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**COURSE DESCRIPTION****INTCV206****Reactive Power Compensation and Harmonics in Power Systems****The goal**

The objective of this course is to enable the attendees to familiarize with the concepts and terminologies of power quality and its significance in power systems with a strong focus on the area of harmonics. The impact of harmonics on various power system components and the methods of mitigation of the excess harmonics will also be addressed in the course in line with the IEEE guidelines.

**Learning objectives**

By the end of this course, the participants will be able to:

- Understand concepts of power factor
- Understand disadvantages of poor power factor and requirements of reactive power compensation
- Understand aspects and methods of Reactive Power Compensation.
- Understand about harmonics, sources of harmonics, effect of harmonics.
- Understand relationship between reactive power compensation and harmonics

**Prerequisites**

All Newly Joined, young & experienced engineers connected with high and medium voltage equipment's & working in R&D, substation design, marketing, projects, maintenance, service and consultancy.

**Topics**

- Power factor and its effects, need for control of power factor
- Fundamental of Reactive Power Compensation.
- The methods adopted for reactive power compensation.
- New solutions for reactive power compensation.
- Basics of Harmonics, sources of harmonics, effect of harmonics
- Harmonic analysis and total harmonic distortion
- Harmonic distortion solutions

**Course type**

This is a face to face class room training

**Learning methods and tools**

Lectures, demonstrations, practical case studies

**Laptop** or tablet is required to have access to the e-documentation. Please bring your own device.

**Duration**

1 day

**To Register:**

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The latest version of the course portfolio, and course schedule can be found on our

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