

### **Electrical Circuits & Control**

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2000	Register Now
	2900

#### **Course Overview:**

- Rapid progress in power plants and utilities leads to a parallel needs in distributed control actions in different sites and environments.
- Advanced control systems have created the world's most advanced distribution automation suite, including designing, planning, management, and automatic feeder restoration.
- This course ranges from revision of power utilities needs for local and remote measurements and control for different sites, to the advanced robot manipulation and rapid action execution.

## Course Objective:

- Understand the basic concepts of the design of power systems measurement and control.
- · Apply different control techniques.
- Know the different methods of systems identifications.
- · Analyze linear discrete-time systems.
- Design digital control systems.
- Be familiar with distributed sensor systems

#### Who Should Attend?

· Electrical and mechanical engineers and technicians

### **Course Outline:**

- Introduction To Electrical Circuits
- · Electrical Components, Standards And Symbols
- Motor And Motor-Branch-Circuit Protection
- General Engineering Considerations
- Measurements
- Control: Introduction, Definitions And Modeling
- Control Circuits Design
- Control And Process Design Consideration
- Networks Voltage Control
- Loads Power Factor Correction
- Voltage Relation With Reactive Power
- Voltage Stability Interrelation With Reactive Power Available
- Loads Voltage Control By Reactive Power Injections

# **Training Methodology:**

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

