






Automated Power System Protection Testing – Virtual Class



 3 days

 English

 oCprs18en

Please join us for a LIVE interactive 3-day virtual testing class! This course will include all the instructional topics from our in-person “Protection Testing” class wrapped into 15-hours of online training. Alongside protection theory, the instructor will show you how to use CMC with Test Universe software to create automated test plans to perform various tests. We will respond to written questions throughout the presentation and verbally address your questions with the instructor at the end of each session.

Objectives

- > Learn how to create automated test plans and customized test reports
- > 15-hours of live interactive instruction
- > Using the OMICRON Test Universe from scratch to test different Protection schemes
- > Workbook provided to do your own hands-on practice
- > Ability to ask questions of the instructors and panel engineers
- > Full class instruction without the need for travel

Content

2,5 hr session

- > **Session 1:** Introduction, Format, CMC Hardware Overview, Test Universe Start Page, Basics of Overcurrent Protection Relay Testing (Pick up/Drop off Test, Trip Times & Characteristics Test)
- > **Session 2:** OMICRON Control Centre (OCC): Creating a New Test Plan, how to do wiring check & manual commissioning test using the QuickCMC module, how to do pick up & Drop off test using the Ramping module, how to record trip times using State Sequencer module, how to test Overcurrent Characteristics using the Overcurrent module
- > **Session 3:** How to test Directional Overcurrent using Overcurrent module, how to test pick up of High stage element without deactivating Low stage element using Pulse Ramping module, how to use the State Sequencer module for testing complex sequences
- > **Session 4:** Differential Protection Overview, how to use the Advanced Differential module to test Transformer Differential Protection Relay
- > **Session 5:** Distance Protection Overview, how to test Distance Characteristics using the Advanced Distance module
- > **Session 6:** Learning how to automate your test plans with Link to XRIO, how to Use the Protection Testing Library, general Tips for Making the Most Efficient Test Plans, Q&A Session with the Instructor & Panelists

Solutions

QuickCMC, Ramping, Pulse Ramping, Overcurrent, Advanced Distance, State Sequencer, Advanced Differential, Protection Testing Library, CMC-Family

Audience

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

Prerequisites

Basic knowledge of power system protection

Structure

Timeframe: 3 days | Work effort: ca. 15 hours

Day 1

Session 1

> 09:30 am – 12:00 pm

Session 2

> 1:00 pm – 3:30 pm

Day 2

Session 1

> 09:30 am – 12:00 pm

Session 2

> 1:00 pm – 3:30 pm

Day 3

Session 1

> 09:30 am – 12:00 pm

Session 2

> 1:00 pm – 3:30 pm

Implementation

This course takes place entirely online. From your desk, you participate in sessions with our trainer. Innovative tools and methods allow you to actively participate and interact with both the trainer and the course participants

Your Tools

- > Computer/laptop with internet access
- > Headset
- > Webcam
- > OMICRON Test Universe
- > Cisco Webex access (provided by OMICRON)