

Hydropower Maintenance Expert

Module 1: Component know-how

Course content

Option 1: Electrical path

Functionality and design of electrical components

- Generator
- Excitation
- Protection
- Balance of plant electrical

Interface to the mechanical team

- P&ID, turbines, hydraulic governor, balance of plant mechanical

Interface to the automation team

- Digital governor, SCADA system

Visit to a hydropower plant (1 day)

Option 2: Mechanical path

Functionality and design of mechanical components

- Turbines
- Hydraulic governor
- Balance of plant mechanical

Interface to the electrical team

- Single line diagram, generator, excitation, protection
- Balance of plant electrical

Interface to the automation team

- Digital governor, SCADA system

Visit to a hydropower plant (1 day)

Duration, date and training venue

5 days, date to be agreed
in Heidenheim an der Brenz, Germany

Learning objectives

- + Know the function of all components of a HPP
- + Understand design aspects of electrical/mechanical components that are relevant for maintenance
- + Know the interfaces between electrical, automation and mechanical equipment

Trainer

Various Voith experts with many years of experience in their field of expertise.

Target groups and prerequisites

Engineers who are responsible for electrical or mechanical maintenance of hydropower plant equipment.

Prerequisites:

- Electrical engineering qualification (Bachelors or Masters) for option 1 (electrical)
- Mechanical engineering qualification (Bachelors or Masters) for option 2 (mechanical)
- Min. 3 years of working experience in hydropower or attended training "Hydropower technology overview"

Maintenance management staff who needs to understand the functionality and details of hydropower plants.

Prerequisites:

- Electrical engineering qualification (Bachelors or Masters) for option 1 (electrical)
- Mechanical engineering qualification (Bachelors or Masters) for option 2 (mechanical)
- Min. 5 years of working experience in power generation or attended training „Hydropower technology overview“

Price

24,900 EUR per module and option for 10 trainees*

**Including visit costs, lunch and refreshments; excluding WHT, VHT, travel and accommodation costs for trainees; validity date is 2021-02-28.*

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