

# **Electric Motor Testing – Energized and De-Energized Course Outline**

## **Monday**

2:00 p.m. - 5:00 p.m.

**Introduction and course overview**  
**Brief History of Electricity and Electric  
Motor Testing**  
**DC Theory Review**

## **Tuesday**

8:00 a.m. - 5:00 p.m.

**AC Theory**  
**Series / Parallel Circuits**  
**Resistance, Inductance, Capacitance,  
Reactance, Impedance**  
**Data Collection Labs**  
**Transformer Theory**  
**Electrical Distribution and Grounding  
Systems**  
**Motor Nameplate**  
**Motor Construction**

## **Wednesday**

8:00 a.m. - 5:00 p.m.

**Motor Rewind Procedures**  
**Motor Operation Theory**  
**Theory to Support De-Energized Electric  
Motor Testing**  
**Data Collection Labs**

## **Thursday**

8:00 a.m. - 5:00 p.m.

**Motor Current Signature and Electrical Signature Analysis**  
**Safety and Technical Documentation to Support Electric Motor Testing**  
**Data Collection Labs**  
**Practical Exams**

## **Friday**

8:00 a.m. - 12:00 p.m.

**Comprehensive Course Review**  
**General Course Exam**  
**Data Analysis Exam**