



Introduction to Smart Grids. Communication in intelligent networks



OBJECTIVE

- Understand the importance of the development of smart grids in tomorrow's energy system and discover a wide range of scopes of application for smart grids.
- Describe the most important aspects about security through real examples of on-going projects and initiatives.



AUDIENCE

Technical professionals interested in the "smart grids" concept, in the technological contribution of ICT to the electrical systems, as well as in the legal framework.



CONTENT

Basics of a smart grid

- Electrical systems of the future. General aspects
- Smart grids and smart cities. Main drivers
- Applications and developments

Communications in smart grids

- Incorporation of ICT in the various areas within the electrical business
- General requirements of communication
- Types of communication networks in smart grids
- Communication network architecture, OSI model
- Home Area Networks and Access Networks
- Certification bodies and standards
- Advanced smart metering at clients' domain (ASM) and demand response (DR)
- Protocols for smart grids and smart cities

Security considerations

- Security levels: physical level, transport level and application level
- Security measures
- Security myths
- Relevant aspects of the NIST 7628 norm

Regulatory aspects of smart grids

- Remote management
- Electrical vehicle
- Distributed generation
- Demand management

LIVE ONLINE TRAINING

Duration: 18 hours

More information and registration here:

<https://bit.ly/HitachiGridAcademy>