Introduction to Exploring Electricity

FESTO

Career Exploration

The **Exploring Electricity** certification introduces learners to electrical theory, safety, and practical wiring skills. Through an instructor-led, hands-on curriculum using the Exploring Electricity Trainer and digital multimeters, learners build and test circuits using lamps, switches, resistors, and motors. The program progresses from foundational electrical properties to applied circuit design, with integrated projects and an engineering design challenge to simulate real-world applications.

Industry Recognized Certification Topics

- Electrical Safety
- Electrical Properties: Voltage, Current, Resistance
- Multimeter Measurement Techniques
- Series and Parallel Circuit Design
- Circuit Wiring and Switching
- Ohm's Law and Electrical Power Calculations
- Three-Way Switching Systems
- Project-Based Applications (Lighting Systems, Relays, and Alarms)

Units - 16 / Labs - 7

Industry Recognized Certification Competencies

- Electrical Safety and Best Practices
- Measurement and Testing
- Circuit Design and Wiring
- Ohm's Law and Power Calculations
- Electrical Diagrams and Symbol Recognition
- Project-Based Applications and Engineering Design
- Career Awareness and Technical Skills Application