



UR

TRNG-URMA

MAINTENANCE

Interactive Learning CD Available
See Page 56



WHAT WILL I LEARN FROM THIS COURSE?

This course is designed to familiarize maintenance staff with the correct procedures for installing, testing, maintaining and troubleshooting the Universal Relay through practical Hands-On Lab exercises. This course is applicable to the following UR Relays: B30, B90, C30, C60, D30, D60, F35, F60, G30, G60, L60, L90, M60, T35 and T60.

WHO SHOULD ATTEND?

This course is designed for maintenance staff responsible for the installation, testing and maintenance of the Universal Relay.

PREREQUISITES

- An understanding of basic electrical circuits
- The UR Applications I Interactive Learning CD would be an asset

TUITION

\$ 1,800 US*

COURSE DURATION

3 Days

CEU CREDITS OFFERED

2.1 Credits

AGENDA

This class includes fully equipped Hands-On Lab exercises.

Day 1

- System overview
- Universal Relay Hardware overview
 - Block diagram
 - Specifications and hardware configuration
 - Trip and Close voltage and current monitoring
 - Mechanical installation and wiring
- Options and ordering
- Keypad operation Lab exercises
- EnerVista UR Setup Software
 - Creating an interface, device and site
- Settings
 - Password Security
 - User Programmable LED Lab
 - AC inputs Current and Voltage
 - Power System
 - Signal Sources
 - Breakers
 - Curves and Flexcurves
 - Digital Inputs and Outputs
 - Commands
 - Actual Values
 - Status and Metering Lab

Day 2

- Introduction to FlexLogic™
 - Gates: AND, NAND, OR, NOR, NOT, XOR, LATCH
 - FlexLogic™ Lab
- Oscillography and Event Log Lab
- Saving/loading settings files

Day 3

- Protection and Control
 - Grouped Elements
 - Sources
- Hands-On testing of the following Protection elements
 - Instantaneous Overcurrent
 - Timed Overcurrent
 - Auto Reclosing
- Firmware updates
- Specifications, installation and basic testing of RS232, RS485, 10BaseT and 10BaseF data communications LANs
- Diagnostic messages and troubleshooting procedure

25% off the price of the training CD when purchased with the in-class course

* Tuition shown is for scheduled courses. Contact us for custom and on-site pricing.