ETAP Software Training

COURSE CONTENT

About Multisoft

Train yourself with the best and develop valuable in-demand skills with Multisoft Systems. A leading certification training provider, Multisoft collaborates with top technologies to bring world-class one-on-one and certification trainings. With the goal to empower professionals and business across the globe, we offer more than 1500 training courses, which are delivered by Multisoft's global subject matter experts. We offer tailored corporate training; project Based Training, comprehensive learning solution with lifetime e-learning access, after training support and globally recognized training certificates.

About Course

Multisoft Systems offers a detailed ETAP software training program designed to equip engineers and professionals in the electrical industry with essential skills in power system analysis and operations. The training encompasses a wide range of topics from basic functionalities to advanced system design and reliability analysis.

Module 1: One-Line Diagram

- ✓ Toolbar Format
- ✓ Dumpster
- ✓ Project View
- ✓ Project Toolbar
- ✓ Mode Toolbar
- ✓ System Toolbar
- ✓ Study Case Toolbar
- ✓ Load flow Analysis
- ✓ Purpose of a Load Flow Study
- ✓ Connect Element –Bus
- ✓ Connect Element –Element
- ✓ Insert Protective Devices
- ✓ Creating a Project
- ✓ Low flow Analysis

Module 2: Short-Circuit Analysis IEC Standard

- ✓ Purpose Of Short-circuit Studies
- ✓ Operating Modes
- ✓ Short-Circuit Phenomenon
- ✓ Combination of AC and DC currents
- ✓ The Effect of Delayed Zero Crossing
- ✓ Circuit Breaker Operation
- ✓ Fault current
- ✓ IEC Short-Circuit Calculation (IEC 909)
- ✓ Currents types and relations
- ✓ Circuit Breaker Selection
- ✓ Standard Ratings for Low Voltage Circuit Breakers (LV-CBs)
- ✓ Protective Device Evaluation

- ✓ Types of Short-Circuits
- ✓ Protective Device Coordination (Etap Star)
- ✓ Concepts & Applications
- ✓ Coordination
- ✓ Motor Protection
- ✓ Required Data -Protection of a Medium Voltage Motor
- ✓ Fuse Types
- ✓ Time margins

Module 3: Transient Stability

- ✓ Causes of Instability
- ✓ Consequences of Instability
- ✓ Swing Equation
- ✓ Power and Rotor Angle
- ✓ Equal Area -Stable
- ✓ Equal Area –unstable
- ✓ The solution to Stability Problems.
- ✓ Optimal Capacitor Placement
- ✓ The problem of Var Flow in Power Systems
- ✓ Purposes of Shunt Capacitor Applications
- ✓ Optimal Capacitor Placement in ETAP
- ✓ ETAP OCP Capabilities

Module 4: Harmonic Analysis

- ✓ Harmonic Sources
- ✓ Classification of Harmonics
- ✓ Phase Angle Relationship
- ✓ Order vs. Sequence
- ✓ Characteristic Harmonics
- ✓ Harmonic-Related Problems

- ✓ Parallel Resonance
- ✓ Harmonic Distortion Measurements
- ✓ Reducing System Harmonics
- ✓ Voltage Distortion Limits
- ✓ Current Distortion Limits

Module 5: Ground Grid Systems

- ✓ Need for Grounding Grids
- ✓ Objectives
- ✓ Symmetrical Grid Current
- ✓ Decrement Factor
- ✓ Ground Rod Length
- ✓ IEEE Methods
- ✓ Step Potential Profile
- ✓ Touch Potential Profile
- ✓ Absolute Potential Profile