

Integrated Operations: Systems Essentials for Technicians (ISET) (US-ISET)

Type

Instructor-led Learning

Duration and Continuing Education Units (CEU)

10 Days

6.5 CEUs

Target Group

- Operators
- Maintenance Technicians
- Reliability Engineers
- Others

Short Description

This instructor-led course reinforces and applies the foundational systems knowledge developed in Systems Essentials for Technicians Upskill (SET Up). Participants work hands-on with representative automation systems to observe how electrical, mechanical, fluid power, and control components interact within a production environment.

Through guided exercises and structured scenarios, participants practice system observation, technical documentation, basic fault recognition, and clear communication of system status. The course supports the practical application, troubleshooting discipline, and cross-system awareness expected at Siemens MSA Level 1. Participants completing the program are prepared to attempt the Siemens MSA Level 1 Certification Exam.

Objectives

- Apply required safety practices to protect personnel, equipment, and production output.
- Observe and describe the operation of an automation system, including how systems, subsystems, and components interact within production operations.
- Explain the roles and functions of electrical, mechanical, fluid power, and control systems within an integrated manufacturing environment.
- Interpret and apply information from technical documents, data sheets, and other operational resources to support decision making.
- Recognize indicators of abnormal system behavior and identify likely sources appropriate to Level 1 troubleshooting responsibilities.
- Document observed conditions, suspected issues, and actions taken using clear technical communication.
- Communicate observed system conditions and actions clearly with production and maintenance team members.

- Complete the Siemens MSA Level 1 Certification Exam.

Content

- Safety
- Electrical, Mechanical, and Fluid Power Systems
- Digital Logic & PLC Fundamentals
- System Documentation & Communication
- Subsystems Awareness & Troubleshooting Fundamentals
- Production & Maintenance Perspectives
- Certification Exam Preparation

Mandatory Prerequisites

[Orientation for Systems Essentials for Technicians Upskill SET Up: US-SETUP](#) AND [Systems Essentials for Technicians Upskill SET Up: US-R-SETUP](#)

Note

Earning the Siemens MSA1 credential reflects an individual's ability to think in terms of system interactions, recognize and document abnormal conditions, and support production and maintenance processes at a foundational level. This globally recognized Siemens certification provides a verifiable standard for system awareness and troubleshooting discipline, helping organizations build a more aligned, future-ready technical workforce.

Language

English

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