

**Electrical, Instrumentation & Control**

# Transformers Operation & Testing

تشغيل واختبار المحولات

Duration

**5 or 10 days**

Language

**English or Arabic**

Formats

**Classroom, online, in-house**

Hours

**35 / 70**

## Overview

Transformers Operation & Testing is part of the Electrical, Instrumentation & Control track at Garnet Global Training Center. Power, protection and automation skills for plants, utilities and smart infrastructure. The course is taught in English or Arabic as a 5-day or 10-day program, in classrooms in cities such as Dubai, Riyadh, Cairo, London and Istanbul, or live online, and it can be delivered in-house with examples and exercises built around your own operations.

## What you will be able to do

- Explain the principles, terminology and standards that govern Transformers Operation & Testing.
- Apply proven methods and tools to real situations from your own workplace.
- Analyse performance gaps, risks and root causes, and choose the right response.
- Measure results with practical indicators and report them clearly to management.
- Leave with a personal action plan you can start using the following week.

## Who should attend

Electrical, instrumentation and control engineers, technicians and maintenance leads.

## 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  | <b>USD 4,750</b>           |
| 5-day online     | <b>USD 2,950</b>           |
| 10-day classroom | <b>USD 8,950</b>           |
| 10-day online    | <b>USD 5,450</b>           |
| In-house         | <b>Quotation per group</b> |

Fees per participant, excluding VAT.

### Register or ask

**WhatsApp:** +971 56 674 7382

**Email:** [info@garnettrainings.com](mailto:info@garnettrainings.com)

**Training:** [training@garnettrainings.com](mailto:training@garnettrainings.com)

**Web:** [www.garnettrainings.com](http://www.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 Foundations of Transformers Operation & Testing

- Scope, terminology and governing standards
- Power system fundamentals and studies

### Day 2 Methods and tools

- Protection, earthing and safety
- Control system architecture

### Day 3 Application and case studies

- Field devices and loop checking
- Troubleshooting with real fault records

### Day 4 Performance, risk and compliance

- IEC and IEEE standards
- Measurement and reporting

### Day 5 Workshop, assessment and action plan

- Hands-on workshop on a workplace challenge
- Final assessment and personal action plan

## 10-day outline

### Day 1 Foundations of Transformers Operation & Testing

- Scope, terminology and governing standards
- Power system fundamentals and studies

### Day 2 Methods and tools

- Protection, earthing and safety
- Control system architecture

### Day 3 Application and case studies

- Field devices and loop checking
- Troubleshooting with real fault records

### Day 4 Performance, risk and compliance

- IEC and IEEE standards
- Measurement and reporting

### Day 5 Workshop, assessment and action plan

- Hands-on workshop on a workplace challenge
- Final assessment and personal action plan

### 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
- 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) |
|----------------|------------------|-------------|----------|-----------|
| 15–19 Mar 2027 | 5-day online     | Live online | English  | 2,950     |
| 11–15 Apr 2027 | 5-day classroom  | Doha        | English  | 4,750     |
| 9–20 Aug 2027  | 10-day classroom | Vienna      | English  | 8,950     |
| 6–17 Sep 2027  | 10-day online    | Live online | English  | 5,450     |
| 8–12 Nov 2027  | 5-day classroom  | Dubai       | English  | 4,750     |
| 21–25 Feb 2028 | 5-day online     | Live online | English  | 2,950     |
| 12–16 Mar 2028 | 5-day classroom  | Doha        | Arabic   | 4,750     |
| 1–12 May 2028  | 10-day online    | Live online | Arabic   | 5,450     |
| 10–21 Jul 2028 | 10-day classroom | Barcelona   | English  | 8,950     |

| Dates               | Format           | City         | Language | Fee (USD) |
|---------------------|------------------|--------------|----------|-----------|
| 20–24 Nov 2028      | 5-day classroom  | Kuala Lumpur | English  | 4,750     |
| 1–5 Jan 2029        | 5-day classroom  | Casablanca   | English  | 4,750     |
| 18–29 Mar 2029      | 10-day classroom | Cairo        | English  | 8,950     |
| 7–11 May 2029       | 5-day classroom  | Abu Dhabi    | English  | 4,750     |
| 17–21 Sep 2029      | 5-day online     | Live online  | Arabic   | 2,950     |
| 1–12 Oct 2029       | 10-day online    | Live online  | Arabic   | 5,450     |
| 21 Jan – 1 Feb 2030 | 10-day online    | Live online  | Arabic   | 5,450     |
| 10–14 Feb 2030      | 5-day classroom  | Doha         | Arabic   | 4,750     |
| 17–21 Mar 2030      | 5-day classroom  | Riyadh       | English  | 4,750     |
| 1–5 Apr 2030        | 5-day online     | Live online  | English  | 2,950     |
| 5–16 May 2030       | 10-day classroom | Amman        | English  | 8,950     |

Customised and in-house versions of this course are available on request. [www.garnettrainings.com/en/customise/](http://www.garnettrainings.com/en/customise/)