
ABB UNIVERSITY & ONLINE ACADEMY FOR EXCITATION AND SYNCHRONIZATION

J590 - UNITROL® F Hands-on and Update

3 days, in-person training

Course goals

Based on practical exercises the students get familiar with the handling of the tools and application software of the UNITROL® F excitation system using simulators. The simulation of the synchronous machine with the grid system allows carrying out realistic commissioning work. Most of the time the participants work on their own supported by an instructor.

Main learning objectives

Upon completion of this course, participants will:

- Carry out functional test of the various software functions such as voltage and field current regulators, limiters, power system stabilizer, monitoring and protection etc.
- Program of additional functions and signals
- Troubleshoot the UNITROL® F system

Participant profile(s)

- Application, Test, Service, and commissioning engineers

Prerequisites

- Completion of the J540 Service and Commissioning course

Delivery and learning methods

- Practical hands-on training using simulators and demo units based on well-chosen exercises
- Discussion of problems/questions with the instructor

Duration

- 3 days, Maximum of 8 participants

Registration

For registration or enquiries please visit: [ABB University & Online Academy for Excitation - Enquiries](#)

Notes

Topics

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- Calibration of actual values
 - Optimization of the various regulators
 - Functional tests of the limiters
 - Test of channel and mode transfer
 - Functional test of the follow up control system
 - Test of reactive power and power factor controller
 - Commissioning and test of the power system stabilizer
 - Test of the monitoring and protection function
 - Programming of additional functions and signals
 - Troubleshooting procedures
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Virtual Course map

Typical course layout (time or sequence may change)

DAY 1 | 8:30 AM – 4:30 PM

- Introduction to the simulator and the demo unit
- Carry out the practical work based on the exercises
- Discussion of problems/questions with the instructor

DAY 2 | 8:30 AM – 4:30 PM

- Carry out the practical work based on the exercises
- Discussion of problems/questions with the instructor

DAY 3 | 8:30 AM – 4:30 PM

- Carry out the practical work based on the exercises
- Discussion of problems/questions with the instructor





Contact us

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