

G911 Electrical Machines Operation and Maintenance

Course description



Course Duration

The duration of the course is 4 days.

Course Type

This is an instructor led course. The course includes lectures, demonstrations, hands-on with the state-of-the-art ABB equipment (about 50% of the time) practical exercises, discussions, factory tours.

Course Goal

After the course the participants have a comprehensive knowledge about the design and operational behavior of electrical AC and DC machines. Also maintenance and repair procedures are introduced. This all together gives a good understanding for all level of personnel involved in planing, operating or maintenance of electrical machines.

Student Profile

Design and planning personnel, engineering and application personnel, maintenance and operating personnel and consultants from the Electricity Supply Industry.
Business managers, sales personnel and technical personnel from ABB companies which like to have more knowledge about our products and the operational behavior.

Prerequisites and Recommendations

Technically trained persons.

Course Objectives

After the course the participants will be able to

- have common understanding of electrical machines
- make a competent assessment of the faults most frequently arising on electrical machines and to initiate the necessary corrective measures
- to perform a simple maintenance independently.....

Main Topics

Basics

- Brief introduction into the theory of electrical machines.
- Electrical Machines Maintenance
- Fundamentals and terminology of maintenance
- Winding structure, insulation system
- Test methods and determination of state particularly with regard to bearing condition, vibration
- Simple check of the windings, diagnosis of sliprings and commutator, faults on brushes and brush gear and kind of methods for eliminating the most frequently occurring faults.