



Customer Course Catalog  
[pmutraining.com](http://pmutraining.com)

**PMU**  
TRAINING CENTER

6/4/2024



# Power Management University (PMU)

PMU is the US based education team dedicated to providing best in-class training on the various energy management software and related products Schneider Electric™ has to offer.

## Who do we teach?

PMU offers courses that benefit a variety of end-user roles within the energy segment, such as:

- Energy Managers
- Facility Technicians
- Site Engineers
- Utility Workers

## What do we teach?

PMU supports end-user training on the following energy management software and related products.

### Software



EcoStruxure™  
Power Monitoring  
Expert (PME)



EcoStruxure™  
Power Operation  
(EPO)



ION Setup Utility

### Hardware



ION & PowerLogic™  
Energy & Power Quality  
Meters



Communication Devices

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# PMU Training Options

**Power Management University (PMU)** offers a variety of courses that can be delivered in several ways. To make it easier for our customers to identify the best fit, we have organized this catalog into our **three core training options**.

## Factory Training

Instructor-led courses with pre-defined agendas that are available for registration by anyone interested. Perfect for sites that have minimal attendees, these courses are offered on specific dates throughout the year and can be delivered in two ways.



**Classroom (CR)** – Delivered in-person at our state-of-the-art training center located at our Nashville Hub (Franklin, TN).



**Virtual Instructor-Led (VILT)** – Delivered virtually via a secure training environment.

## Customer-Dedicated Training

Instructor-led courses with either pre-defined or custom agendas that are private events for a specific customer. Perfect for sites that have multiple attendees, these courses are hosted on a coordinated date and can be delivered in three ways.



**Customer Site** – Delivered in-person at the customers facility.



**Virtual Instructor-Led (VILT)** – Delivered virtually via a secure training environment. (Minimum 6 attendees).



**Workshop** – A dedicated customer event delivered in-person at our state-of-the-art training center located at our Nashville Hub (Franklin, TN).

## Self-Paced Training

Perfect for customers that have continuous training needs and wish to have the flexibility as to when it must be accomplished.



**PMU+** Yearly Education Subscription Plan



**Education Kits** – Training Lab Station with ION9000/PM8000/PM5000 meters. Gain more in-depth meter experience without disrupting your facility's production environment.

# Factory Training Options

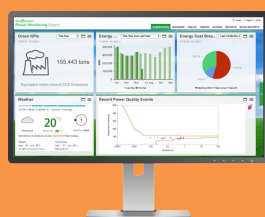
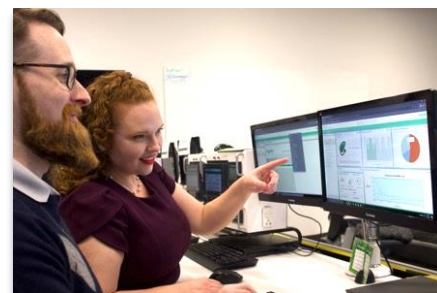




# Factory Training Options

The following page provides an overview of the current available **Factory Training Options** for end-users.

Navigate to each course page for more detailed information or visit [pmutraining.com](https://pmutraining.com) to check availability and to register.



## EcoStruxure™ Power Monitoring Expert (PME) Factory Training Options

Page	Course Name
6	<a href="#">EcoStruxure™ PME – Operation</a>
7	<a href="#">EcoStruxure™ PME – Administration &amp; Maintenance</a>
8	<a href="#">EcoStruxure™ PME – ION Architecture Programming</a>
9	<a href="#">EcoStruxure™ PME – Elective Series – 2023 Delta Training</a>
10	<a href="#">EcoStruxure™ PME – Elective Series – Energy Billing Module</a>



## Hardware Factory Training Options

Page	Course Name
11	<a href="#">PowerLogic™ and ION Metering Hardware – Installation and Troubleshooting</a>
12	<a href="#">ION Utility Meter – Configuration &amp; PME Administration</a>

# EcoStruxure™ Power Monitoring Expert

## Operation

### Description:

This 4-day Instructor-Led course provides an introduction into Schneider Electric's energy management software called EcoStruxure™ Power Monitoring Expert (PME). It covers the software capabilities with a focus on viewing, creating, and managing objects within the Web Application such as Dashboards, Reports, Diagrams, Alarms, and Trends.



### Audience:

This course is designed as an entry level training to this software and recommended for anyone that is or will become involved with using this software as part of their day-to-day role.

### Course Details

#### Duration:

- 4-Days

#### Delivery Type:

- Classroom (CR)
- Virtual Instructor-Led (VILT)

#### Product Numbers:

- (CR) 3000PLUC4DAY
- (VILT) 3000PMUWEB4DAY

### Registration

- [Click here](#) to view available dates and to register for this course.

### Prerequisites:

- None

### 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:

After completion of this training, participants will be able to:

- Understand basic power fundamentals, terminology, and utility billing
- Understand what the PME software is, how it works, and its full capabilities
- Create and manage Dashboards
- Create and manage Reports
- Create and manage Alarms
- Create and manage Trends
- Create and manage user access via the web application
- Add and managing native serial and ethernet devices using the web client (Management Console and adding nonnative devices are not part of this course)
- View and navigate through existing Diagrams (Vista and Creating new diagrams are not part of this course)
- Understand proper meter selection, communication & basic configuration

Question? Email [pmu@se.com](mailto:pmu@se.com)

# EcoStruxure™ Power Monitoring Expert

## Administration and Maintenance

### Description:

This 4-day Instructor-Led course focuses on teaching how to manage and maintain an EcoStruxure™ Power Monitoring Expert (PME) systems. Students will learn how to design PME systems and plan system deployments. They will also learn how to build a system by adding meters, user accounts, configure meter hierarchies, and build custom graphics screens to represent the system. The course will also cover integrating PME with 3rd party hardware, as well as database management, system maintenance and backup, and disaster recovery.



### Audience

This course is designed for anyone who is responsible for administering, maintaining, and/or supporting a PME system, such as system administrators (and possibly IT Admins), as well as advanced PME users.

#### Course Details

##### Duration:

- 4-Days

##### Delivery Type:

- Classroom (CR)
- Virtual Instructor-Led (VILT)

##### Product Numbers:

- (CR) 3000PLUC4DAY
- (VILT) 3000PMUWEB4DAY

#### Registration

- [Click here](#) to view available dates and to register for this course.

### Prerequisites:

- A basic familiarity with using PME
- A reasonable understanding of 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:

After completion of this training course, participants will be able to:

- Understand and utilize system specifications to design a PME system
- Explore new cyber security features for user management
- Add meters and other hardware devices to the PME system
- Configure Logical Devices
- Configure Hierarchies to simplify data aggregation and extraction
- Design and build custom graphics screens
- Incorporate 3rd party devices into the PME software
- Understand database structures and modify or adjust default database maintenance tasks

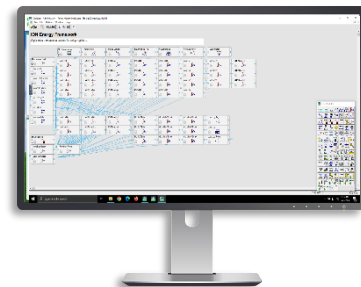
Question? Email [pmu@se.com](mailto:pmu@se.com)

# EcoStruxure™ Power Monitoring Expert

## ION Architecture Programming

### Description:

This 4-day Instructor-Led course focuses on system and device level customization using the Designer Application in EcoStruxure™ Power Monitoring Expert (PME). Students will learn the architecture of ION meters and be guided through a series of lab activities to create custom programs for equipment monitoring, alarming, and logging. The Virtual ION Processor (VIP) will be covered for programming Modbus meters and 3<sup>rd</sup> party equipment. Designer and Vista integration will be covered, as well to show how programs can be used in PME's graphic screens. Students will create 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 Details

#### Duration:

- 4-Days

#### Delivery Type:

- Classroom (CR)
- Virtual Instructor-Led (VILT)

#### Product Numbers:

- (CR) 3000PLUC4DAY
- (VILT) 3000PMUWEB4DAY

### Registration

- [Click here](#) to view available dates and to register for this course.

### 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:

After completion of this training course, participants will be able to:

- 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

Question? Email [pmu@se.com](mailto:pmu@se.com)

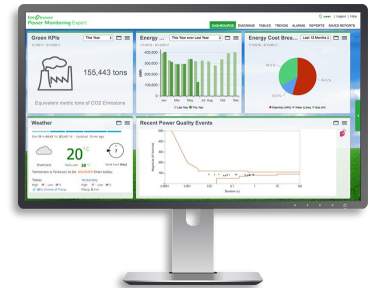


# EcoStruxure™ Power Monitoring Expert

## Elective Series - 2023 Delta

### Description:

This 1-day VILT demonstrates the new features of Power Monitoring Expert 2023. These features include Graphics Editor, Custom Day Reporting, and ION Secure Protocol. With the largest addition being Graphics Editor, students will learn how to navigate the new tool and build their own diagrams and one lines.



### Audience:

This course is designed for customers who have recently upgraded their PME system to version 2023. This is not an overview of PME in its entirety and will only focus on the additions and changes with the release of version 2023.

### Course Details

#### Duration:

- 1-Day

#### Delivery Type:

- Virtual Instructor-Led (VILT)

#### Product Numbers:

- 3000PMUWEB1DAY

### Prerequisites:

- A basic understanding of PME is needed.
- Some knowledge of Vista may be helpful and referenced but is not required.

### Students will be provided:

- Course material including presentations, labs, etc.
- Access to demo software for hands-on lab assignments
- Certificate of Completion
- CEUs: 0.6

### Objectives:

After completion of this training course, participants will be able to:

- Create Diagrams with the new Graphics Editor
- Understand the strong password policy in PME
- Identify and understand newly released reports
- Create Dashboards and Reports using a custom day definition
- Understand ION Secure Protocol

### Registration

- [Click here](#) to view available dates and to register for this course.

Question? Email [pmu@se.com](mailto:pmu@se.com)

# EcoStruxure™ Power Monitoring Expert

## Elective Series – Energy Billing Module

### Description:

This 1-day VILT focuses on the Energy Billing Module, which is a PME add-on module. This module is used to develop an accurate, complex energy bill based on data in PME's database. This data can be used for utility bill verification, load cost analysis, or tenant billing. Students will develop advanced rate schedules in the form of XML files, then run the various billing reports based on these rates. Students will also learn how to use the Time of Use (TOU) Editor.



### Audience:

Anyone who has a need to deploy and configure the Energy Billing Module. While the focus is on system integrators, this may also include experienced engineers who need to configure or modify the usage of this module.

### Course Details

#### Duration:

- 1-Day

#### Delivery Type:

- Virtual Instructor-Led (VILT)

#### Product Numbers:

- 3000PMUWEB1DAY

### Prerequisites:

- Working knowledge of PME software
- Experience configuring PME hierarchies
- Working knowledge of utility billing rate contents
- General computer skills and basic working experience with Microsoft Windows
- Completion of a PME Fundamentals, Operation, or Overview course is recommended

### Students will be provided:

- Course material including presentations, labs, etc.
- Access to demo software for hands on lab assignments
- Certificate of completion
- CEUs: 0.6

### Objectives:

After completion of this training course, participants will be able to:

- Run a report from the Energy Billing Module
- Add additional line items to an energy bill
- Develop a tiered time-of-use rate structure
- Generate a bill based on metered circuits in a datacenter

### Registration

- [Click here](#) to view available dates and to register for this course.

Question? Email [pmu@se.com](mailto:pmu@se.com)

# PowerLogic™ and ION Metering Hardware

## Installation & Troubleshooting

### Description:

This 4-Day in-person Instructor-Led course focuses on the installation, set up, and troubleshooting of PowerLogic™ and ION meters, and communication devices. Through a series of instructor-led topics, followed by hands-on lab exercises, students will learn specific meter capabilities, selection, and placement throughout a facility. Participants will also learn how to correctly wire and then configure these devices using the ION Setup Utility. They will also learn how to navigate through a meter display and how to identify and resolve issues related to configuration, wiring, or network communications. Finally, students will learn how to add and manage these devices in EcoStruxure™ Power Monitoring Expert (PME).



### 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 Details

##### Duration:

- 4-Days

##### Delivery Type:

- Classroom (CR)

##### Product Numbers:

- 3000PLUC4DAY

### Prerequisites:

- Basic computer skills and experience with Microsoft Windows
- Working knowledge and understanding of electrical terminology, concepts and calculations, including an understanding of the relationships among current, voltage, power and power factor in three-phase circuits

### Students will be provided:

- Course material including presentations, labs, etc.
- Access to demo hardware and software for hands-on lab assignments
- Certificate of completion
- 2.4 CEU's

### Objectives:

After completion of this training course, participants will be able to:

- Understand basic power fundamentals and terminology
- Determine the capabilities of specific PowerLogic and ION devices
- Use the PowerLogic™ and ION meter front panels
- Use the ION Setup Utility to troubleshoot CT and PT wiring issues
- Use the ION Setup Utility to modify and save meter configurations
- Explain how to correctly mount and wire PowerLogic™ and ION meters
- Upgrade the firmware of PowerLogic™ and ION meters
- Troubleshoot meter wiring and communication issues
- Configure PowerLogic™ gateways for device communications
- Add PowerLogic™ and ION meters into a PME system
- Create a simple power monitoring system in PME
- Generate a Vista diagram and create basic Vista objects

#### Registration

- [Click here](#) to view available dates and to register for this course.

Question? Email [pmu@se.com](mailto:pmu@se.com)



# ION Utility Metering

## Configuration and PME Administration

### Description:

This 4-Day instructor-led training focuses on the configuration and operation of ION revenue meters using the front panel, Setup software, and EcoStruxure™ Power Monitoring Expert (PME). Students will configure ION meters for revenue metering, advanced security, communications, energy pulsing, logging, and power quality monitoring.

With the meters configured, the students will proceed to build up their systems by adding meters to PME's Device Manager. The meter data will then be analyzed using PME's Dashboards, Reports, and Trends, though the other applications will be available for exploration.



### Audience:

Anyone who will be configuring, customizing, and troubleshooting ION meters extensively using the ION Setup Utility. The course has a focus on revenue meters, featuring the ION8650, ION7400, and ION9000.

### Course Details

#### Duration:

- 4-Days

#### Delivery Type:

- Classroom (CR)
- Virtual Instructor-Led (VILT)

#### Product Numbers:

- (CR) 3000PLUC4DAY
- (VILT) 3000PMUWEB4DAY

### Registration

- [Click here](#) to view available dates and to register for this course.

### Prerequisites

- Basic computer skills and experience with Microsoft Windows
- Basic metering terminology
- A basic working knowledge of power and energy will be helpful

### Students will be provided

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

### Objectives

After completion of this training course, participants will be able to:

- Navigate the front panel of an ION meter
- Use ION Setup Utility software to configure ION meters
- Use ION Setup Utility software to assess meter wiring
- Use ION Setup Utility software to manage ION meter programs
- Identify the components of a PME system
- Add serial and Ethernet meters to the PME system
- Analyze historical loads and consumption using Diagrams
- Create, manage, and automate reports with Web Reporter

Question? Email [pmu@se.com](mailto:pmu@se.com)

# Customer Dedicated Training Options



# Customer Dedicated Training Options

For customers with multiple students or specific training needs, it may be more beneficial to request a **Customer Dedicated training** event, which can be delivered right at the customer's site location, virtually, or even at our PMU Training Center via a **Customer Dedicated Workshop**.

While custom content is certainly available upon request, PMU has developed a series of **standardized 1-day agendas** (shown below). These 1-day agendas cover the most common training requests and can be delivered as individual events or combined to create a more comprehensive event. This allows customers to build a dedicated training event that best fits their sites' needs.

Review each of the 1-day agendas to determine which one(s) are required, and then reference **Table A** at the end of this section to determine the correct part numbers required.

## Standard 1-Day Agendas



### EcoStruxure™ Power Monitoring Expert (PME) 1-Day Standard Agendas

Page	Course Name
15	<a href="#">EcoStruxure™ PME – Operation (1-day Agenda)</a>
16	<a href="#">EcoStruxure™ PME – Administration &amp; Maintenance (1-day Agenda)</a>
17	<a href="#">EcoStruxure™ PME – ION Architecture Programming (1-day Agenda)</a>



### EcoStruxure™ Power Operation (EPO) 1-Day Standard Agendas

Page	Course Name
18	<a href="#">EcoStruxure™ Power Operation – Operation (1-day Agenda)</a>
19	<a href="#">EcoStruxure™ Power Operation – Administration &amp; Maintenance (1-day Agenda)</a>



### Hardware 1-Day Standard Agendas

Page	Course Name
20	<a href="#">PowerLogic™ and ION Metering Hardware – Installation and Troubleshooting (1-day Agenda)</a>



# EcoStruxure™ Power Monitoring Expert

## Operation – 1-day Agenda

### Description:

This 1-Day Instructor-Led course is designed as an introduction to the capabilities of EcoStruxure™ Power Monitoring Expert (PME). Students will follow along in their own system as the instructor provides a general overview of the PME architecture and client types, software, and hardware components. Focus will be given to the Web Applications which include viewing and creating Dashboards, Alarms, Trends, Reports, Diagrams, and User Management.



### Audience:

Owners or operators of an EcoStruxure™ Power Monitoring Expert - PME system.

#### Course Details

##### Duration:

- 1-Day

##### Delivery Type:

- Onsite Classroom (CR)
- Virtual Instructor-Led (VILT)

##### Product Numbers:

- Reference [Table A](#)

### Prerequisites:

- None

### Students will be provided:

- Operating Manuals or training material (if available) by request only
- Demo software or equipment is not included, but can be requested for purchase during the quotation process

### Objectives:

After completion of this training course, participants will be able to:

- Understand basic power fundamentals, terminology, and utility billing
- Understand what the PME software is, how it works, and its full capabilities
- Create and manage Dashboards
- Create and manage Reports
- Create and manage Alarms
- Create and manage Trends
- Create and manage user access via the web application
- Add and managing native serial and ethernet devices using the web client (Management Console and adding nonnative devices is not part of this course)
- View and navigate through existing Diagrams (Vista and Creating new diagrams is not part of this course)
- Understand proper meter selection, communication & basic configuration

#### Registration

- Contact [pmu@se.com](mailto:pmu@se.com) to begin this process.

Question? Email [pmu@se.com](mailto:pmu@se.com)

# EcoStruxure™ Power Monitoring Expert

## Administration and Maintenance – 1 - day Agenda

### Description:

This 1-Day Instructor-Led course focuses on teaching students how to manage and maintain an EcoStruxure™ Power Monitoring Expert (PME) systems to best meet their needs. Students will follow along in their own system as the instructor shows them how to add physical meters, logical devices, and user accounts to their systems. The course will also cover integrating PME with 3rd party hardware, as well as database management, system maintenance and backup, and disaster recovery



### Audience:

This course is designed for anyone who is responsible for administering, maintaining, and/or supporting a PME system, such as system administrators (and possibly IT Admins), as well as advanced PME users

### Course Details

#### Duration:

- 1-Day

#### Delivery Type:

- Onsite Classroom (CR)
- Virtual Instructor-Led (VILT)

#### Product Numbers:

- Reference [Table A](#)

### Prerequisites:

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

### Students will be provided:

- Operating Manuals or training material (if available) by request only
- Demo software or equipment is not included but can be requested for purchase during the quotation process

### Objectives:

After completion of this training course, participants will be able to:

- Understand and utilize system specifications to design a PME system
- Add meters and other hardware devices to the PME system
- Configure Logical Devices
- Incorporate 3rd party devices into the PME software
- Understand database structures and modify or adjust default database maintenance tasks

### Registration

- Contact [pmu@se.com](mailto:pmu@se.com) to begin this process.

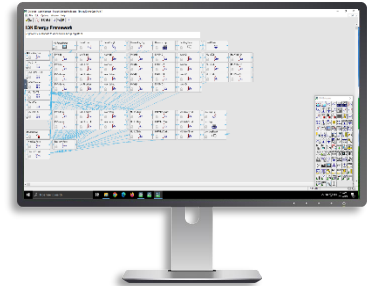
Question? Email [pmu@se.com](mailto:pmu@se.com)

# EcoStruxure™ Power Monitoring Expert

## ION Architecture Programming - 1 - day Agenda

### Description:

This 1-Day Instructor-Led course focuses on system and device level customization using the Designer application in PME. Students will follow along in their own system as the instructor provides an overview of the architecture of ION meters. They will be guided through 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 learned how to create multiple frameworks for integrating WAGES devices, control and process applications, logging, alarming, and custom calculations.



### Audience:

This course is designed for anyone who is responsible for administering, maintaining, and/or supporting a PME system, such as system administrators (and possibly IT Admins), as well as advanced PME users.

### Course Details

#### Duration:

- 1-Day

#### Delivery Type:

- Onsite Classroom (CR)
- Virtual Instructor-Led (VILT)

#### Product Numbers:

- Reference [Table A](#)

### 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:

- Operating Manuals or training material (if available) by request only
- Demo software or equipment is not included but can be requested for purchase during the quotation process

### Objectives:

After completion of this training course, participants will be able to:

- 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
- 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

### Registration

- Contact [pmu@se.com](mailto:pmu@se.com) to begin this process.

Question? Email [pmu@se.com](mailto:pmu@se.com)



# EcoStruxure™ Power Operation

## Operation – 1 - day Agenda

### Description:

This 1-Day Instructor-Led course is designed as an introduction to the capabilities of EcoStruxure™ Power Operation (EPO). Students will follow along in their own system as the instructor provides an overview of the EPO architecture, software, and hardware components. Focus will be given to the WebHMI, which includes real-time Diagrams, Alarms, and Trends. Reports and Dashboards will be built using the historical data in the Advanced Reports and Dashboards module.



### Audience:

Owners or operators of an EcoStruxure™ Power Operation system.

#### Course Details

##### Duration:

- 1-Day

##### Delivery Type:

- Onsite Classroom (CR)
- Virtual Instructor-Led (VILT)

##### Product Numbers:

- Reference [Table A](#)

### Prerequisites:

- None

### Students will be provided:

- Operating Manuals or training material (if available) by request only
- Demo software or equipment is not included, but can be requested for purchase during the quotation process

### Objectives:

After completion of this training course, participants will be able to:

- Understand basic power fundamentals, terminology, and utility billing
- Understand what the EPO software is, how it works, and its capabilities
- Navigate diagrams
- Create and manage trends
- View, acknowledge, and disable alarms
- Create custom alarm views
- Build custom dashboard views of historical data
- Run a variety of historical reports
- Deliver a report automatically with a subscription

#### Registration

- Contact [pmu@se.com](mailto:pmu@se.com) to begin this process.

Question? Email [pmu@se.com](mailto:pmu@se.com)

# EcoStruxure™ Power Operation

## Administration and Maintenance – 1 - day Agenda

### Description:

This 1-Day Instructor-Led course focuses on teaching students to manage and maintain their EcoStruxure™ Power Operation (EPO) system to best meet their needs. Students will follow along in their own system as the instructor provides an overview of the hardware and software components running EPO. They will learn how to backup and restore projects, add users, manage device communications, and edit diagrams. They will also learn how to manage separate device communications and plan for disaster recovery.



### Audience:

This course is designed for anyone who is responsible for administering, maintaining, and/or supporting an EPO system, such as system administrators (and possibly IT Admins), as well as advanced EPO users.

#### Course Details

##### Duration:

- 1-Day

##### Delivery Type:

- Onsite Classroom (CR)
- Virtual Instructor-Led (VILT)

##### Product Numbers:

- Reference [Table A](#)

### Prerequisites:

- A basic familiarity with using EPO
- A reasonable understanding of Microsoft Windows operating systems
- A basic working knowledge of power and energy will be helpful

### Students will be provided:

- Operating Manuals or training material (if available) by request only
- Demo software or equipment is not included, but can be requested for purchase during the quotation process

### Objectives:

After completion of this training course, participants will be able to:

- Understand the architecture and workflow of an EPO project
- Backup and restore a project
- Modify device communications
- Edit diagrams
- Modify communications in Advanced Reports
- Change database backup timing and location

#### Registration

- Contact [pmu@se.com](mailto:pmu@se.com) to begin this process.

Question? Email [pmu@se.com](mailto:pmu@se.com)

# PowerLogic™ & ION Metering Hardware

## Installation & Troubleshooting - 1 - day Agenda

### Description:

This 1-day Instructor-Led course focuses on the installation, set up, and troubleshooting of various PowerLogic™ and ION meters and communication devices a customer may own (reference the list of supported hardware below). Students will follow along on their own devices (unless demo equipment requested) as the instructor teaches meter capabilities, selection and proper placement around a facility. Participants will learn how to correctly wire and then configure these devices using the ION Setup Utility. They will also learn how to navigate through a meter display and how to identify and resolve issues related to configuration, wiring, or network communications. Finally, students will learn how to configure PowerLogic™ gateways for device communication.



### Supported Hardware:

- ION9000
- PM8000
- PM800
- EcoStruxure™ Panel Server
- Link150
- ION8650
- PM5000
- CM4000
- EcoStruxure™ Site Server
- EGX
- Enerlin'X
- Com'X

### Audience:

Anyone who will be designing, installing, configuring, troubleshooting or maintaining PowerLogic and ION metering and communication devices.

#### Course Details

##### Duration:

- 1-Day

##### Delivery Type:

- Onsite Classroom (CR)
- Virtual Instructor-Led (VILT)

##### Product Numbers:

- Reference [Table A](#)

### Prerequisites:

- Basic computer skills and experience with Microsoft Windows.
- Working knowledge and understanding of electrical terminology, concepts and calculations, including an understanding of the relationships among current, voltage, power and power factor in three-phase circuits.

### Students will be provided:

- Operating Manuals or training material (if available) by request only
- Demo software or equipment is not included, but can be requested for purchase during the quotation process

### Objectives

After completion of this training course, participants will be able to:

- Understand basic power fundamentals and terminology
- Determine the capabilities of specific PowerLogic and ION metering devices
- Use the PowerLogic™ and ION meter front panels
- Use the ION Setup Utility to troubleshoot CT and PT wiring issues
- Use the ION Setup Utility to modify and save meter configurations
- Explain how to correctly mount and wire PowerLogic™ and ION meters
- Upgrade the firmware of PowerLogic™ and ION meters
- Troubleshoot meter wiring and communication issues
- Configure PowerLogic™ gateways for device communication

#### Registration

- Contact [pmu@se.com](mailto:pmu@se.com) to begin this process.

Question? Email [pmu@se.com](mailto:pmu@se.com)

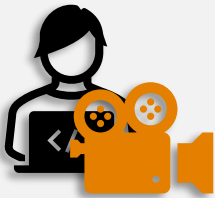


# Videography Service

- Interested in having your dedicated training event recorded?\*
- Add our **Videography Service** to your onsite training event as a complement to your learning experience!\*\*



Designed specifically for Customer Dedicated Onsite and Workshop events, our **Videography Service** allows attending students to preserve knowledge by providing:



- A **dedicated multimedia specialist** to handle all audio and video recording during the entire event using state-of-the-art equipment



- A **fully edited digital copy** of the training event shot in 4K HD and organized into chapters by subject

- Reference [Table A](#) to learn how to add this service to Customer Dedicated Onsite training events.
- Contact [pmu@se.com](mailto:pmu@se.com) to add this service to a Customer Dedicated Workshop event (discussed on the following page).

*\*PMU does not allow customers to record our training events themselves.*

*\*\*A signed waiver is required.*

Question? Email [pmu@se.com](mailto:pmu@se.com)

# Customer Dedicated Workshop

- Need help coordinating a location for your PMU training event?
- Allow PMU to host your class via a **Customer Dedicated Workshop!**
- Contact [pmu@se.com](mailto:pmu@se.com) to learn more!



Hosted at our Schneider Electric Nashville Hub located in Franklin, TN, our **Customer Dedicated Workshop** service provides:



- **State of the Art Facility:** Train in a modern and fully-equipped environment, designed to enhance your learning journey and ensure your safety and comfort.



- **Hands-On Learning:** Learn in a controlled training environment, gaining practical skills that can later be applied directly to your production environment.



- **Expert Guidance:** Access to some of the experts, not only in the training group, but also from the research and development teams that can help support further your training experience.

Question? Email [pmu@se.com](mailto:pmu@se.com)

# Table A - Customer Dedicated Training Events

## Quoting reference guide

The following table provides guidance on how to purchase/quote all **Customer Dedicated Training** events.

### Onsite Events

SE Part Number	Description
3000PMUSITE1C	1 Instructor for 1 day, up to 10 students (no minimum required), standard content, Standard Business Hours (SBH)
3000PMUSITE1CVF	1 Instructor for 1 day, up to 10 students (no minimum required), standard content, SBH, with Videography Service (VS).
3000PMUCSITEPREP	1 day of Instructor prep time for custom content requests. Qty as needed.
3000PMUCSITE	Used to cover cost of second instructor for classes with 11-20 students.
Use the following part numbers for multi-day Onsite events	
3000PMUSITE2C	1 Instructor for 2 days, up to 10 students (no min), standard content, SBH
3000PMUSITE2CVF	1 Instructor for 2 days, up to 10 students (no min), standard content, SBH, with VS
3000PMUSITE3C	1 Instructor for 3 days, up to 10 students (no min), standard content, SBH
3000PMUSITE3CVF	1 Instructor for 3 days, up to 10 students (no min), standard content, SBH, with VS
3000PMUSITE4C	1 Instructor for 4 days, up to 10 students (no min), standard content, SBH
3000PMUSITE4CVF	1 Instructor for 4 days, up to 10 students (no min), standard content, SBH, with VS

### Virtual Events

3000PMUCDVILT1DAY	1 Instructor for 1 day, up to 10 students (no minimum required), standard content, Standard Business Hours (SBH)
-------------------	--

### Workshops Events

Contact [pmu@se.com](mailto:pmu@se.com) for a custom quote



# Self-Paced Training Options





# Self-Paced Training Options

- Power Management University (PMU) understands that flexibility is key to effective learning.
- Therefore, we are excited to offer two **self-paced training options**, putting you in control of your professional development journey.
- Navigate to each **Self-Paced Training Option** to learn more!



## PMU+ Education Subscription



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[PMU+ Education Subscription](#)

## Education Kits



Page: 27

[Education Kits](#)



## Education Subscription

A flexible learning solution, designed to fit your team's needs.

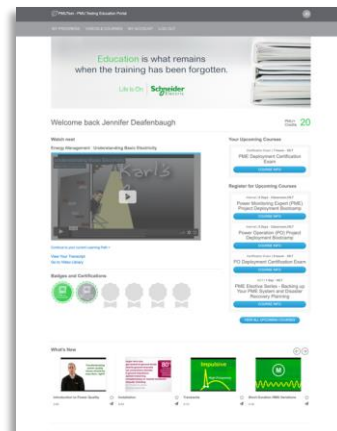
### What is it?

- A flexible annual subscription plan providing customers with **exclusive access to**, and **discounts on** a variety of self-paced and Instructor-Led training options to support their Energy Management Systems

### Who is it for?

- Any customer with an **EcoStruxure™ Service Plan (ESP)** via the add-on part number\*

### What's Included?



#### Access to the PMU+ Education Portal

- Self-Paced learning paths for both Meter and Power Fundamental topics
- Video Library with over 300 training modules on everything from software to hardware
- Instructor-Led course schedule and registration process

4

#### Education Credits

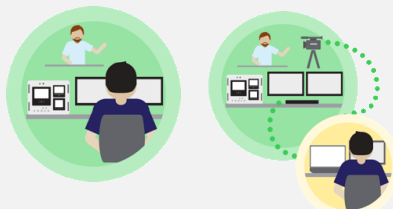
- Additional credits can be purchased at an additional discount \*\*
- Rollover up to 4 unused credits to next year's subscription upon renewal\*\*

### Credit Value

#### 4-Day

##### Factory Training

Classroom or Virtual



4 Credits / Student

#### 1-Day

##### Factory Training

Virtual



1 Credit / Student

#### 1-Day

##### Dedicated Training

Virtual



4+ Credits / Day  
For up to 6 students

\*PMU+ Part Number: **3000PMUPLUS4**

\*\* Additional Credits: **3000PMUPLUSADD4CR**

Question? Email [pmu@se.com](mailto:pmu@se.com)

# Education Kits

## Train on your own time:

The PMU Education Kit includes a training lab station, ION9000, PM8000, and PM5000 meters, as well as user controls to adjust loads and create waveform events. It also comes with a digital instruction guide and workbook, all packaged in a hard-side travel case, ready to use.

## Audience:

- Anyone with a Schneider Electric power monitoring system that contains the meters included in the kit.
- Anyone needing to educate their own staff on the hardware and supporting software.
- Anyone needing the ability to test or pilot advanced frameworks created that would eventually reside in production meters.
- Anyone needing to demonstrate the hardware and supporting software solution to a customer/user.
- Universities looking to enhance their Power Engineering or other curriculum.



## Kit Details

### Course Reference Code:

- PMUTRAINLAB9

### To Order:

- [Click here](https://pmutrain.com/educationkit.cfm) to begin, or visit:  
[pmutrain.com/educationkit.cfm](https://pmutrain.com/educationkit.cfm)

\*Please include a recipient email address with your order so that you may receive the Instruction Guide and Workbook PDFs.

\*International Education Kit recipients may be responsible for additional shipping fees.

## Students will be provided:

- Training Lab Station
- Instruction Guide (Digital Copy)
- Student Workbook (Digital Copy)
- Power Cables
- Hard Side Travel Case

## Objectives:

After completion of the workbook, participants will have experience with:

- Front Display Navigation and Setup
- ION Setup Navigation and Setup
- Navigating Phasor Diagrams
- Adding Devices to PME
- Adding a Dashboard in PME

Question? Email [pmu@se.com](mailto:pmu@se.com)



# Additional Resources

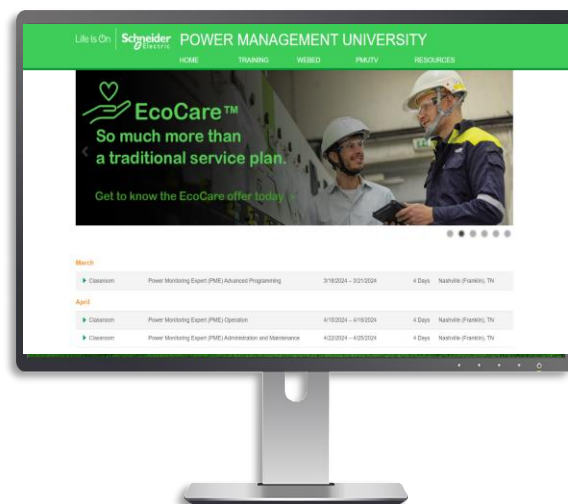




# PMU Website

[pmutraining.com](http://pmutraining.com)

Visit our website for a variety of **PMU training resources** such as:



- Current PMU Catalog
- Factory Course Schedule & Registration
- Nashville Training Center Logistics
- PMU+ & Education Kit Information
- Terms & Conditions
- Registration and Payment FAQs
- **PMUtv** (discussed below)

## PMUtv

Explore a variety of free videos on topics ranging from specific meters and software information, to general knowledge such as Power Quality & Fundamentals.



**Karl's Corner**  
Product-agnostic videos teaching the fundamentals and value of Power Monitoring



**Get Connected**  
Tips and tricks to maximize your EcoStruxure™ Power Monitoring Expert (PME) system



**EcoStruxure™ Power**  
Solve big picture problems by exploring case studies using the EcoStruxure™ Power system



**The Power Block**  
Broadcasts covering specific hardware and software offers



**Dr. ION**  
10-part series discussing the ION74000, ION8650 & ION9000 and topics such as Revenue & Power Quality.

Question? Email [pmu@se.com](mailto:pmu@se.com)

# How to Register for Factory Courses

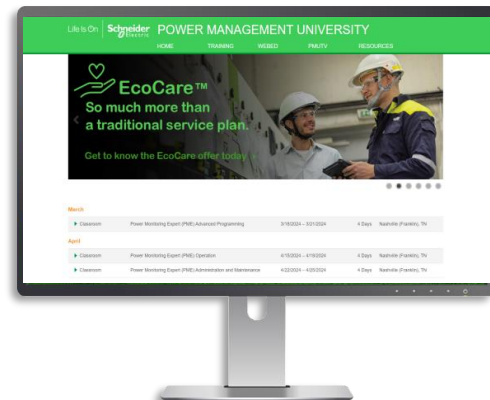
The following job aid provides guidance on **how to register for a PMU Factory Training Course**.

## 1. Navigate to the appropriate portal as indicated below.

**PMU+ Customers** must use their dedicated Education Portal at:  
[pmutraining.com/pmuplus](https://pmutraining.com/pmuplus)



**NON PMU+ Customers** must use the main PMU Website at:  
[pmutraining.com](https://pmutraining.com)



## 2. Login with your existing Student Number or create a new Student Account.

- Your uniquely assigned **Student Number** will appear on the final confirmation page upon submitting your information. It will also be **sent to the email address provided** during Student Account creation.
- If you have **forgotten your Student Number**, you can retrieve it by clicking on “Forgot Student Number” and providing your email address. .

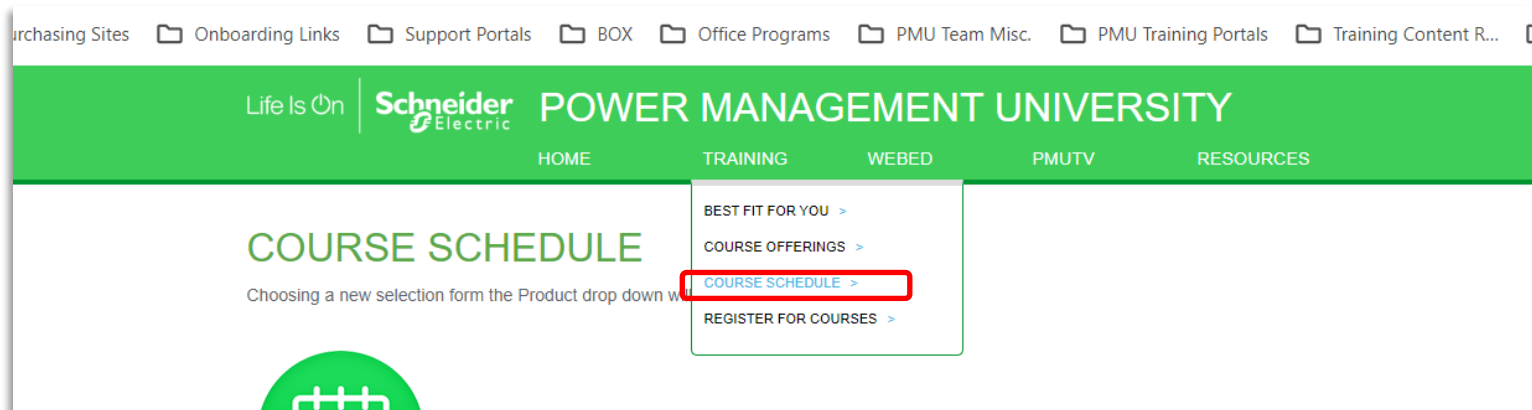
A screenshot of a login and account creation form. At the top, it says 'Student Number:' followed by a large white input field. Below the input field is a blue 'LOG IN' button. Underneath the button, there are two green links: 'NEW STUDENT ACCOUNT' and 'FORGOT STUDENT NUMBER'.

Question? Email [pmu@se.com](mailto:pmu@se.com)

# How to Register for Factory Courses

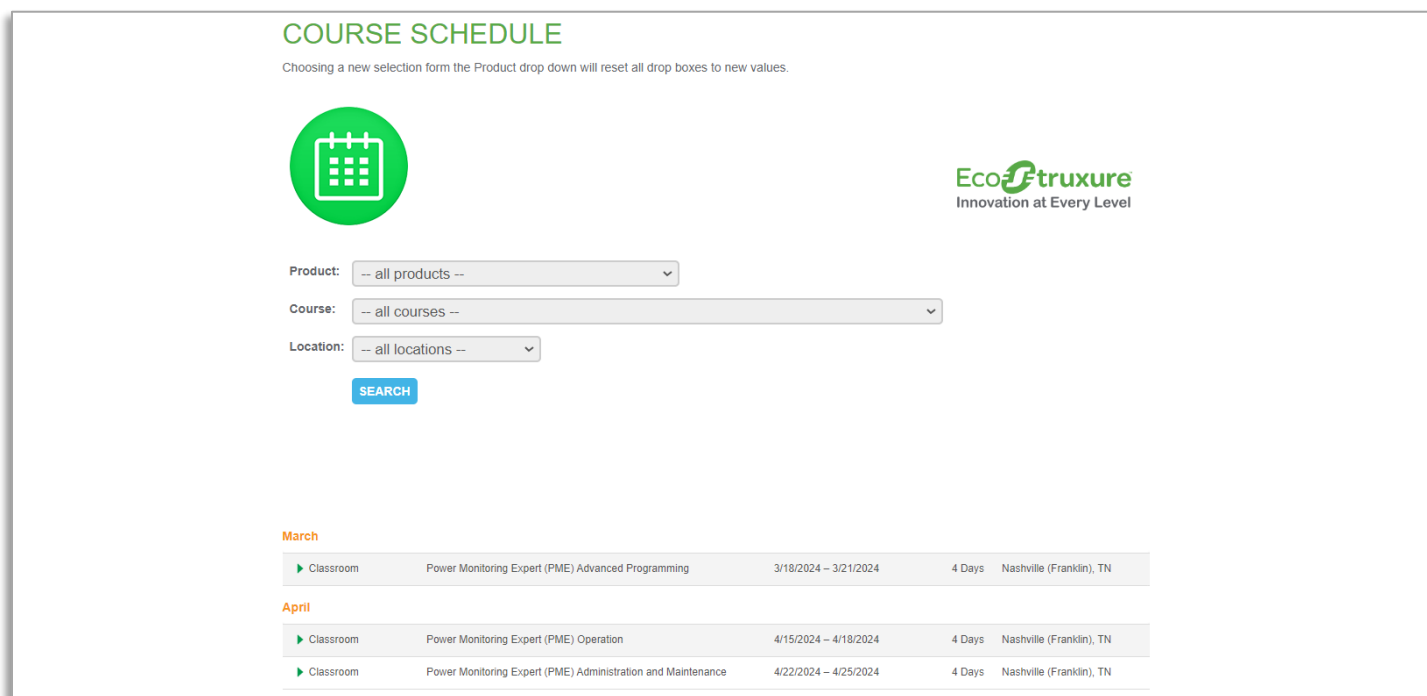
## 3. Navigate to “Course Schedule”.

- Located within the Training Tab, click on the “Course Schedule” link.



## 4. Locate the course you wish to register for

- This course schedule view allows users to search for a specific courses by filtering by product, specific course name or delivery method (location). It also provides a list of all Factory Courses by upcoming schedule.



Question? Email [pmu@se.com](mailto:pmu@se.com)

# How to Register for Factory Courses

## 5. Once located, expand the course view

- Click anywhere on the course line to open the course details view which includes information such as:
  - Overview & Objectives
  - Date / Location
  - Web (Credit Card) Pricing / PMU+ Credit Cost
  - Downloadable Brochure (Course Description)
  - Course Reference Code

**March**

- ▶ Classroom Power Monitoring Expert (PME) Ad

**April**

- ▶ Classroom Power Monitoring Expert (PME) Op
- ▶ Classroom Power Monitoring Expert (PME) Ad

**May**

- ▶ Classroom PowerLogic and ION Metering Hardware - Installation and Troubleshooting (4 Day)
- ▶ VILT PME Elective Series - EcoStruxure Delta **VILT ONLY**

**Classroom** PowerLogic and ION Metering Hardware - Installation and Troubleshooting (4 Day) 5/8/2024 – 5/9/2024 4 Days Nashville (Franklin), TN

**Overview:**

This 4-day course focuses on installation and setup of PowerLogic and ION metering. Participants will identify and resolve meter setup issues, CT and PT wiring issues, and meter communication network issues. Participants will examine the capabilities of specific PowerLogic and ION meters and learn how to select the correct meter for different metering points in a facility. Participants will explore the features of PowerLogic communication gateways and practice setup and configuration. ION Setup will be used to perform initial meter configuration and verification. ION Setup will also be used to setup logging and event detection for each meter in the system. Participants will also create and manage a basic system in EcoStruxure Power Monitoring Expert. This course introduces installing and setting up a metering system utilizing PowerLogic and ION hardware.

**Who Should Attend:**

Anyone who will be designing, installing, configuring, troubleshooting or maintaining PowerLogic and ION metering and communication devices.

**Prerequisites:**

- Basic computer skills and experience with Microsoft Windows
- Working knowledge and understanding of electrical terminology, concepts, and calculations, including an understanding of the relationships among current, voltage, power and power factor in three-phase circuits.

**Students Will Be Able To:**

- Understand basic power fundamentals and terminology
- Determine the capabilities of specific PowerLogic and ION metering devices
- Use the PowerLogic and ION meter front panels
- Use the ION Setup Utility to troubleshoot CT and PT wiring issues
- Use the ION Setup Utility to modify and save meter configurations
- Explain how to correctly mount and wire PowerLogic and ION meters
- Upgrade the firmware of PowerLogic meters and ION meters
- Troubleshoot meter wiring and communication issues
- Configure PowerLogic gateways for device communications
- Add PowerLogic and ION meters into an EcoStruxure system
- Create a simple power monitoring system in EcoStruxure Power Monitoring Expert
- Generate a Vista diagram and create basic Vista objects

**Registration Deadline:** 04/19/2024

**Course Reference Code:** 3000PMUHW250

**Course Type:** Factory

**Location:** Nashville (Franklin), TN

**Web Price:**

**Subscription Credits:** 4

[Payment FAQs](#)

**Register** **Download Course Description**

## 6. Click Register

Question? Email [pmu@se.com](mailto:pmu@se.com)



# How to Register for Factory Courses

## 7. Read through and agree to PMU's Terms & Conditions.

future PMU training offer.

Cancellation Charges for Web-Based Training Classes:

On-Demand Campus (ODC) Subscriptions  
PMU+ Subscriptions  
Custom Education Portals

No refunds are offered for subscription-based training once access has been activated.

☒ I agree with all Terms and Conditions.

## 8. Confirm Course and Contact Information

- Enter or confirm your mobile phone
- Enter a Discount Code (if applicable)
- Select "Proceed with Registration"

Please confirm the following information:

**Your Name:** Jennifer Deafenbaugh  
**Your Student Number:** je04808de  
**Your Company:** ABC\_TEST  
**\* Mobile Phone:**

**Course Registering For:** PowerLogic and ION Metering Hardware - Installation and Troubleshooting (4 Day) - 3000PMUHW250  
**Location:** Nashville (Franklin), TN  
**Date(s):** 5/6/2024 - 5/9/2024

**Web Price:**

**Enter Discount Code (if applicable):**

Question? Email [pmu@se.com](mailto:pmu@se.com)

# How to Register for Factory Courses

## 9. Confirm Course Payment Method

- A valid form of payment is required to receive your final email confirmation, which guarantees your seat in a class. Emails will come from [NoReply@verified.se.com](mailto:NoReply@verified.se.com), so it is *recommended to add this address to your approved email sender list to ensure receipt of this email and other important course communications*.
- Use the **drop-down menu to select** one of the following options:
  1. **Credit Card** – Payments via Visa®, MasterCard®, or American Express® can be submitted during individual online registration.
  2. **PO Number** – The Purchase Order (PO) option will require customers to enter both the Sales Quote # as well as the PO# or Sales Order (SO) #. See the next page for instructions on how to get a formal quote.
  3. **Prepaid Voucher** – Vouchers may have a “V” or “PP” prefix., Example: PPV4-0117-9RN93863MU674735N
  4. **PMU+ Credits** – Available for use by customers with an active PMU+ Education Subscription by registering through their PMU+ Education Portal and entering their support contract number into the designated field.

### PAYMENT INFORMATION

Your Name:  
Your Company:  
Your Student Number:  
Course Registering For: PowerLogic and ION Metering Hardware - Installation and Troubleshooting (4 Day) - 3000PMUHW250  
Location: Nashville (Franklin), TN  
Web Price:  
Subscription Credits:  
Date(s): 5/6/2024 - 5/9/2024

Please fill out the form below to register for this course. A valid form of payment is required to register.

[Payment FAQs](#)

Course Payment Options:

-- Please select an option --

-- Please select an option --

Credit Card

PO Number

Prepaid Voucher

Schneider Electric employee

PMU+ Credits

Question? Email [pmu@se.com](mailto:pmu@se.com)

