

Excellence through Education

Overview of Training Options



The right training for your application

The OMICRON Academy training courses are built around real testing situations and are ideal for technical staff from electrical utilities, industrial plants, equipment manufacturers and service companies.

Contents range from gaining knowledge of assets and applications, fully utilizing the test equipment and applying efficient test procedures to interpreting test and measurement results.

Benefit from professional courses with expert trainers, full-scale test and training equipment, effective methodology and excellent customer care.

Different types of training are available to meet your requirements: **Scheduled Training** courses take place regularly at the training centers. **Customized Training** courses are planned specifically for you at your premises and tailored to your requirements. **Webinars** are short interactive online courses.

Our staff at the OMICRON Academy Training Centers across the globe will help you to find the right training course for your application.

Please contact us or write an email to academy@omicronenergy.com.

We will give you a warm welcome.



Instrument Transformer Testing

Objectives: performing commissioning and periodic tests of CTs and VTs in line with IEC and IEE standards, verifying the class accuracy and correct connection.

Benefits: verifying proper function of the instrument transformer as well as determining the insulation condition and fault types.



Circuit Breaker / Switchgear Testing

Objectives: analyzing circuit breakers, isolating switches and bus bar joints, performing tests such as static contact resistance, minimum pick-up, timing, coil/motor analysis and undervoltage condition.

Benefits: assessing CBs' condition, verifying proper electrical connections, adequate tension and intact contacts.



Rotating Machines Testing & Monitoring

Objectives: performing diagnostic measurements of motors and generators such as power/dissipation factor, capacitance, partial discharges and moisture tests.

Benefits: detecting defects in the insulation, or damage to the winding structure for generator and motor condition assessment.



Cable Testing & Monitoring

Objectives: performing diagnostic measurements such as partial discharges, power/dissipation factor, capacitance tests and dielectric response.

Benefits: determining the condition of the cable insulation and assuring its quality during the production process.



Protection Testing

Objectives: understanding basic and special protection functions, performing efficient tests of different protection devices as well as creating test templates for commissioning and periodic testing.

Benefits: ensuring proper protection functions for the safe operation of substation assets and a secure power supply.



Transmission Line Testing

Objectives: performing positive and zero-sequence impedance measurements on transmission lines, testing mutual coupling of parallel overhead lines.

Benefits: getting data for correct short circuit calculation, fault location and relay parameterization.



Grounding System Testing

Objectives: performing accurate measurements of ground impedances as well as step and touch voltages according to IEC standards.

Benefits: drawing conclusions about the grounding system condition and verifying safety requirements.



Power Transformer Testing & Monitoring

Objectives: performing diagnostic measurements such as DC winding resistance, transformer turns ratio (TTR), leakage reactance/short-circuit impedance as well as power/dissipation factor (Tan Delta), partial discharges (PD), moisture tests (DFR) and Sweep Frequency Response Analysis (SFRA).

Benefits: detecting fault types as well as assessing the transformer's insulation condition.



Measurement Equipment Testing

Objectives: performing function and accuracy tests of electricity meters, transducers and power quality analyzers as well as calibrating these devices to provide valid measurements.

Benefits: ensuring accurate measurement of electrical energy and other physical values for transparent consumption data and assessment of PQ phenomena.



Power Utility Communication

Objectives: analyzing protective relays (IEDs) according to IEC 61850, using the client/server, GOOSE and sampled values services for power utility automation.

Benefits: applying the engineering process according to the IEC 61850 standard and testing the performance of the substation communication network.

OMICRON is an international company serving the electrical power industry with innovative testing and diagnostic solutions. The application of OMICRON products allows users to assess the condition of the primary and secondary equipment on their systems with complete confidence. Services offered in the area of consulting, commissioning, testing, diagnosis and training make the product range complete.

Customers in more than 140 countries rely on the company's ability to supply leading-edge technology of excellent quality. Service centers on all continents provide a broad base of knowledge and extraordinary customer support. All of this together with our strong network of sales partners is what has made our company a market leader in the electrical power industry.

For more information, additional literature,
and detailed contact information of our
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