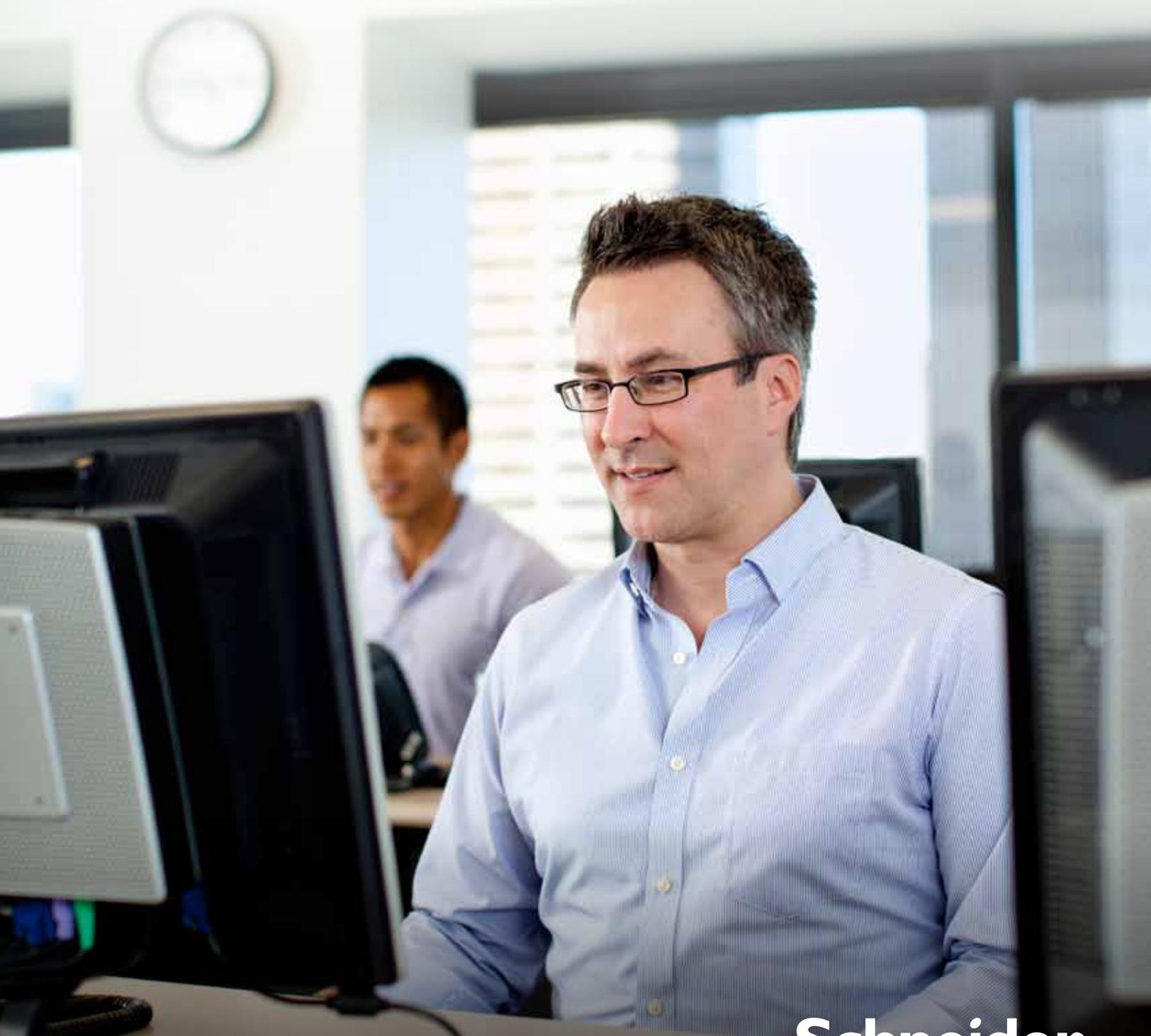


Power Management University

2013 Course Catalog



Make the most of your energySM

Schneider
 **Electric**

[Power Management University]

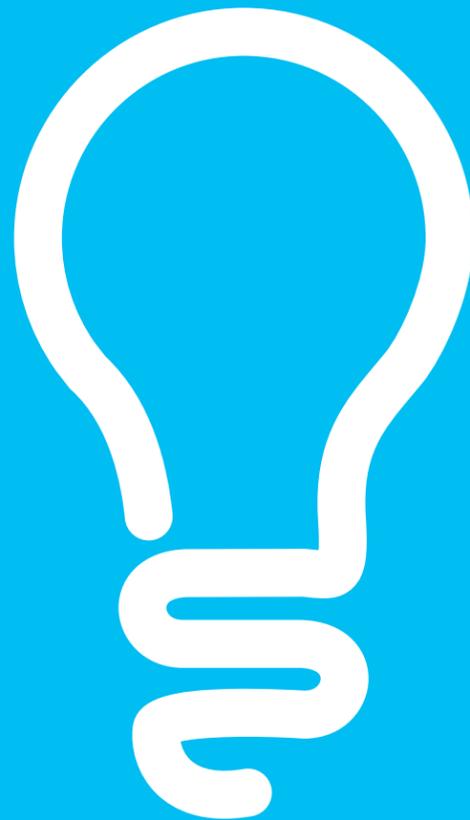
Where knowledge saves you money.

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.

- Who is PMU?
- Why attend a PMU class?
- What type of training is offered?
- How can you receive PMU training?

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[Who is PMU?]

PMU consists of a group of industry professionals with diverse backgrounds dedicated to providing the absolute “best in class” training experience for attendees. PMU instructors carry qualifications such as:

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

With over 100 years of cumulative experience.

Why do you need to attend a PMU training course?

Attending a PMU sponsored course will enable the attendees to more quickly utilize their Schneider Electric™ power monitoring system. In doing this it will allow those attendees to see a much reduced ROI and ensure their facility will start realizing their energy savings as quickly as possible.

What type of training does PMU offer?

PMU offers a wide variety of targeted power monitoring solution courses. Couple those standard and customer courses with PMU’s dedication to ensure the attendees understand all the tools available to them with their new power monitoring system; will allow the attendees employer to meet and in most cases exceed their energy plan goals.

How can you attend training?

PMU offers a wide variety of training mediums, including:

- Instructor-led classroom training
- Instructor-led webinar training
- On-site instructor-led classroom training
- Mentoring (1-2-1) training
- Virtual training classroom training
- On-demand Campus self-guided training

[What is new in 2013!]

There are several exciting developments for 2013 that include:

- 1 New EEMtraining offer** — A new subscription based offer to allow users to more fully understand their new or existing EEM system. Subscribers have access to an EEM system to “play with”. This time along with the optional “instructor led” modules can quickly allow EEM owners to fully realize the power of their new system.
- 2 New StruxureWare Power Monitoring (SPM) courses** — With the launch of SPM in mid 2012, PMU now offers all core factory based classes with the new SPM content!
- 3 New webED webinars** — Gone are the days of the boring PowerPoint™ heavy webinars! Get your hands on the software and have access to an instructor should you have any issues in your virtual lab! 2–3 hours of intense, focused lab time around the topic in question.
- 4 PayPal™** — To further ease the payment process, PMU has partnered with PayPal to ensure an easier, seamless payment transaction. All our webED sessions are PayPal enabled. Get connection info, log in info, AND receipt within minutes of payment!
- 5 Twitter™ handle** — Search for #PMU at the Schneider Electric Corporate Twitter handle of @SchneiderNA.



Training Options for the Customer

Factory training

Our training center in Nashville, TN, offers a variety of courses for students that teach them how to utilize PowerLogic™ power monitoring products. Each course is designed with 80 percent hands-on lab exercises to capitalize on proficiency.

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

Go to the **Factory Training Section** of this catalog to view the courses offered at the factory.

Regional training

In an attempt to reduce travel expenses for our customers, we offer training at a number of our field offices throughout the country. Check our website to find where and when a training class is coming to you.

Go to the **Regional Training Section** of this catalog to view the course list offered regionally.

PMU customized, on-site training

PMU custom training is the best way to ensure your technical personnel have the skills and knowledge they need to implement, operate, and maintain the power monitoring system that supports your business.

PMU training consultants will tailor a plan that specifically addresses your learning and system needs and can be provided at any skill level. On-site training is most valued when your facility has multiple people requiring training or very specific training needs.

Prices are based on number of training days, number of people being trained, is video recording necessary, and whether or not we need to ship training equipment to your site.

Call us today for a quote at 615-287-3304.

PMU On-demand Campus for training

Today's economic times have presented companies with shrinking budgets, rising travel costs, and limited manpower. In addition, employees are responsible for multiple systems requiring various competencies. PMU On-demand Campus offers customers access to training anytime, anywhere, they can access the Internet. It can also be used for continuing education of staff for that "what is next?" question after attending an instructor-led class; as well as primers for staff attending a future PMU factory or regional class.

Visit www.powerlogic.com/training to learn more about our On-demand Campus.

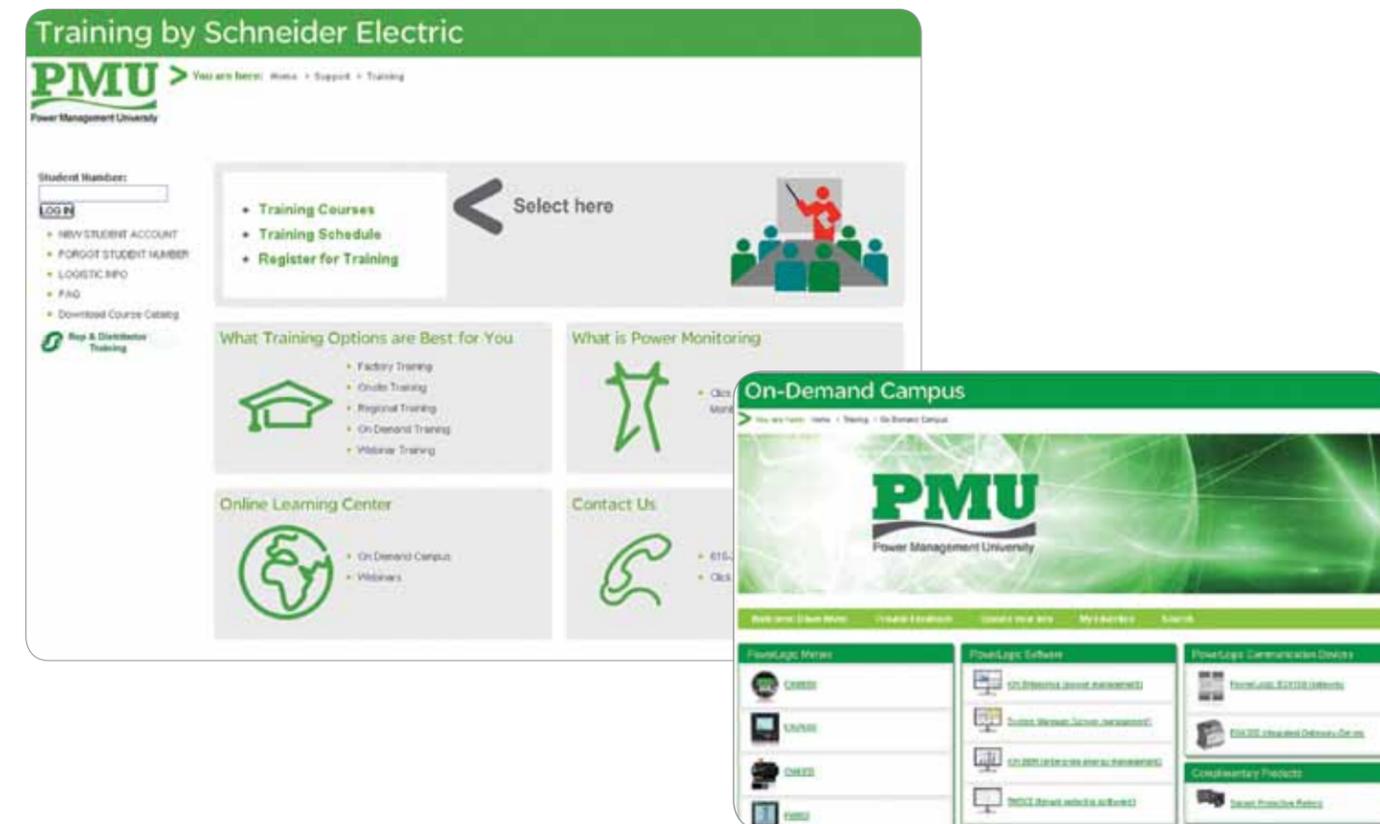
PMU webED training

The benefits of online webinar training is that it offers remote students all the benefits of a classroom experience without the costs of travel. Our new webED and PMUtube offers allow students several options for distance learning. PMUtube is a free learning offer and PMU webED is a "pay for" offer. This type of environment features:

- **Live instructors** – Each class is directed by a live instructor.
- **Refresher training** – Online training is broken down into specific topics so that students can take specific webinars for refreshing the skills in certain areas.
- **Real-time interaction** – Raise your hand to ask questions, chat with instructors or other panel members, and answer poll questions.
- **Labs and exercises** – Students get to access virtual servers to perform the labs and exercises, just like a real class. Get the most out of our training with hands-on training remotely.
- **Reduced cost** – Because we do not have to ship equipment or incur the expenses of travel we can lower the cost of the class and pass the savings over to you.

Go to the **Webinar Section** of the Online Learning Center from our training website www.powerlogic.com/training.

PMU Website



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

From the training website one can:

- View course information
- Check course schedules
- Register for classes
- Access On-demand Campus
- View the latest webinar offerings
- Find contact information
- Access logistical information about our two factory training centers

... and, much more.

Check it out at www.powerlogic.com/training.



Factory Classes: StruxureWare Power Monitoring Software



StruxureWare Power Monitoring Fundamentals

Class Number: 3000PMUFUNDSPMCR
(includes a 12-month subscription to our On-demand Campus)

To attend the course without including the 12-month subscription select Class Number 3000PMUFUNDSPM

Overview (four days):

This four-day introductory course focuses on how to use a StruxureWare Power Monitoring (SPM) system effectively. After examining the key features of SPM, students will use the software interfaces to monitor, control, analyze, and report on their electrical system. Students will configure real-time alarms and view historical events, logged data, and plot historical trends. Then students will enable sag/swell detection and plot power quality data and waveforms. For the second half of the course, students will configure ION meters and incorporate them into their SPM system. This course provides a comprehensive overview of the capabilities of a SPM system and the practical skills to use it successfully.

Who should attend?

Anyone who will be using or is currently using SPM software.

Prerequisites:

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

Students will be able to:

- Explain the key features of a SPM system
- Conduct real-time monitoring using *Vista* and *Diagrams*
- Analyze historical loads and consumption using *Vista* and *Diagrams*
- Analyze power quality and waveform data using *Vista* and *Diagrams*
- Create and manage reports using *Reporter*
- Determine the capabilities of specific PowerLogic meters
- Use meter front panels
- Configure new meters using *ION Setup™* software
- Add new meters to a SPM system
- Describe how ION meters calculate demand, peak demand, and energy
- Examine the basic configuration of ION meters using *Designer*
- Enhance *Vista* diagrams to show information for newly installed meters

Factory Classes: StruxureWare Power Monitoring Software

StruxureWare Power Monitoring Programmer

Class Number: 3000PMUPROG

Overview (four days):

This four-day advanced course focuses on meter level and system level customization using the *Designer* interface in StruxureWare Power Monitoring (SPM) software. Students will be guided through a series of lab activities to practice modifying the default ION meter programs (frameworks) as well as 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 and event driven reporting. Students will then have the opportunity to design and build their own custom applications, such as reading registers from downstream Modbus slave devices or enabling the ION OPC server capabilities. Students are encouraged to bring application examples and programming ideas to the course.

Who should attend?

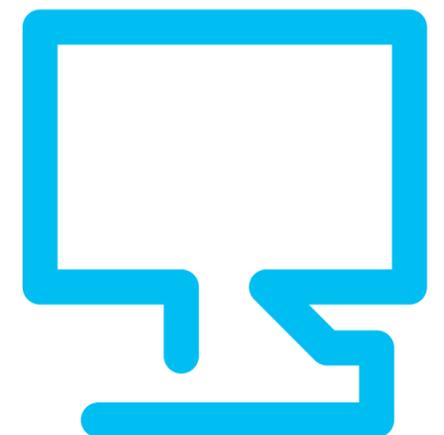
This course is designed for anyone who works with a SPM system and has reasonable knowledge of the default functions of ION meters and SPM software. This course may be appropriate for meter/instrumentation technicians, system engineers, and system integrators who need to learn how to get the most out of their SPM system.

Prerequisites:

- Working knowledge of PowerLogic SPM 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 SPM Fundamentals or Overview PowerLogic course is recommended

Students will be able to:

- Describe ION architecture and ION module properties
- Examine configuration of meters installed in a SPM system
- Modify the default frameworks of ION meters using *Designer*
- Construct programs to monitor and alarm for current
- Create a program to monitor equipment and capture high speed data
- Create a program that sends email alert messages
- Create system-level programs in the *Virtual ION Processor (VIP)*
- Design and build your own custom applications



Factory Classes: StruxureWare Power Monitoring Software

StruxureWare Power Monitoring Administrator

Class Number: 3000PMUADMINSPM

Overview (four days):

This four-day course focuses on topics for StruxureWare Power Monitoring (SPM) system administrators. In a training lab environment, students will install SPM software and commission a SPM primary server. After adding ION devices to the system, students will verify communications and critical functions and configure the system according to a set of specifications. The course also covers SPM folder and file structure, security considerations, user access, database management, system maintenance, and backup and disaster recovery.

Who should attend?

This course is designed for anyone who is responsible for maintaining and supporting a SPM system, such as system administrators, advanced SPM users, and partners of Schneider Electric who have taken the ION Fundamentals training course sometime in the past.

Prerequisites:

- A reasonable understanding of Microsoft Windows operating systems
- It is beneficial to have basic working knowledge of a real SPM system

Students will be able to:

- Commission a SPM primary server
- Add ION meters to a SPM system
- Assess the communications to ION devices in an SPM system
- Confirm data logging from ION meters into the *ION_Data* database
- Verify the clock settings of ION meters and time synchronization
- Configure the SPM system to meet specific requirements
- Commission a SPM client workstation
- Assess the components of a SPM system
- Assess the security of the SPM system
- Establish a maintenance and backup plan for a SPM system
- Practice a disaster recovery for a SPM system



Regional Classes: StruxureWare Power Monitoring Software

Regional StruxureWare Power Monitoring Overview

Class Number: 3000PMU3SPMCR
(includes a 12-month subscription to our On-demand Campus)

To attend the course without including the 12-month subscription select Class Number 3000PMU3SPM

Overview (three days):

This three-day introductory course focuses on how to use a StruxureWare Power Monitoring (SPM) system. After reviewing the key features of SPM systems, students will practice using meter front panels and *ION Setup* software to verify the configuration of devices that already exist in the system. In a hands-on lab environment, students will use the software interfaces to monitor and report on their electrical system. Lab activities include viewing historical events and waveforms. This course provides a basic overview of the capabilities of an SPM system and the practical skills to begin using it more efficiently.

Who should attend?

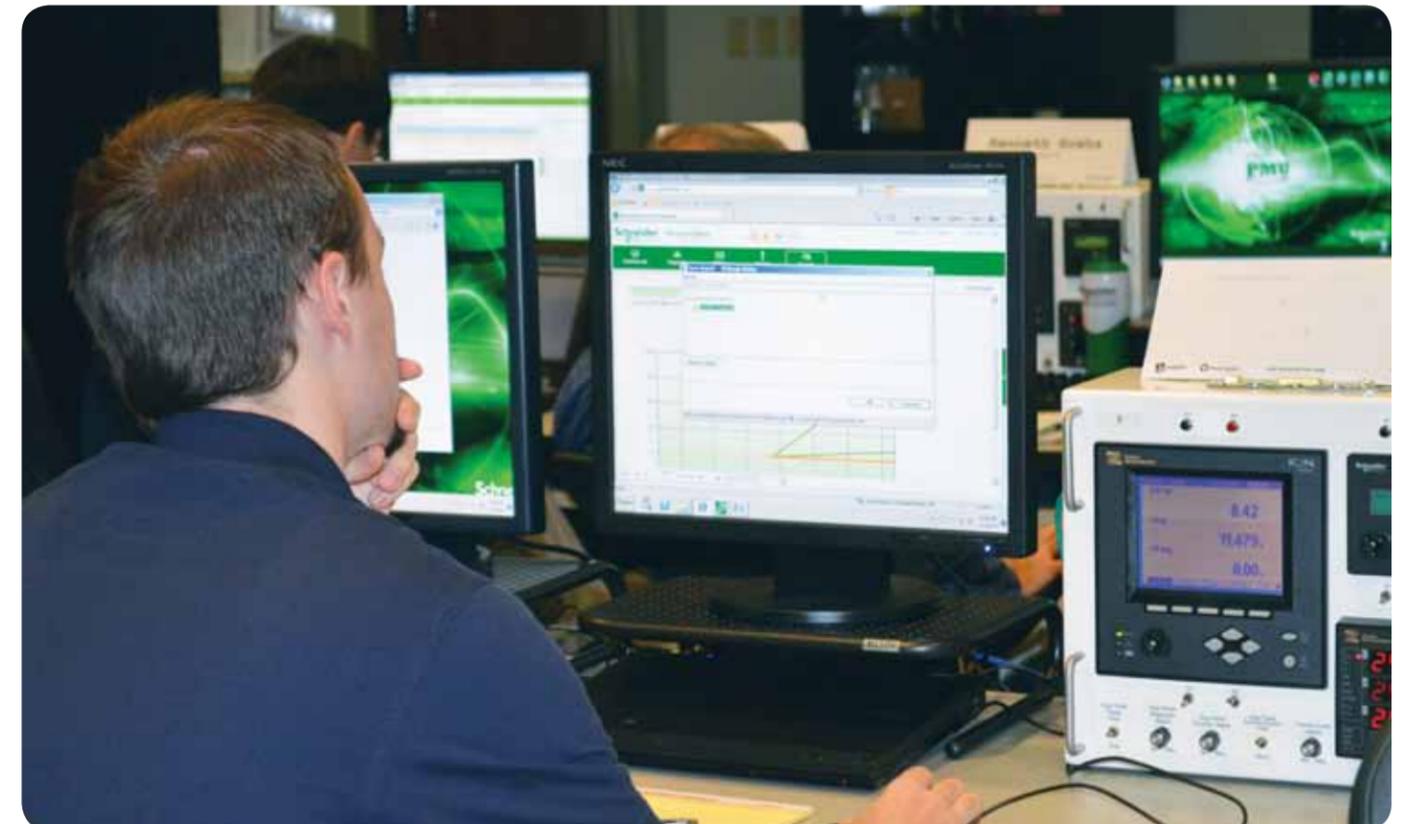
Anyone who will be using or is currently using SPM software.

Prerequisites:

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

Students will be able to:

- Explain key features of SPM systems
- Verify the configuration of meters in an SPM system
- Conduct real-time monitoring in *Vista*
- Manage events and alarms in *Vista*
- Analyze load and power quality data in *Vista*
- Generate basic reports with *Reporter*



[Other Software Courses]

Enterprise Energy Manager (EEM) Fundamentals

Class Number: 3000PMUEEMFUND

Overview (four days):

This four-day course focuses on how to use an EEM system effectively. After examining the key features of an EEM system, students will use the software interface to monitor, control, analyze, and report on their electrical system. Students will configure trend analyses and view historical data and create reports. Then students will create models based on these historical reports. For the second half of the course, students will configure cost allocation data for their system and use it to allocate billing data and calculate cost per unit. This course provides a comprehensive overview of the capabilities of an EEM system and the practical skills to use it successfully.

Who should attend?

Anyone who will be using EEM or is already using EEM software.

Prerequisites:

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

Students will be able to:

- Explain key features of EEM systems
- Create trend analysis and data manipulation using EEM software
- Run and understand reports
- Create models for systems
- Create and share dashboards and understand the dashboard interface
- Create external web links for their dashboards
- Manually enter data using the manual data entry interface
- Create cost allocation measurements and allocate billing data to commodities
- Create data quality templates and reports with the administrator tool
- Learn the concept of hierarchies and where they are used
- Create and share dashboards and understand the dashboard interface

PowerLogic ION Meter Programmer for Utility Meter Shop Technicians

Class Number: 3000PMUMTRPRG

Overview (two days):

This two-day course focuses on how to setup and program ION revenue meters using the front panel and *ION Setup* software. After reviewing the displays and setup menus available via the meter front panel, students will configure ION meters for revenue metering, advanced security, communications, energy pulsing, logging, and power quality monitoring. All of the key features of *ION Setup* software will be emphasized, including the *Setup Assistant*, Offline meter programming, *Network Mode*, *Advanced Module View*, and *Data Viewing Mode*. Topics such as meter template and firmware management, time synchronization, and meter configuration reports will be covered. Students will also explore the advanced features of *ION Setup* to add and change ION modules for customized functions. The last part of the course concentrates on using *ION Setup* software as a meter troubleshooting tool.

Who should attend?

Anyone who will be configuring, customizing, and troubleshooting ION meters extensively using *ION Setup* software.

Prerequisites:

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

Students will be able to:

- Use the front panel of an ION meter
- Use *ION Setup* software to configure ION meters
- Use *ION Setup* software to assess meter wiring
- Use *ION Setup* software to manage ION meter programs
- Use *ION Setup* in *Network Mode* to connect to multiple meters
- Use *ION Setup* in *Data Viewing Mode* to view meter values remotely
- Describe ION architecture and ION module properties
- Use *ION Setup* in *Advanced Module View* to create additional functionality

[Other Software Courses]

PowerLogic System Installation and Troubleshooting

Class Number: 3000PLUC100

Overview (four days):

This four-day introductory course focuses on how to install and setup power metering and communication devices and how to create and manage a system in the power metering system application. Identifying and resolving meter setup issues, CT and PT wiring issues, and meter communication network issues are emphasized. Students will examine the key features of a power metering system. The students will examine the capabilities of specific power metering meters and learn how to select the correct meter for different metering points in a typical facility. The features of the Ethernet communication gateways will also be examined. Students will configure meters and communication gateways and incorporate them into a system.

Who should attend?

Anyone who designs power monitoring systems, installs and configures meters and communications gateways, as well as sets up designs and commissions power monitoring systems.

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:

- Explain the key features of power monitoring systems
- Determine the capabilities of specific metering devices
- Explain how to correctly mount and wire specific meters
- Use the meter display
- Setup communications to metering devices using Ethernet gateways
- Create and download data display web pages to the EGX300 and ECC21 gateways
- Use the system application to create a system and setup metering devices
- Update the firmware for meters and Ethernet gateways

PowerLogic SCADA Administrator

Class Number: 3000PMUPLSADMIN

Overview (four days):

This four-day course introduces PowerLogic SCADA for use within power management environments. It traverses the full process of creating and configuring a SCADA project to communicate with and manage all power devices in the system. In addition, it demonstrates the management of alarms and graphical trend data derived from the installation. The class introduces knowledge of the principles behind networking in PowerLogic SCADA.

Who should attend?

Anyone who needs to learn about the key features and functions of PowerLogic SCADA. Both from a runtime standpoint, and more importantly, a configuration standpoint.

Prerequisites:

- Reasonable proficiency with the Microsoft Windows operating system
- Basic working knowledge of power control installations
- Clear understanding of Power Management devices

Students will be able to:

- Describe the key features of the PowerLogic SCADA environment
- Create and manage PowerLogic SCADA projects
- Establish communications with power devices
- Create and configure graphical pages to view activities in the system
- Customize the interaction between PowerLogic SCADA and the power devices
- Manage alarms
- Perform real-time trending of system-wide data for visual inspection

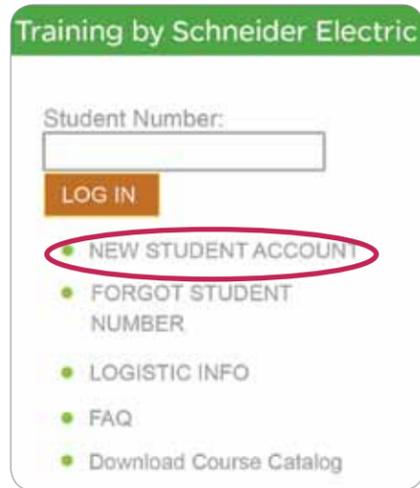
[To Register for a Class]

Register online by visiting: www.powerlogic.com/training, or from the main site page, click on the "Training" link listed under "Power Management Support."

Step One for New/First Time Users:

First, create a new student account by clicking on the "New Student Account" link on the PMU home page:

Next, fill in the required fields and submit info:



Make note of your uniquely assigned alphanumeric student ID in next window:



Step Two New Users (Step One Repeat Users):

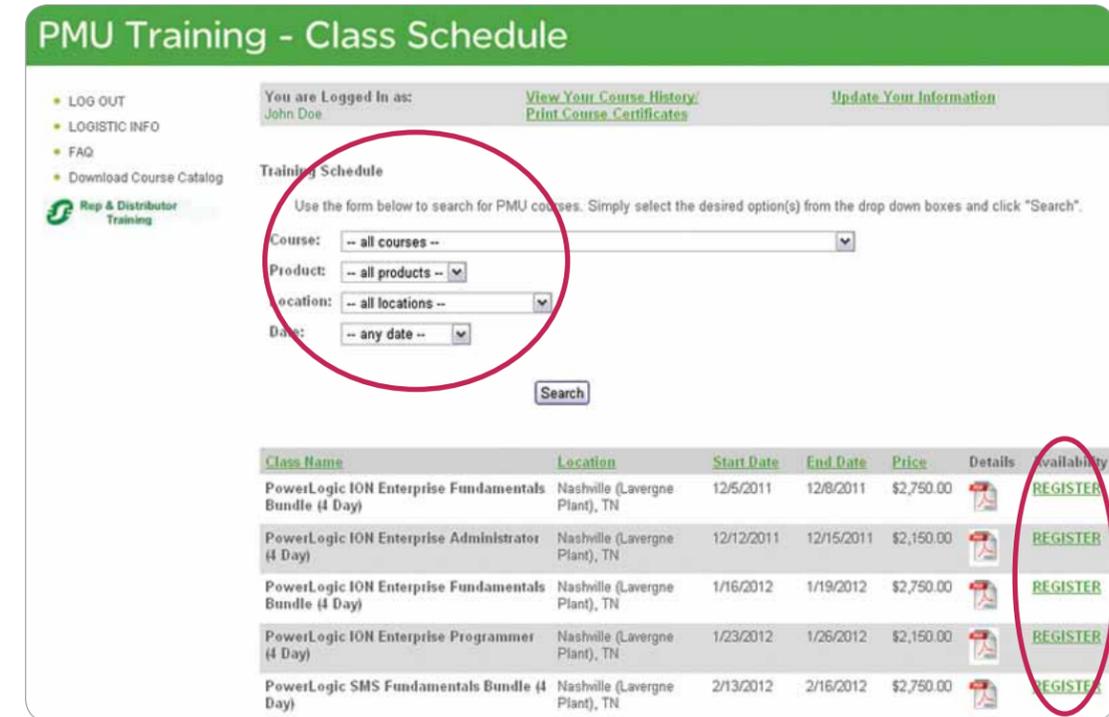
Log in to website w/student ID, click on "Register for Training" link:



[To Register for a Class]

Step Three New Users (Step Two Repeat Users):

Search for your desired class using the following criteria, then choose your class from the list by clicking on its pertaining "Register" link:



To guarantee registration, the form of payment must be submitted.

Four forms of payment accepted*:

- 1. PayPal**
- 2. Purchase order:**
Copy must be submitted via fax at 615-287-3403, or email to: PowerLogic.University@us.schneider-electric.com
- 3. USA/domestic checks made payable to:**
Schneider Electric USA, Inc.
295 Tech Park Drive, Suite 100
La Vergne, TN 37086
ATTN: Power Management University
- 4. Credit card**:**
Visa®, MasterCard®, American Express®
Paying by credit card without using PayPal must be submitted by phone (615-287-3304)

*Once the form of payment info is received, an email will be sent to the student guaranteeing the training seat. Please note that invoicing will not be processed until after the student's attendance has been confirmed in the class.

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

Please call us at 615-287-3304 or email us at PowerLogic.University@us.schneider-electric.com should you have any difficulties with this process.

Entering prepaid vouchers (V_-prefix; i.e., V4-1013-12345678-001) and Buy One/Get One Free support coupons (format varies) on the online registration form: prepaid vouchers should be entered into the Voucher Number field, and the Support coupons should be entered into the "2-for-1" Support Coupon Number Field. If you are unsure of your support coupon number, please email the Support Dept for assistance at service.agreements@schneider-electric.com

PMU Course Summary Sheet

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

Please email us at Powerlogic.University@us.schneider-electric.com or call us at (615) 287-3304 should you need any assistance with the registration process.

Course	Course Number	Length	Tuition (USD)
Factory Classes: StruxureWare Power Monitoring (SPM 7.0) Software Solutions			
StruxureWare Power Monitoring Fundamentals Bundle (includes 12 mo. On-Demand Campus access)	3000PMUFUNDSPMCR	4 Days	\$2,750
StruxureWare Power Monitoring Fundamentals (without 12 mo. On-Demand Campus access)	3000PMUFUNDSPM	4 Days	\$2,150
StruxureWare Power Monitoringx Programmer (formerly ION Enterprise Programmer)	3000PMUPROG	4 Days	\$2,150
StruxureWare Power Monitoring Administrator (formerly ION Enterprise Administrator)	3000PMUADMINSPM	4 Days	\$2,150
Regional Classes: StruxureWare Power Monitoring (SPM 7.0) Software Solutions			
StruxureWare Power Monitoring Fundamentals Bundle Overview (includes 12 mo. On-Demand Campus access)	3000PMU3SPMCR	3 Days	\$2,400
StruxureWare Power Monitoring Fundamentals Overview (without 12 mo. On-Demand Campus access)	3000PMU3SPM	3 Days	\$1,800
Other Software Courses			
Enterprise Energy Manager (EEM) Fundamentals	3000PMUEEMFUND	4 Days	\$2,150
Installation & Troubleshooting	3000PLUC100	4 Days	\$2,150
SCADA Administrator	3000PMUPLSADMIN	4 Days	\$2,150
Meter Programmer for Utility Meter Shop Technicians (Factory/Regional)	3000PMUMTRPRG	2 Days	\$1,200
Online Training Solutions			
On-Demand Campus (1 year subscription — online access)	3000PMUDEMAND12	12 months	\$600
webED Webinars (any webinar)	3000PLUCWEB	3-4 hours	\$299
Client Specific Webinar Training for up to 10 people (for any webinar — call/email for more info)	3000PLUCWEBCST	3-4 hours	\$1,200

\$ Forms of payment accepted:
PayPal, credit card (Visa, Master Card, or American Express), **purchase order** (distributor PO's and PO's from customer accounts with direct purchase approval with Schneider Electric, USA), and **check payments** (made payable to Schneider Electric, USA).

Billing Policy:
 A form of payment is required in order to confirm your online registration.

Cancellation Policy:
 Schneider Electric, USA/Power Management University (PMU) reserves the right to cancel any course three (3) 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.powerlogicframe.com/training for the latest available schedule, and for more info on the following:**

- > New webED offers
- > New Regional/Remote Factory class offerings, such as Dallas, San Francisco, and Chicago
- > For more information on customized on-site training
- > A demo of the On-Demand Campus
- > To check out the latest on PMUtube (Karl's Corner)

Schneider Electric USA

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