3 Diagnosis and problem solving

- Boilers, turbines and generators
- Hands-on workshop on a workplace challenge

Day 4 Quality, safety and documentation

- Grid operation and dispatch
- Common mistakes and how to avoid them

Day 5 Workshop, assessment and action plan

- Reliability and outage planning
- Regional and international case studies

Day 6 Advanced techniques and specialist practice

- Complex cases in depth
- Checklists and templates to take away

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
- Group discussion and peer review

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)
7–11 Feb 2027	5-day classroom	Cairo	English	4,750
21–25 Jun 2027	5-day classroom	Paris	English	4,750
13–24 Sep 2027	10-day classroom	Abu Dhabi	English	8,950
11–15 Oct 2027	5-day online	Live online	English	2,950
8–19 May 2028	10-day classroom	Barcelona	English	8,950
13–17 Aug 2028	5-day classroom	Doha	English	4,750
18–29 Sep 2028	10-day online	Live online	English	5,450
2–6 Oct 2028	5-day classroom	Dubai	English	4,750
12–16 Feb 2029	5-day classroom	Singapore	English	4,750

Dates	Format	City	Language	Fee (USD)
9–20 Jul 2029	10-day classroom	Paris	English	8,950
20–24 Aug 2029	5-day online	Live online	Arabic	2,950
3–7 Sep 2029	5-day classroom	Geneva	English	4,750
13–17 May 2030	5-day classroom	London	English	4,750
5–16 Aug 2030	10-day classroom	Abu Dhabi	English	8,950
16–20 Sep 2030	5-day classroom	Paris	English	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/