The goal
The goal of the course is to provide understanding of the internal and external elements of the transformer and reactors with basic design, testing, operation and maintenance.

Learning objectives
Upon completion of this course, participants will:
• Become conversant in basics of transformer and reactors design and construction, accessories, auxiliary & monitoring devices.
• Understand Operation and maintenance.
• Identify content of safety

Participant profile
Personnel from Power Utilities, Power Generation, transmission companies & industries and Consultants responsible for engineering, commissioning, operation and Maintenance of substations.

Prerequisites
This course requires working knowledge of basic electricity. Students must wear safety toe shoes or boots while entering the labs. No shorts or sandals will be allowed.

Topics
• Basic Electrical Concepts regarding Transformers and Reactors
• Working principles, core, winding, losses etc
• Introduction to Transformers & reactors – Construction, Operation, accessories, cooling methods, transformer connections – start, delta, Zigzag
• On Load Tap Changer
• Inspection and test procedures commonly performed on transformers
• Operation & Maintenance – Do’s & Don’t
• Transformer Oil, Dissolved Gas Analysis
• Interpreting Oil Test Results and Maintenance Options
• Monitoring and Digitalization of Transformer
• Diagnostic Testing and Life Extension
• Manufacturing & assembling process
• Core, winding. Bushing and other accessories assembling
• Safety: standards and regulations, safe work procedures, and usage of personal protective equipment
• Case Studies, Q & A, Open Discussion

Course type
This is a face to face class room training.

Learning methods and tools
Lectures, demonstrations and visit of transformer shop floor factory. The language of the course is English
Laptop or tablet is required to have access to the e-documentation. Please bring your own device.

Duration
The duration of the course is five days.

To Register:
LMS: MyLearning
Sign in: check IE browser setting Click SIGN IN to Sign-up or Log-in with your ABB account.
Search: please enter course number INTCV561 into the search field. (Please check the language filter EN)

The latest version of the course portfolio, and course schedule can be found on our ABB PowerTEC Webpage:
http://new.abb.com/service/abb-university/india

- or
scan the below QR Code: