



# Motor Control Training

[View Course Details](#)

## COURSE DATES AND TIMES

Our 12-Hour live online instructor-led Motor Control Training course is designed to provide you with a comprehensive understanding of motor control systems, including their operation, maintenance, and troubleshooting. Through six interactive sessions, you will gain a solid foundation in motor control theory, techniques, protection, failure analysis, testing methods, and maintenance practices.

During the course, you will learn about different types of motors and their characteristics, the effects of power systems on motors, and how to apply motor loads. You will also explore various motor control techniques, such as starting and stopping methods, speed control techniques, and troubleshooting common motor control problems. In addition, you will learn how to protect motors from short-circuit, overload, and thermal failures, and how to use solid-state motor protection relays.

Our course will also cover the analysis of motor failures, including electrical, mechanical, and load-related failures. You will learn different testing methods for evaluating motor insulation, such as resistance, polarization index, hipot, capacitance, dissipation factor, and partial discharge tests. Finally, you will gain an understanding of motor maintenance practices, including electrical and mechanical maintenance, lubrication and cooling components, periodic testing, and motor cleaning, alignment, and balancing.

Through this interactive, problem-solving learning environment, you can ask specific questions and exchange ideas relating to your unique situations. By the end of the course, you will have a solid understanding of the basics of electric motor control maintenance medium-voltage and the knowledge required to operate and maintain low and medium-voltage motors and controls safely.

Whether you're a beginner or an experienced professional, this course will provide you with valuable insights and practical knowledge to advance your career in motor control. Let's get started!

## WHO SHOULD ATTEND

- Engineering and design personnel
- Maintenance and technical services personnel
- Process and operations personnel
- Technical and process managers
- Engineering and design personnel
- Electrical consulting engineers
- Electrical contractors

## STUDENTS RECEIVE

- This Course Includes Our Latest Electric Motor And VFD Handbook Volume!! (Value \$20)
- **\$100 Coupon** Toward Any Future Electricity Forum Event (Restrictions Apply)
- 1.2 Continuing Education Unit (CEU) Credits (12 Professional Development Hours)
- **FREE** Magazine Subscription (Value \$50.00)
- Course Materials In PDF Format

## COURSE OUTLINE

### MOTOR CONTROL TRAINING COURSE OUTLINE

#### Day 1:

##### Session 1: Introduction to Motor Control

- Overview of motor control systems
- Types of motors and their characteristics
- Basic motor control theory
- Power system effects on motors
- Application of motor loads

##### Session 2: Motor Control Techniques

- Symbology and terminology
- Starting and stopping methods
- Speed control techniques

- Variable frequency drive (VFD) effects on motor performance
- Troubleshooting motor control problems

### **Session 3: Motor Protection**

- Induction motor characteristics
- Short-circuit protection
- Overload protection
- Thermal protection
- Solid-state motor protection relay

### **Day 2:**

### **Session 4: Motor Failure Analysis**

- Electrical failures
- Mechanical failures
- Load-related failures
- Failure analysis techniques

### **Session 5: Motor Testing Methods**

- Overview of insulation life
- Testing methods for insulation resistance, polarization index, DC hipot, DC ramp test, AC hipot, capacitance test, dissipation factor, partial discharge, surge test, mechanical testing, and on-line testing

### **Session 6: Motor Maintenance Practices**

- Electrical maintenance
- Mechanical maintenance
- Lubrication and cooling components
- Periodic testing and load check
- Motor cleaning, alignment, and balancing

## **COURSE TIMETABLE**

### **Both days:**

Start: 8:00 a.m.

Coffee Break: 10:00 a.m.

Lunch: 12:00 noon

Restart: 1:15 p.m.

Finish: 4:30 p.m.

Contact us Today for a FREE quotation to deliver this course at your company's location.

[Request Quote](#)