

Course Overview:

In theoretical and hands-on sessions the tests are explained and applied at the OMICRON test towers. The towers feature distance and differential relays of different manufacturers and enable realistic test situations by simulating the bays related to the relays. During the hands-on sessions you will work in small groups of up to 3 persons. Our experienced trainer provides you with relevant background information and takes your specific questions into account during the training.

Course Objective:

- Perform commissioning, trouble-shooting and periodic tests of protection relays
- Test overcurrent, distance and transformer differential relays with the OMICRON Test Universe
- Create and modify automated test plans and customized test reports
- Use the OMICRON Test Universe from scratch

Course Outline:

- Quick current and voltage output for easy wiring tests
- Configuration of the test object parameters and the test hardware
- Creating test plans which adapt automatically to newly entered relay settings
- Creating a flexible test plan for overcurrent relays including testing pick-up values and trip times
- Hands-on testing of the overcurrent protection function
- Creating a flexible test plan for distance relays including testing the trip times and zone reaches as well as switch on to fault (manual close) and auto-reclosing
- Hands-on testing of distance relays
- Creating a flexible test plan for transformer differential relays including testing the stability during external faults, the tripping characteristic, the trip times and the harmonic restraints
- Hands-on testing of transformer differential relays

Who Should Attend:

Technical staff from utilities, transmission and distribution networks, railway grids, service companies and manufacturers involved in protection testing

Training Language:

EN / AR

Training Methodology:

- Presentation & Slides
- Audio Visual Aids
- Interactive Discussion
- Participatory Exercise
- Action Learning
- Class Activities
- Case Studies
- Workshops
- Simulation