

# Electric Motor Testing Certification Course Objectives and Outline

## Objectives

This course is designed to provide training that allows students to achieve Electric Motor Testing Certification. Attending OEM training before taking the certification class will benefit the learning experience of the certification class but is not required to take the class. Completing OEM training will be required before you can complete the certification. Certification tests are conducted at the end of the class.

The vendor-neutral program provides a path for certification regardless of utilized instrumentation or equipment.

Upon completion of the course the student will be able to take the test for the Electric Motor Testing Technician (EMTT) or Electric Motor Testing Data Analyst (EMTA) Certification.

The course is worth 32 CEUs or NETA CTDs.

## 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 Collections 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 Collections Labs

**Thursday**

8:00 a.m. – 5:00 p.m.

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

**Friday**

8:00 a.m. – 12:00 p.m.

Comprehensive Course Review  
General Course Exam  
Data Analysis Exam