

Course Overview:

This five days course gives an insight to the subject of Batteries, Battery Charger and AC/DC systems. The subject of "power quality" is discussed and the need for Batteries is emphasized. The basic circuits for Battery system are explained and also various configurations shall be discussed. The concept of supply reliability is discussed and the various factors affecting reliability are presented.

Course Objective:

- Battery & Power systems applications, components, operating principles and causes of failure for vented lead acid, valve regulated lead acid and nickel-cadmium batteries.
- Introduction to types of battery chargers

Course Outline:

- INTRODUCTION TO BATTERIES AND BATTERY CHARGER
- BATTERY HAZARDS
- BATTERY SAFETY EQUIPMENT AND PROCEDURES
- APPLICATION AND SCOPE
- GROUND FAULT DETECTION
- BATTERY PROTECTION
- BATTERY BASICS
- BATTERY CONSTRUCTION
- INTRODUCTION TO POWER SYSTEMS AC/DC
- WHY POWER SYSTEMS ARE INTERCONNECTED
- ELEMENTS OF INDUSTRIAL POWER SYSTEMS
- TYPICAL INDUSTRIAL POWER SYSTEMS
- SYSTEM RELIABILITY
- SYSTEM FLEXIBILITY
- SYSTEM PLANNING
- EQUIPMENT SELECTION

Who Should Attend:

Designed for maintenance and operation personnel, Engineers, Technicians that are responsible for battery systems in substations, power plants and other systems that require emergency power

Training Language:

EN / AR

Training Methodology:

- Presentation & Slides
- Audio Visual Aids
- Interactive Discussion
- Participatory Exercise
- Action Learning
- Class Activities
- Case Studies
- Workshops
- Simulation