

Module 2-Transformers & Applications Class 6 days - 48 hours

This will be an interactive hands-on instructor-led class. The primary learning objective of this class is for the student to experience a comprehensive overview of transformer operations, maintenance, installation, and troubleshooting. The student will gain practical experience through several hands-on lab experiments wiring and testing transformers. Upon completion the student will have a functional understanding of how transformers are used in the industrial world as well as their capabilities to reduce the harmful effects of harmonics and how reactors and isolation transformers are used to improve the power quality available to electronic equipment.

This class is highly recommended for technical staff responsible for the daily plant debug and analysis of industrial power systems.

Key Instrumentation the students will be exposed to:

- Megger TTR100-1 Transformer Turns Ratio

Objectives will be as follows:

- Magnetism and Electromagnetism
- Operating Principles
- Electrical Safety
- Transformer Connections• Harmonics
- Power Generation and Distribution
- Reactors and Isolation Transformers• Autotransformers
- Buck-Boost Transformers
- Special Transformers
- Special Connections
- Selection and Installation
- Maintenance and Troubleshooting

Transformer simulator lab hardware:

- Auto transformer
- Buck-Boost Transformer
- Isolation Transformer
- Control Transformer
- Constant Voltage Transformer