

Life Is On

Schneider
Electric

PMU
TRAINING CENTER

2023

Course
Catalog

pmutraining.com

Power Management University

Whether you generate, transmit, distribute, or consume electricity, today's energy market is more complex than ever. Schneider Electric™ provides comprehensive solutions to develop a long-term energy action plan for your business. Understanding these solutions is key to improving energy performance. Allow our professional training staff and training options to lead you on your journey to optimize performance and maximize the return on your investment.

Table of Contents

- PMU+, page 3
- PMU Website, page 4
- Who is PMU?, page 5
- Online Training, page 6
- Classroom Training, page 7
- Course Offerings, pages 8-14
- How to Register, pages 15-17
- Education Kit, page 18
- Pricing Sheet, page 19



An annual education subscription plan, tailored to your training needs.

The Education Subscription includes a PMU+ Education Portal login and 4 PMU+ Credits*. Subscription credits are a cost savings over other methods of purchasing training. One administrator and up to five users are included with a subscription.

This offer is included in Ultra Service Contracts and is optional for Prime Service Contracts.

Manage your team's learning progress in the Education Portal:

Choose how to use your Education Subscription Credits:

- Product and role-based training paths for an improved learning experience:
 - > Connected Devices
 - o Meter Fundamentals - Meter Anatomy
 - o Setting up the PM5000
 - o Setting up the PM8000
 - o Setting up the ION9000
 - > Power Fundamentals
 - o Energy Management
 - o Power Quality
 - o Reliability
- Dashboards to track team progress with easy access to training paths and transcripts
- Access to over 350 videos in the Education Library (formerly the On-Demand Campus)
- Attend classes in person at the NashvilleHub (3-4 credits)
- Attend Virtual Instructor-Led Training (VILT) Sessions (1-4 credits)
- Coordinate with a PMU engineer to setup a custom 1-day Virtual Instructor-Led Training or Consulting Session with up to 5 attendees (4 credits)
- Roll over up to 4 unused credits to next year's subscription

**You may purchase additional credits and assign them to team members as needed.*

Part Number: 3000PMUPLUS4

Additional Credits: 3000PMUPLUSADD4



PMU Website

Be sure to visit our website to get the latest information on class schedules and course offerings.

From the website, one can:

- View course information
- Determine your learning path
- Check course schedules
- Register for classes
- Find contact information
- Access logistical information about our factory training center
- Submit inquiries regarding custom Onsite or custom webinar training ... and much more.

Check it out at www.pmutraining.com

Best in Class Training, Tailored to Your Facility's Needs

Who is Power Management University (PMU)?

PMU consists of a group of industry professionals with diverse backgrounds dedicated to providing an exceptional training experience for all attendees. PMU instructors have over 75 years of cumulative experience and carry qualifications such as:

- Certified Energy Manager®
- Business Energy Professional
- Professional Engineer
- Pragmatic Marketing Certified
- OPC® Level 1 and 2 Certified
- LEED® Certification

Why do you need to attend a PMU training course?

Attending a PMU-sponsored course will enable the attendees to utilize their Schneider Electric power monitoring system more quickly and effectively. This allows those attendees to see an increased ROI and ensures their facility will realize energy savings as quickly as possible.

What type of training does PMU offer?

PMU offers a wide variety of targeted power monitoring solution courses, including standard and custom courses. PMU's commitment to ensuring attendees understand all the tools available to them with their new power monitoring system allows the attendees' employers to meet and, often, exceed their energy plan goals.

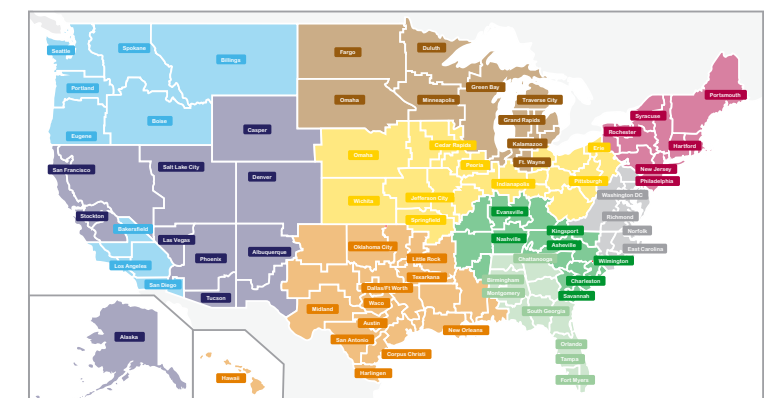
How can you attend training?

PMU offers a variety of training mediums, including:

- Instructor-led classroom training
- On-site, instructor-led classroom training
- Consulting (one-on-one) training
- On-Demand Campus self-guided training
- PMU+ Education Portal - Self-paced online learning modules

Contact your regional sales team for a formal quote:

- Northeast Team: DPNE@se.com
- East Team: DPE@se.com
- East Central Team: DPEC@se.com
- Southeast Team: DPSE@se.com
- South Team: DPS@se.com
- Central Team: DPSC@se.com
- North Central Team: DPNC@se.com
- Southwest Team: DPSW@se.com
- West Team: DPWE@se.com



Online Training

Virtual Instructor-Led Training (VILT)

If you are unable to travel or be away from your facility for multiple days of training, PMU offers a live distance learning solution. Our VILT environment provides attendees the experience of in-classroom training to any location with a good internet connection. This solution incorporates multiple live cameras and a hands-on lab feature that allows each attendee to have remote access to our actual training equipment and their own individually assigned lab station in our Franklin, TN training hub.

- 4-Day Training Courses-Our Factory Training options have been reformatted for this digital delivery format.
- PME Elective Series-These workshops allow you to get hands-on experience in a variety of topics in a 1-2 day format.
- Virtual On-site Training-Customized training for your facility, delivered in an online format.

Visit www.pmutraining.com/distancelearning.cfmt to learn more and to see which of our courses are available in the VILT format and register.

PMU+ Education Subscription

This online team-based subscription allows your team access to structured learning paths and the PMU Education Library. Self-paced training courses and Lab time on-demand are offered exclusively to subscribers. 4 PMU+ Subscription credits are included, which can be used for a variety of online and in-person training options.

Visit https://pmutraining.com/education_subscription.cfmt to learn more.

PMUTV

These videos are free and can be shared with anyone who can benefit from the information presented. They are designed to present information in an easy-to-understand, efficient manner.

- Karl's Corner-Product-agnostic videos designed to teach the fundamentals and value of Power Monitoring.
- Get Connected-Tips and tricks to help you make the most of your Power Monitoring Expert system.
- EcoStruxure Power-Solve big picture problems by exploring case studies using the EcoStruxure Power system.
- The PowerBlock-Broadcasts that cover specific hardware and software offers.
- Dr. ION-Learn about Schneider Electric's offer for Utility Metering, including ION meters and software customization.
- Power Scada Operation Tutorials-Learn about specific Power Scada software features.

Visit pmutraining.com/pmuv.cfmand to select to see all the videos we offer.

Classroom Training

Factory Training

Our training center in Franklin, TN offers a variety of courses that teach students how to utilize and get the most from their Schneider Electric power monitoring products. Each course focuses on different roles and needs; "why" and "how" to use the products. Students develop proficiency through a variety of hands-on exercises and quality instruction.

In addition to the training, customers will be at the location where the products are designed, developed, and supported. Within this environment, face time with people who can make a difference for you and your company is invaluable.

To learn more about our specific class offers, please go to the "Factory Training" section of this catalog and sign up at www.pmutraining.com.

On-site Training

If you prefer a custom training agenda for multiple people focused on your system or have a training budget without travel, then on-site training is your best solution. We offer flexible agendas that can separate training based on job function with the solution. For example, one day we can focus on the operation of the software and how to extract and analyze data from the system. Another day, we can train meter techs or electricians on the meters and the communication installed at your site.

We have agendas that specialize on system maintenance, customization, or special focused areas like Power Quality. Our instructors will come to your site and either train you on your own system, on our demo equipment we ship to your site, or both. We will tailor the agenda to be focused entirely on the equipment you have and the objectives you want.

Pricing is based on the number of days needed.

For pricing and to discuss options, contact us at (615) 538-9868.



Course Offerings

EcoStruxure™ Power Monitoring Expert (PME) Operation

Overview

This 4-day overview course focuses on how and why to use an EcoStruxure Power Monitoring Expert system. Students will be exposed to power monitoring fundamentals to set a baseline for class. Students will practice using PowerLogic and ION meter front panels to verify the configuration of devices that already exist in the system. In a hands-on lab environment, students will use the Web Applications offered in PME to extract and analyze the data coming from connected devices. Students will learn how to quickly examine data from their system using tools like Dashboards, Reports, Trends, Alarms, and Diagrams. The course then moves on with an overview of one of the engineering client tools, Management Console, to ensure the attendees understand how to add new devices to the PME system. The course concludes with a round-robin session to ensure that students “take away” one tangible item they will do when they get back to their location and their PME system.

Duration

4 Days (Monday - Thursday). Daily hours may vary, depending on Classroom vs. Remote delivery.

Who should attend

Anyone who will be/ is using PME or migrating from our SMS platform or ION platforms.

Prerequisites

- Basic computer skills and experience with Microsoft Windows
- Basic metering terminology

Students will be able to

- Understand basic power fundamentals and terminology
- Verify the configuration of meters in a PME system
- Analyze historical loads and consumption using Diagrams
- Manage events and alarms in new Incident Alarm Viewer web tool
- Analyze power quality and waveform data in the new Waveform viewer
- Create, manage, and automate reports with Web Reporter
- Create and manage Trends in Trends web tool
- Create and manage Dashboard web tool



EcoStruxure™ Power Monitoring Expert (PME) Advanced Programming Programming

Overview

This advanced programming course focuses on system and device level customization using the Designer interface in PME software. Students will learn the architecture of the ION meter along with using the Designer interface to examine the default frameworks. Students will be guided through a series of lab activities to creating custom applications for equipment monitoring, alarming and logging. Students will learn to program the Virtual ION Processor (VIP) for special applications such as data aggregation, logging, and alarming. Students will create a custom virtual meter framework by aggregating multiple meters in the VIP and displaying the real-time and historical information from that newly created meter in the Vista application. Students will learn the differences between the default meter templates and firmware versions that can be uploaded to devices and be able to describe each. At the end of the course, students will have created frameworks for integrating the several types of WAGES devices available and programmed frameworks that will perform process and control applications.

Duration

4 Days (Monday -Thursday). Daily hours may vary, depending on Classroom vs. Remote delivery.

Who should attend

This course is designed for anyone who works with a PME system and has reasonable knowledge of the default functions of ION meters and PME software. This course may be appropriate 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.

Prerequisites

- Working knowledge of PME software, especially experience using Vista
- Working knowledge of the default capabilities of ION meters
- General computer skills and basic working experience with Microsoft Windows
- Completion of a PME Fundamentals or Overview course is recommended

Students 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 applications inside of ION meters to monitor processes and control functions
- Understand the ION Reference document and how to use it
- Learn best practices for programming in Designer



EcoStruxure™ Power Monitoring Expert (PME) Administration and Maintenance

Overview

This training curriculum focuses on teaching students to manage and maintain their Power Monitoring Expert (PME) systems to best meet their needs. Students will learn how to design PME systems and plan system deployments. The students will proceed to build up their systems by adding meters, adding user accounts, configuring meter hierarchies, and building custom graphics screens. The course will also cover integrating PME with 3rd party hardware, as well as database management, system maintenance and backup, and disaster recovery.

Duration

4 Days (Monday -Thursday). Daily hours may vary, depending on Classroom vs. Remote delivery.

Who should attend?

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.

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

Prerequisites

- 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 and 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

Internal Hardware Installation & Troubleshooting

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. The ION Setup Utility will be used to display real-time data tables for the purpose of verifying that meter CTs and PTs are correctly wired to the meters. The ION Setup Utility 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.

Duration

4 Days (M-W 8am-4pm / Th 8am-1:30pm).

****Please book departing flights for 4pm or later on the last day of class.**

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

PME Elective Series

The PME Elective Series delivers advanced topics through the Virtual Instructor-Led Training (VILT) format. These classes are shorter than PMU's traditional classes and they allow students to log into and access live meters virtually in the PMU Training Lab in Franklin, TN.

Check out pmustraining.com/distancelearning.cfm to learn about course prerequisites and to register for Elective Series classes.

1-DAY (6 HR) PME Elective Series Classes(3000WEB1DAY)

Getting Started with PME Designer

This advanced programming webinar focuses on an introduction to the Designer interface in PME software. Students will learn the architecture of the ION meter along with using the Designer interface to examine the default frameworks. Students will also be introduced to the Virtual ION Processor (VIP) navigation and features. Students will learn the differences between the default meter templates and firmware versions that can be uploaded to devices and be able to describe each. At the end of the course, students will have learned how to open and navigate the nodes available to the Designer tool as well as best practices for program creation and backup of .dcf and .cfg files to preserve the node environment.

Learn How to Configure Alarming and Logging in PME

This advanced programming course focuses on system and device level customization using the Designer interface in PME software. Students will be guided through a series of lab activities to creating custom applications for equipment monitoring, alarming and logging. Students will learn to program the Virtual ION Processor (VIP) for special applications such as logging, and alarming.

How to Customize Graphic Screens in Vista

This advanced programming course focuses on system and device level customization using the Designer interface in PME software. Students will learn how to link the Vista application to Designer to display real-time values, status, and pass program variables to Designer. Best practices will be shown to use Vista to augment the Designer programming interface.

Adding and Managing Devices in PME

This training curriculum focuses on teaching students to manage and maintain their Power Monitoring Expert (PME) systems to best meet their needs. Students will learn how to build up their systems by adding meters, modifying device and site names, communication parameters, and proper procedure for removing sites, devices, and associated historical data. The course will also cover integrating PME with 3rd party hardware.

Configure Meters and Communication Troubleshooting

This Webinar 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. The ION Setup Utility will be used to display real-time data tables for the purpose of verifying that meter CTs and PTs are correctly wired to the meters. The ION Setup Utility will also be used to setup logging and event detection for each meter in the system. This course introduces installing and setting up a metering system utilizing PowerLogic and ION hardware.

Backing up Your System and Disaster Recover Planning

This training curriculum focuses on teaching students to manage and maintain their Power Monitoring Expert (PME) systems to best meet their needs. The course will cover User Management, database management, available troubleshooting tools, system maintenance and backup, and best practices for disaster recovery.

Learn How to Setup and Automate Web Reports in PME

As with all our elective series classes, this remote session will cover a specific task, tool or use case as it pertains to the PME platform. Reports displays pre-defined report templates that can be used to view and analysis historical data from the system. These capabilities as well the pertinent use cases of the Reports tool will not only be covered with presentation and discussion but also practiced, with a hands-on lab session for the attendees.

2-HOUR PME Elective Series Classes(3000WEB2HR)

Learn How to Visualize Data with Dashboards

As with all our elective series classes this remote session will cover a specific task, tool or use case as it pertains to the PME platform. Dashboards is a component of the Power Monitoring Expert web client that allows the user to visualize past and present energy usage in meaningful graphic representations called gadgets. Gadgets are used to display various information within a single dashboard. Dashboards can also be enabled to run as an autonomous slideshow for display in the main entrance of a facility. These capabilities as well the pertinent use cases of the dashboard tool will not only be covered with presentation and discussion but also practiced, with a hands-on lab session for the attendees.

Learn How to Setup and Automate Web Reports in PME

As with all our elective series classes, this remote session will cover a specific task, tool or use case as it pertains to the PME platform. Reports displays pre-defined report templates that can be used to view and analysis historical data from the system. These capabilities as well the pertinent use cases of the Reports tool will not only be covered with presentation and discussion but also practiced, with a hands-on lab session for the attendees.

How to Customize Graphic Screens in Vista

This advanced programming course focuses on system and device level customization using the Designer interface in PME software. Students will learn how to link the Vista application to Designer to display real-time values, status, and pass program variables to Designer. Best practices will be shown to use Vista to augment the Designer programming interface.

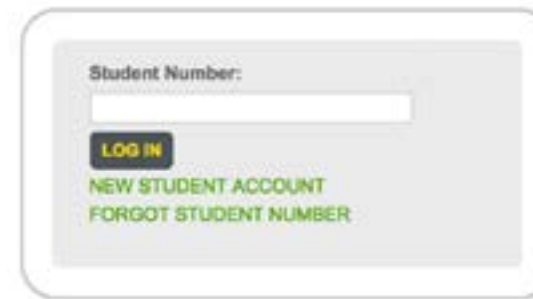
Adding and Managing Devices in PME

This training curriculum focuses on teaching students to manage and maintain their Power Monitoring Expert (PME) systems to best meet their needs. Students will learn how to build up their systems by adding meters, modifying device and site names, communication parameters, and proper procedure for removing sites, devices, and associated historical data. The course will also cover integrating PME with 3rd party hardware.

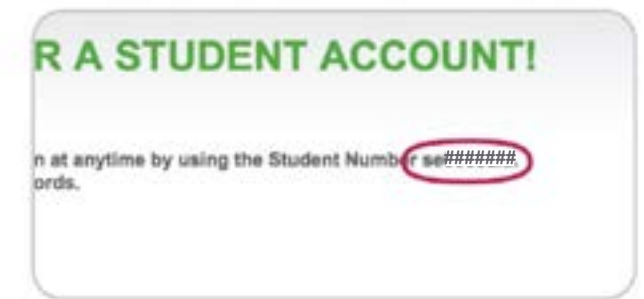
How to Register for Courses

- Register online by visiting: www.pmutraining.com.
- If you are a PMU+ Subscriber, visit your education portal at www.pmutraining.com/pmuplus.

1. Log In Using Your Student ID



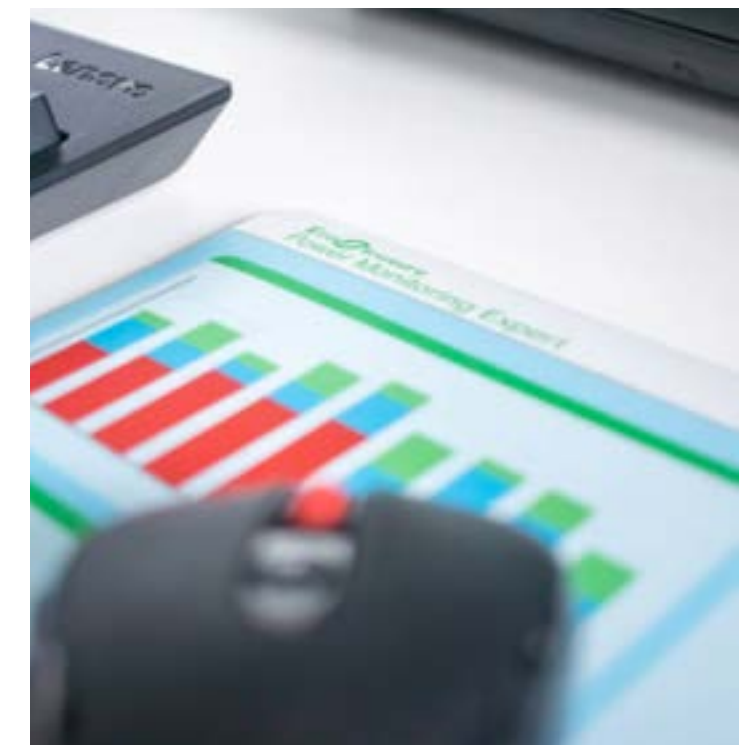
Log in with your existing Student Number or create a new student account and log in. If you have forgotten your Student Number, you can retrieve it by clicking on "FORGOT STUDENT NUMBER" and providing your email address.



Note for New Users: When you create a new account, your Student Number will appear on the confirmation page after you submit your Student Account Profile information. It is also sent to the email address you have provided. Be sure to note your uniquely assigned user ID.

2. Search for and Select a Class

Click on "Courses > Training Schedule" from the top menu.





- From the "Course Schedule" page, you can:
- View a list of scheduled courses
 - Easily find dates for classes you are interested in
 - Find course catalog numbers and pricing
 - Download course descriptions with agendas
 - Find specific course hours
 - See logistics information
 - Read information on payment options

Don't forget to add our email address: PowerLogic.University@se.com to your approved sender list to ensure that you are able to receive important communications from us regarding courses for which you have registered.

4. Submit Payment Information

Select your payment type and enter your payment information:



3. Select Your Attendance Type

Select whether you will be attending in-person, at the Schneider Electric NashvilleHub in Franklin, TN or via our virtual classroom:



You must enter/submit a valid form of payment to receive your final email confirmation, which guarantees your seat in a class. Note that PMU+ Credits are only available as an upgrade to a Prime or Ultra level support contract.

Please visit www.pmutraining.com/paymentfaqs.cfm for additional information on:

- Payment process details based on chosen form of payment
- How to locate a Schneider Electric USA distributor in your area
- How to request an official training quote
- How to register using a coupon
- How to register with a discount code
- How to use PMU+ Subscription Credits

PMU+ Subscription Credits are only available for use when courses are accessed through the PMU+ Education Portal pmutraining.com/pmuplus. For details

The PMU Education Kit



Train on your own time.

This kit is designed so that your staff can test code, create advanced frameworks, and gain more in-depth experience with the meters they use every day, without disrupting your facility's production environment.

This kit is also great for educational institutions specializing in power engineering and for individuals who need to demonstrate meter functionality.

Kit includes:

- Training Lab Station
-ION9000
-PM8000-
PM5500
- Instruction Guide
- Workbook
- Travel Case

SE Product Number: PMUTRAINLAB9

NOT FOR RESALE -For Education Purposes Only.

Education Kits cannot be shipped internationally.

To order, contact your sales rep or visit pmutraining.com/educationKit.cfm

Pricing Sheet

- 1 Choose a course from the list below
- 2 Check the PMU website for dates of availability
- 3 Log in with your Student ID and register for your chosen class

Please email us at PowerLogic.University@schneider-electric.com or call us at 615-538-9809 should you need any assistance with the registration process.

Course	SE Product Number	Course Reference Number	Length
EcoStruxure™ Software Solutions Factory or VILT Classes			
PME Operation	3000PLUC4DAY	3000PMEOPS100	4 Days
PME Administration and Maintenance	3000PLUC4DAY	3000PMEADMIN200	4 Days
PME Advanced Programming	3000PLUC4DAY	3000PMEPROG300	4 Days
Hardware Installation and Troubleshooting	3000PLUC4DAY	3000PMUHW250	4 Days
Self-Paced Training Solutions			
PMUPlus	3000PMUPLUS4		
Add-on Credits			
Educational Hardware			
PMU Education Kit with ION9000, PM8000 and PM5000meters	3000PMUTRAINLAB	PMUTRAINLAB9	

Forms of payment accepted*:

1. Credit Card**
Payments via Visa®, MasterCard®, or American Express® can be submitted during the individual online registration process.
2. Purchase Order†
All purchase order registrations will require the prior issuance of a formal sales quote.
3. Prepaid Voucher
Prepaid vouchers containing a "V" prefix (e.g., V4-1016-12345687-01) should be entered in the "Voucher Number" field on the online registration form.
4. Buy One - Get One Free (2-for-1) Coupon‡
This coupon is awarded in the Welcome Packet for each purchase or renewal of a site's annual Priority or Premium Support Agreement. Coupon #'s should be entered into the "2-for-1" Support Coupon Number" field on the online registration form.

For additional registration/payment information, including discounts, sales quotes, and information about Prime and Ultra Support Level Packages, please visit: www.pmutraining.com/paymentfaqs.cfm

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Franklin, TN 37067
Toll Free 866-466-7627
www.pmutraining.com
Doc# 3000CT0702R06/19

*Once the online registration has been submitted, an automated email will be sent to the student confirming that it has been received. Once all the required form of payment information is received, verified and/or processed, a final email confirmation will be sent to the student guaranteeing their seat/s in the training class.

Please email us at PowerLogic.University@se.com or call us at (615) 538-9809 should you have any difficulties with this process.

**Credit card payments via Visa, MasterCard, and American Express are subject to individual approval.

†Please note that invoicing against purchase orders will not take place until after the student's attendance has been confirmed in the class.

‡Please contact the Support Department at Service.Agreements@se.com for questions regarding the following:
Support renewal/activation status & coupons not yet received, access to On-Demand or the Knowledge Base through your Support Package.

Billing Policy:

A valid form of payment is required to confirm your registration.

Cancellation Policy:

Schneider Electric USA/Power Management University (PMU) reserves the right to cancel any course up to two (2) weeks in advance, upon which any/all registrants will be notified.

Schneider Electric USA/Power Management University (PMU) reserves the right to change course schedule, modify course content, and limit class size.

Please check our website at www.pmutraining.com for the latest available schedule and for more information on the following:

- > New factory class offerings
- > Customized Onsite training
- > More information on the On-Demand Campus
- > The latest videos on PMUTV

