Garnet
Garnet Global Training Center

GGT-EI-105

Electrical, Instrumentation & Control

# Safety Instrumented Systems (SIS) & SIL

أنظمة السلامة الآلية ومستويات SIL

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

## Overview

Participants in Safety Instrumented Systems (SIS) & SIL practise the methods, tools and standards they need to perform reliably and solve problems on the job. Power, protection and automation skills for plants, utilities and smart infrastructure. 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 Safety Instrumented Systems (SIS) & SIL to real tasks.
- Diagnose common problems and identify root causes.
- 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.

## 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 Safety Instrumented Systems (SIS) & SIL: principles and standards

- Protection, earthing and safety
- Common mistakes and how to avoid them

### Day 2 Methods and tools in practice

- Control system architecture
- Field devices and loop checking

### Day 3 Diagnosis and problem solving

- IEC and IEEE standards
- Regional and international case studies

### Day 4 Quality, safety and documentation

- Troubleshooting with real fault records
- Checklists and templates to take away

### Day 5 Workshop, assessment and action plan

- Power system fundamentals and studies
- Group discussion and peer review

## 10-day outline

### Day 1 Safety Instrumented Systems (SIS) & SIL: principles and standards

- Protection, earthing and safety
- Common mistakes and how to avoid them

### Day 2 Methods and tools in practice

- Control system architecture
- Field devices and loop checking

### Day 3 Diagnosis and problem solving

- IEC and IEEE standards
- Regional and international case studies

### Day 4 Quality, safety and documentation

- Troubleshooting with real fault records
- Checklists and templates to take away

### Day 5 Workshop, assessment and action plan

- Power system fundamentals and studies
- Group discussion and peer review

### Day 6 Advanced techniques and specialist practice

- Complex cases in depth
- Measurement and reporting

### 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
- Hands-on workshop on a workplace challenge

### 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 Mar 2027 | 5-day classroom | Doha | Arabic | 4,750 |
| 16–20 Aug 2027 | 5-day classroom | Kuala Lumpur | English | 4,750 |
| 11–15 Oct 2027 | 5-day online | Live online | Arabic | 2,950 |
| 14–25 Nov 2027 | 10-day classroom | Cairo | English | 8,950 |
| 6–10 Mar 2028 | 5-day classroom | London | English | 4,750 |
| 10–21 Apr 2028 | 10-day online | Live online | Arabic | 5,450 |
| 11–22 Jun 2028 | 10-day classroom | Jeddah | English | 8,950 |
| 6–10 Aug 2028 | 5-day classroom | Manama | English | 4,750 |
| 18–22 Jun 2029 | 5-day classroom | Vienna | English | 4,750 |

| Dates | Format | City | Language | Fee (USD) |
|---|---|---|---|---|
| 6–10 Aug 2029 | 5-day online | Live online | English | 2,950 |
| 3–7 Sep 2029 | 5-day classroom | Dubai | English | 4,750 |
| 14–25 Oct 2029 | 10-day classroom | Doha | English | 8,950 |
| 6–10 Jan 2030 | 5-day classroom | Amman | Arabic | 4,750 |
| 8–19 Apr 2030 | 10-day online | Live online | Arabic | 5,450 |
| 2–6 Sep 2030 | 5-day classroom | Istanbul | English | 4,750 |
| 16–27 Dec 2030 | 10-day classroom | Amsterdam | English | 8,950 |

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