

Electric Motor Testing Certification Course Objectives and Outline

This course does **NOT** include an Introduction to MCEMAX or MCEMAX Data Analysis course and does **NOT** include training on any PdMA test equipment.

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