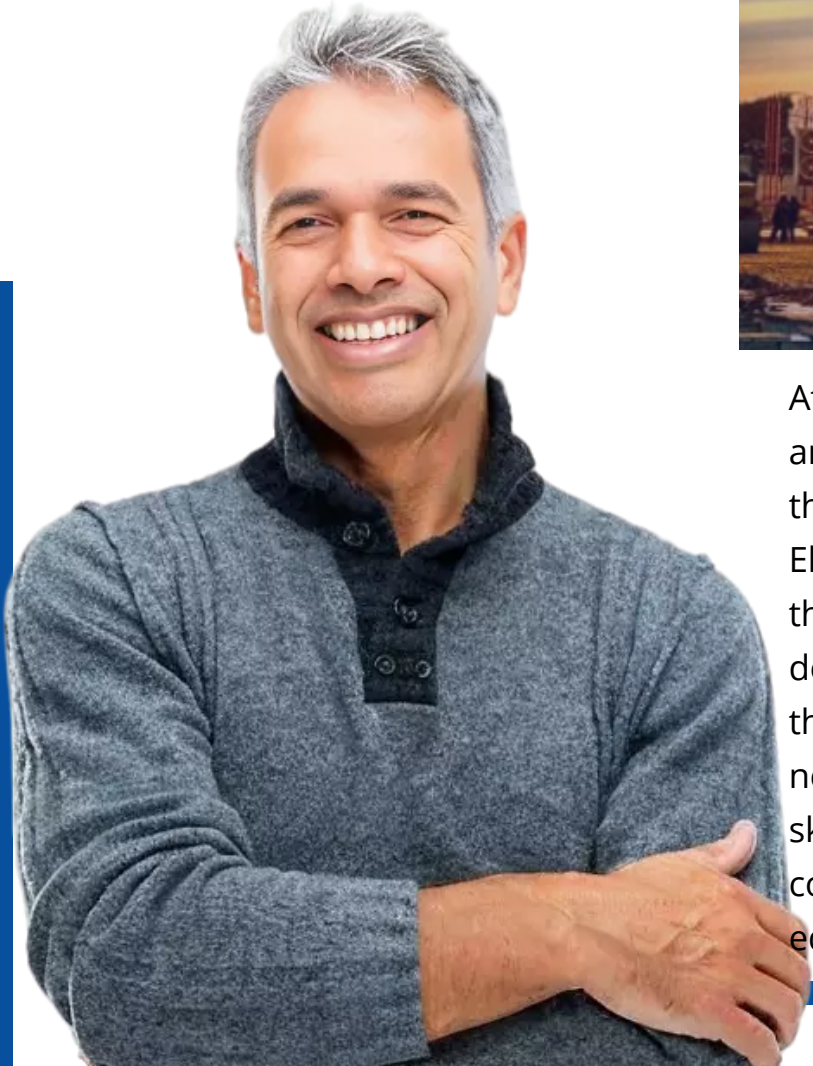




ENGINEERS' CERTIFICATION PROGRAM

Engineering Skills



ELECTRICAL LEARNING PORTAL ELP



At Electrical Learning Portal (ELP), we are dedicated to shaping the future of the electrical and MEP (Mechanical, Electrical, and Plumbing) industries through professional training and development. Our mission is to bridge the gap between the ever-evolving needs of employers and the dynamic skill set of engineers by providing comprehensive, industry-relevant education and training.

Degree + Skills = Career Growth

CONTACT US

Electrical Learning Portal | ELP

☎ +91-8430180594, +91-7055230623

✉ info@electricallearningportal.com

🌐 <https://electricallearningportal.com>

POWER SYSTEM PROTECTION | LIVE

In an era where the world relies heavily on electricity for almost every aspect of daily life, ensuring a reliable and uninterrupted supply of electrical power is of paramount importance. Power systems, whether they operate at High Voltage (HV), Medium Voltage (MV), or Low Voltage (LV), are the backbone of modern society, facilitating the transmission and distribution of electrical energy to homes, industries, and businesses. To safeguard these complex and vital power systems from operational disturbances, faults, and unexpected events, robust protection strategies are indispensable.

The “Power System Protection (HV/MV/LV) Training Program” has been meticulously designed to equip engineers, technicians, and power system professionals with the essential knowledge and skills required to understand, implement, and maintain effective protection systems across different voltage levels. This comprehensive program delves deep into the intricacies of power system protection, covering a wide spectrum of topics, from fundamental principles to advanced techniques.



TOPICS

Part 01 Overview of Protection & Switchgear

Introduction

- o Introduction about Power Systems, Protection.*
- o HV_MV & LV Voltage details*
- o Single Line Diagram/One Line Diagram*

Protection Single line diagram Up to 415V/11kV to 220kV

- o SLD From 220kV HV_33/11 MV to LT MCC, Feeder types.*
- o ANSI Codes and standards*

Current Transformers

- o Introduction/Type*
- o Protection CT classifications*
- o Technical Specifications*

Voltage Transformer

- o Introduction/Type*
- o Protection VT classifications*
- o Technical Specifications*

Part 02 LV Protections

LV Protections

- o Design Criteria _ protection in LV panels*
- o Protection in MCC panels.*
- o Protection in PCC panels.*
- o Release, Electronic relays*

Part 03 MV protections(33/11/6.6kV)

MV protections(33/11/6.6kV)

- o Design Criteria _ protection in MV panels*
- o Protection in 33kV MV panels (main & Aux protections).*
- o Protection in 11kV & 6.6kV panels (main & Aux protections).*
- o Protection & Relay selection.*
- o O/C, E/F & S/C protections*
- o Feeder protection*
- o Directional & non directional*
- o Motor protection*
- o Transformer differential protection*
- o Restricted & stand by earth fault protections*
- o NGR protection*
- o Capacitor feeder protection*
- o Line PT & Bus PT protections*
- o Aux protections Like (AC/DC, Transformer, Trip circuit supervision, Antidumping, Master Trip)*

Part 04 HV Protections (220kV to 66kV)

HV Protections (220kV to 66kV)

- o Design Criteria _ Protection in HV Power system
- o Control and Relay panels.
- o Main Protections.
- o O/C, E/F & S/C Protections.
- o Primary and back Up Protections
- o Busbar differential protection
- o Line differential protection
- o Distance protection.
- o Aux protections Like (AC/DC, Transformer, Trip circuit supervision, Antidumping, Master Trip)

Part 05 Relay Coordination & Settings

- o Introduction to Relay settings
- o Relay coordination settings and calculations

Tools

- o All Classes are Live via Google Meet or Zoom
- o MS PowerPoint slides
- o Calculation on MS Excel
- o PDF material

Benefits of the program

1. Join the professional training
2. Understand the real world
3. Be a part of the Professional Engineers' Community
4. **Program Completion Certificates**
5. **Join our engineers' WhatsApp Groups**

Contact:

+91-8430180594/+91-7055230623

info@electricallearningportal.com

<https://electricallearningportal.com>

