



SM TECHNO

MEP & NLP Training Services



SOFTWARES

- AutoCAD
- ETAP 12.6.0 SOFTWARE
- DiaLUX (4.13 VERSION)

Course standards



HIGHLIGHTS

- LIVE ONLINE TRAINING
- CLASSROOM TRAINING
- VIDEO COURSES
- GULF EXPERIENCE FACULTY
- DIGITAL CLASSROOM
- BASIC TO ADVANCE LEVEL
- CONCEPT BASED TRAINING
- SOFTWARE CALCULATION
- INTERACTIVE SESSIONS
- UPDATED SYLLABUS

PROJECTS

1. G+6 Floor Building Project
2. International School Building Project

 **LECTRICAL**

DESIGNING & DRAFTING



ELECTRICAL DESIGNING & DRAFTING SYLLABUS

MODULE 01: DESIGNING

Chapter: 1

1. Electrical Designing
2. Basics of Electrical Engineering
3. Types of Loads
4. Types of Electricity

Chapter 2

1. Basic Formulas
2. Find out Current (I)
3. Find out Power kW & kVA.
4. Thumb rule for calculation for current

Chapter 3

1. Abbreviations
2. Codes & Standards
3. Lux Level Standards
4. Load details for different electrical equipments
5. Saving electrical energy

Chapter 4

1. Illumination Design
2. Classification of lighting design
3. Air Conditioning System

Chapter 5

1. Introduction Of Cables
2. Types of cable insulation
3. Thumb Rule For Cable Size.

Chapter 6

1. Introduction to Circuit Breakers
2. Types of circuit breaker
3. Specifications of circuit breaker
4. Calculation of Circuit Breaker size

Chapter 7

1. Introduction to Capacitor Bank
2. Advantages of improved power factor
3. Capacitor bank sizing
4. Electrical Motors

Chapter 8

1. Electrical Designing Rules & Regulation
2. Conversion from feet to meters
3. Lighting Designing
4. Raw Power Designing
5. Air Condition Designing
6. Load Balancing Sheet

Chapter 9

1. Introduction to Transformer
2. Parts of Transformer
3. Transformer cooling techniques
4. Transformer sizing

Chapter 10

1. Introduction to Diesel Generator
2. Different types of generator
3. Installation factors of generators
4. Diesel Generator set sizing

Chapter 11

1. Introduction to Uninterruptable Power Supplies
2. •UPS sizing
3. •Battery sizing

Chapter 12

1. •Cable Sizing
2. •Voltage Drop Calculation

Chapter 13

1. Short Circuit Calculation
2. Tripping Time of Circuit Breaker & Cable checking

Chapter 14

1. Cable Tray
2. Earthing
3. Bus bar
4. Lightning Arrestors

Chapter 15

1. CCTV
2. PAS

Chapter 16

1. ETAP
2. Load Flow Analysis
3. Short Circuit Analysis

Chapter 17

1. Electrical Drafting
2. Electrical Legends & Symbols

MODULE 02: DRAFTING

Electrical Drafting

1. Electrical Drafting (AutoCAD) 2012/2021
2. Electrical Legends & Symbols
3. Lighting layout
4. Raw power Layout
5. Conduit Layout
6. Control & Circuit Wiring Layout
7. Single Line Diagram
8. Electrical Project Explanation & Exercises

UPDATED TOPICS

1. Illumination Designing by using Dialux software
2. Selection & Sizing of the cable.
3. Voltage Drop & Short Circuit Calculation along with tripping time of circuit breaker
4. Sizing of Switch Gear Panel/Distribution Board
5. Raw Power & Standby power Designing
6. Low Current Designing which include CCTV Camera, Public Addressable System
7. Electrical Drafting - MEP Electrical

