

ABB UNIVERSITY & ONLINE ACADEMY FOR EXCITATION AND SYNCHRONIZATION

# J520 – UNITROL® F Operation and Maintenance

5 days, in-person training

#### Course goals

The course goal is to learn how to operate, maintain and perform simple troubleshooting of the excitation system or automatic voltage regulator (AVR).

#### Main learning objectives

Participant profile(s)	Prerequisites
<ul> <li>Operator and maintenance personnel in power plants and industrial sites</li> </ul>	<ul> <li>Basic knowledge of electronics and power generation</li> <li>Basic knowledge using personal computer</li> <li>English Level: B1</li> </ul>
Delivery and learning methods	Duration
- Lectures, Presentations	- 5 days, Max. 8 participants
- Demonstrations	
– Exercises	
Registration	
For registration or enquiries please visit: ABB Unive	ersity & Online Academy for Excitation - Enquiries
Notes	
Tailor-made and on-site training courses on reques	t

## **Topics**

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- Basics of the synchronous machine
- Duties of excitation system
- Major components of the UNITROL® F excitation system

#### The main software function of UNITROL® F

- Voltage regulator
- Limiters
- Power System stabilizer PSS
- Superimposed regulators (Power factor and VAR control)
- Monitoring and protection

#### **Operating aspects**

- Local service panel
- Start/Stop sequence
- Commands and Indications

### Maintenance aspects

- Reading the hardware drawing and tracing signals
- Maintenance schedule
- Alarm and fault indication
- How to use the commissioning and maintenance tool CMT
- What to do in case of troubles
- How to replace hardware devices

