# Schneider Electric Training



## **EcoStruxure™ Power Monitoring Expert**

## - ION Architecture Programming

#### Description

This course focuses on system and device level customization using the Designer application in PME. Students will learn the architecture of ION meters and be guided through a series of lab activities to creating custom programs for equipment monitoring, alarming, and logging. The Virtual ION Processor (VIP) will be covered for programming Modbus meters and third-party equipment. Designer and Vista integration will be covered as well to show how programs can be used in PME's graphic screens. At the end of the course, students will have created multiple frameworks for integrating WAGES devices, control and process applications, logging, alarming, and custom calculations.



#### Audience

This course is intended for meter/instrumentation technicians, system engineers, and system integrators who need to learn how to get the most out of their PME software and associated meters.

## Course Length:

4-Days

## Delivery Type:

- · Classroom (CR), or
- Virtual Instructor Led (VILT)

#### Course Reference Code:

3000PMEPROG300

#### **Product Number:**

- (CR) 300PLUC4DAY
- (VILT) 300PMUWEB4DAY

## Register

www.pmutraining.com

#### Prerequisites

- A basic familiarity with using PME
- · Familiar with Microsoft Windows operating systems
- · A basic working knowledge of power and energy will be helpful

#### Students will be provided

- Course material including presentations, labs, etc.
- Access to demo software for hands on lab assignments
- Certificate of completion
- CEUs: 2.4

#### **Objectives**

- Describe ION architecture and ION module properties
- Examine configuration of meters installed in a PME system
- Understand the procedure to backup and restore a meter template
- Construct programs to perform custom calculations
- Describe how Designer and Vista work together
- Build programs for logging and alarming
- · Construct programs for Advanced WAGES metering
- Build programs to read Modbus registers from one device to an ION meter
- Program process and control applications inside of an ION meter
- Understand the ION Reference document and how to use it
- Learn best practices for programming in Designer

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Life Is On Schneider

# **EcoStruxure Power Monitoring Expert**

# - Advanced Programming

## Course Agenda

## Day 1

- Introductions
- ION Architecture and ION module properties
- Designer navigation and interface
- Backup and restore ION meters

### Day 2

- Vista and Designer integration
- Counter Module
- Arithmetic Module

### Day 3

- Clock Module
- Periodic Timer Module
- Data logging framework
- Setpoint Module

### Day 4

- Digital I/O
- Modbus Mastering
- Course Summary

 This course typically runs Monday – Thursday, 9am – 3pm (CST) unless otherwise noted during the registration process.



