



## Relay Technician Training Program

Online Training

Utility relay technicians are the backbone of a reliable utility. Unfortunately, finding and keeping relay techs is also one of a utility's biggest challenges. How do you quickly and effectively train a new hire so they are a productive member of your team? And, once they are up to speed, how do you retain them?

As one of the industry's top training companies, we have designed a program to overcome these challenges. Our Relay Technician Training Program focuses on the fundamentals and provides progressive training to give your techs a defined career path.

### Training for Reliability and Retention

According to the Wynhurst Group, an executive coaching and consulting firm, employees who participate in a structured onboarding program are 58% more likely to remain with the organization after three years. Our program provides a structured, fundamental curriculum to quickly get your new hires up to speed. Using a systematic approach to training, new hires learn what they need to know before they begin your company-specific training.

As your employees progress through their career path, our program provides advanced training, including simulation, to ensure the highest level of performance. Statistics show 40% of employees leave within the first year because of poor training. Our Relay Tech Training Program is a step toward retaining your employees.

### Our program consists of:

- **Level 1 – The Fundamentals** – training designed to introduce your new hires to the electric utility industry and provide a foundation for your company-specific training. This training is appropriate for new hires with no electrical or relaying experience
- **Level 2 – The Next Step** – training for new hires or technician candidates who may have a good understanding of electrical theory, applications, and related math
- **Level 3 – Advanced** – a generalized application of Levels 1 and 2
- **Level 4 – Simulation** – includes simulation training so your experienced relay techs get hands on training with a variety of scenarios



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[Full Curriculum >](#)

## RELAY TECHNICIAN CURRICULUM

### Level 1 (15 courses)

Basic Electricity Fundamentals
Basics of Power System Operations
Electron Theory
Magnetism and Electromagnetism Explained
Ohm's and Kirchoff's Laws Relating to DC Circuits
Evaluating Series and Parallel DC Circuit Performance
Determine Circuit Outputs from Specified Inputs
Introduction to Alternating Current (AC)
Ohm's and Kirchoff's Laws Involving AC Circuits
Inductance in AC Circuits
Capacitance in AC Circuits
Impedance in AC Circuits
AC Power
Fundamentals of Three-Phase AC
High Voltage AC

### Level 2 (16 courses)

Electric Distribution System Fundamentals
Primary and Secondary Distribution Systems
Distribution System Components and Application
Characteristics of Distribution Switchgear
Load Characteristics and Management
Elements of System Protection
Types of Protective Relays
Monitoring System Conditions
Disturbance Monitoring Equipment
Line Protection
Transformer Protection
Pilot Protection
Bus Protection
Generator Protection
Protection System Misoperation
Protection System Maintenance Programs

### Level 3 (8 courses)

Electrical Faults and Current Ratings
Overcurrent Protection, Fuses, and Breakers
Protective Relays
Generator, Transformer, and Motor Protection
Grounding and Bonding
Electrical Drawings
Industrial Print Reading Overview
Logic Diagrams

### Level 4 (3 courses)

*Level 4 courses are under development. Please contact your account manager for more information.*

#### Electric Utility Print Reading

- Electrical Drawings
- Logic Diagrams
- Simulation



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