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Course Catalog

EnergyIP MDM Software and Applications Training

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Siemens provides training through its Smart Grid EnergyIP Platform & Applications Training department, which develops and delivers core, self-paced and custom training courses to support the operation, maintenance, and expansion of Smart Grid products.

Regular Updates

Get the latest information about our new products and platform technologies; and learn both intro and in-depth skills and knowledge for completing work tasks in a production environment.

Custom Development

Tell us how we can help by extending existing courses or developing new ones.

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Email: sgappstraining.si@siemens.com

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Types of Courses:

- Self-Paced – student completes using materials provided on the Siemens Learning Cloud website
- Instructor – a traditional instructor-led course taught on location by a qualified instructor
- Blended – web-based sessions with a qualified instructor combined with self-paced study
- WBT – web-based training. Interactive module with text, graphics and audio
- Learning Path – a set of Self-Paced and WBT style courses provided for convenient enrollment

Course File Formats:

- WBT – web-based training. Interactive module with text, graphics and audio
- PDF – document
- Video – video with a presenter, slides and demos
- Cam – video with a presenter and a demo
- ILT – instructor-led training
- vILT – virtual instructor-led training. Web-based sessions with a live instructor.
- EPSS – electronic performance support system. Tools and guidelines for completing on-the-job tasks.
- ZIP – archive. Tools that can be used on the job.

Getting Started

Title	Duration	Description
Energy Overview Self-paced (WBT) <i>Energyover</i>	30 min	This web based training explores some fundamental electrical parameters, their units, and, the inter-relationship and understanding the process of electricity generation, transmission and distribution.
Utility Industry Overview Self-paced (WBT) <i>UtilOver</i>	20 min	This web-based training course provides an overview of the energy and utility industry through a combination of animated slides, videos, and interactive quizzes and activities. The topics included are: <ol style="list-style-type: none"> 1. Basics of how power is generated 2. Roles of various entities within the utility industry, regulators, and system integrators 3. Information and resources on Siemens suite of software and applications that help utilities with Smart Grid metering and management
Learning Path: EnergyIP for New Users Self-paced (WBT)	60 min	This learning path will help new users to understand the product features and see basic functionality of the EnergyIP platform. The courses in this EnergyIP for New Users Learning Path include: <ul style="list-style-type: none"> • Introduction to EnergyIP Platform • EnergyIP 8.5 Release Overview <p>Use this learning path as a time-saving way to enroll in multiple courses.</p>

Advanced Device Management

Title	Duration	Description
Advanced Device Management Self-paced (Video) <i>ADMintro</i>	30 min	Smart Grid devices with communication capabilities are proliferating on the distribution network increasing the number of devices that need to be managed by two or three times the number of meters. The Advanced Device Management (ADM) EnergyIP® 8 platform application automates many of the previously tedious manual tasks required to maintain operational stability. ADM fills gaps in the headend systems by performing automated communications network management, device provisioning, device configuration, and device topology. It is designed as the system of record for all device knowledge available through the communications network.

Analytics

Title	Duration	Description
Learning Path: EnergyIP Analytics Applications Self-paced (WBT)	30 to 120 min	<p>The courses in this Learning Path are designed to provide you with a basic understanding of EnergyIP Analytics Foundation and the Analytics Application suite. These applications enable utilities to gain insight into customers and their usage patterns, and generate insightful charts and graphs, drill into diagnostic reports, and feed Enterprise Business Intelligence applications.</p> <p>The courses in this Analytics Applications Learning Path include:</p> <ul style="list-style-type: none"> • EnergyIP Analytics Foundation • Let's Play with EnergyIP Analytics Foundation 3.4 • Asset Topology Mapping 1.0 • Power Quality 1.1 Product Overview • Revenue Protection 2.5 Product Overview <p>Use this learning path as a time-saving way to enroll in multiple courses.</p>
Elastic Stack Installation Self-paced (Video) <i>Elast50</i>	45 min	This video walks through the steps to installing Elastic Stack's main components, Elasticsearch and Kibana. It also shows you how to configure authentication and role-based access controls using X-Pack.
ETL Process Overview Self-paced (Video) <i>ETL_Process</i>	12 min	<p>As the name suggests, ETL or Extract, Transform, and Load performs the following three operations:</p> <ul style="list-style-type: none"> • Extracts the data from EnergyIP • Transforms the data by performing data cleansing operations, and • Loads the data for the Analytics application
EnergyIP® Analytics Suite and Analytics Foundation Self-paced (Video) <i>AnFound</i>	30 min	This product introduction course provides an overview of the EnergyIP® Analytics Suite and Foundation. EnergyIP Analytics Suite is a solution that encompasses Analytics Foundation with add-on applications for specific uses cases such as Power Quality, and Revenue Protection. EnergyIP Analytics Foundation enables utilities to gain insight into customers and their usage patterns, and the infrastructure that provides this information.
Kibana Visualization Tool - Install and Config Self-paced (Video) <i>Kibana_demo</i>	25 min	Raymund Pimentel provides an overview of the installation and configuration steps, plus a software demonstration of Kibana, a visualization tool for Elasticsearch used in EnergyIP® Analytics Foundation.
Elastic Stack - Interactive Visualization Tool Self-paced (Video) <i>IVT_Analytics</i>	5 min	Analytics Foundation 3.2 includes Elastic Stack as the interactive visualization tool. It has been incorporated in order to help in the search and analysis of a number of events from the utilities' end points and perform highly interactive analysis on event data including outage event data. This video includes a demonstration of the Dashboard, a collection of one or more visualizations.
Service Point Data Visualizer Self-paced (Video) <i>SPDV_Analytics</i>	5 min	This video provides a product introduction to the Service Point Data Visualizer, a key component of Analytics Foundation for EnergyIP. The Data Visualizer allows you to select a Service Point, a date and time range and then visualize any time series data for that Service Point.

Title	Duration	Description
Prepare for and Install Hadoop Common Self-paced (Video) <i>HdpInstall</i>	39 min	This covers the steps needed to meet the prerequisites for, and then to install, Hadoop Common for use with an EnergyIP Analytics application. These steps need to be completed before an Analytics application such as Analytics Foundation is installed.
Hadoop Common Configuration Self-paced (Video) <i>HdpConfig</i>	17 min	This is video shows how to verify the Hadoop cluster is in a functional state and will work properly with the Analytics application. These steps need to be completed before an Analytics application such as Analytics Foundation is installed.
Power Quality 1.1 Product Overview Self-paced (Video) <i>PQ_1.1_ProdOvr</i>	45 min	This video introduces you to Power Quality 1.1, an application that provides insights about critical power quality metrics that help utilities address power quality issues within their distribution network. Presented by Dr. Patricia Seifert, PhD.
Let's Play with EnergyIP Analytics Foundation 3.4 Self-paced (Video) <i>An34Play</i>	45 min	Demo and examples of EnergyIP Analytics Foundation 3.4, Data Load to Visualization. Presented by Seitaro Nagao, Product Manager.
EnergyIP Analytics Foundation 3.4 REST API Usage Self-paced (Video) <i>An34Rest</i>	16 min	Demo of Analytics Foundation 3.4 REST API usage. Presented by Seitaro Nagao, Product Manager.
Analytics Foundation 5.0 , Revenue Protection 4.0, – Knowledge Transfer Self-paced (Video) <i>AF5_RP4_KT</i>	50 min	Learn about what's new in Analytics Foundation 5.0 and Revenue Protection 4.0 from Seitaro Nagao, Product Manager.

Asset Topology Mapping

Title	Duration	Description
Asset Topology Mapping 1.0 Product Overview Self-paced (Video) <i>ATM1.0_KT</i>	55 min	This product introduction provides an overview of Asset Topology Mapping 1.0. Asset Topology Mapping (ATM) is an application that uses advanced analytics technology to validate the accuracy of distribution network topology. The Asset Topology Mapping application runs analytics algorithms and applies an expression-based scorer on the algorithm results to generate investigations that can be accessed through the user interface. It applies algorithms on AMI data, spatial data from the GIS, and the existing distribution network topology to detect and report inaccurate meter-to-transformer connections.

Energy Engage

Title	Duration	Description
Energy Engage for CSRs Instructor (ILT) <i>E3csr</i>	2 days	The Energy Engage for Customer Service Representative (CSR) is a one day, instructor-led course that provides utility CSRs with an understanding of the Energy Engage features used by their customers. Using case studies, CSRs will learn to support customer inquiries and troubleshoot user issues using the Energy Engage portal.
Energy Engage for System Administrators Instructor (ILT) <i>E3SysAd</i>	2 days	This course provides system administrators with the skills necessary to set-up and manage Energy Engage in a production environment. The topics of the course include: <ol style="list-style-type: none"> 1. Web Administration Tool 2. Carbon Stories and Rate Structures 3. Energy Engage Architecture 4. Integration and Administration.
Energy Engage Mobile Self-paced (Video) <i>E3mobVid</i>	20 min	This webinar introduces the features, benefits and user interface of Energy Engage Mobile.
Energy Engage Overview Self-paced (Video) <i>E3wbt</i>	20 min	This webinar provides an overview of the Energy Engage Application and the user interface. The Energy Engage Product Manager discusses the following topics: <ol style="list-style-type: none"> 1. Energy Engage Overview 2. The customer portal 3. Service Invocation Patterns 4. The User Interface

EnergyIP 8x

Title	Duration	Description
Learning Path: EnergyIP Data Migration and Installation Self-paced (Video) <i>Upgrade-to-EIP86</i>	Up to 3 hours	The courses in this Learning Path are designed to provide you with a full understanding of Installation and Data Migration for EnergyIP 8.x. The courses in Data Migration and Installation Learning Path include: <ul style="list-style-type: none"> • EnergyIP 8 Data Migration • EnergyIP Data Migration 1.5 • EnergyIP 8.4 & 8.5 Installation Walk-Through • EnergyIP Installation and Upgrade from version 8.x to 8.6 Use this learning path as a time-saving way to enroll in multiple courses.
GDPR - General Data Protection Regulation Self-paced (Video) <i>GDPROver</i>	8 min	The General Data Protection Regulation (GDPR) is regulation that intends to strengthen and unify data protection for all individuals within the European Union (EU). In this video you will learn more about GDPR and how EnergyIP intends to be compliant with the rules mandated by this new regulation. The video is presented by Amit Prakaash, Product Manager at Siemens.

Title	Duration	Description
GDPR EnergyIP® Implementation Overview Self-paced (Video) <i>GDPRTech</i>	47 min	In this video you will learn the new jobs, tables and settings in EnergyIP designed for compliance with the rules mandated by this new regulation. The video is presented by Amit Prakaash, Product Manager at Siemens.
Basics - EnergyIP® 8 Self-paced (Video) <i>EIP8Bas</i>	60 min	This web-based training series provides an overview of major features of EnergyIP 8. The topics included are: <ul style="list-style-type: none"> • Introduction to EnergyIP 8 • EnergyIP 8 High Level Data Model • EnergyIP 8 User Interface and Navigation • EnergyIP 8 Meter Reads • EnergyIP 8 Services • EnergyIP 8 Security Framework • EnergyIP 8 In-Memory Data Grid (EIDG) • Siemens SmartGrid Application Suite
Foundations for End Users - EnergyIP® 8.6 Instructor (ILT) <i>EIP86Found</i>	1 day	EnergyIP Foundations is an instructor-led course that provides Utility end users with core Smart Grid, Meter Data Management, and EnergyIP concepts, including: <ul style="list-style-type: none"> • Smart Grids and Meter Data Management • The EnergyIP Solution • High Level Overview of EnergyIP components • Device Synchronization • Data Collection, Delivery & Billing • Reporting • High Level Overview - Other Apps This course is usually customized to suit Utilities needs for content and duration. Please contact Training to discuss requirements and schedule this class.
Foundations for Implementation Teams - EnergyIP® 8.6 Instructor (ILT) <i>EIP86FoundImp</i>	3 days	EnergyIP Foundations for Implementation is an instructor-led course intended for Utility administrators and managers participating in the implementation workshop process. The class provides core EnergyIP concepts, including: <ul style="list-style-type: none"> • Smart Grids and Meter Data Management • The EnergyIP Solution • High Level Overview of EnergyIP components. • Data Synchronization • Data Collection • Data Delivery and Billing • Configuration Tools • Reporting • High Level Overview - Other Apps This course is usually customized to suit Utilities needs for content and duration. Please contact Training to discuss requirements and schedule this class.

Title	Duration	Description
Billing CSR - EnergyIP® 8.6 Instructor (ILT) <i>BillCSR</i>	2 days	This course is designed for Utility Billing customer service representatives who need to use EnergyIP meter data management The course provides: <ul style="list-style-type: none"> • overview of the billing process and functionality • Logging in, basic navigation, and search • Reviewing meter data • Validation, validation errors and verify/edit service requests • Editing meter data • Analyze and resolved billing exceptions • Cancel single and multiple months • Device control transactions
Validation Analyst - EnergyIP® 8.6 Instructor (ILT) <i>ValAnalyst</i>	2 days	This course is designed for Utility validation analysts who need to use EnergyIP meter data management. The course includes: <ul style="list-style-type: none"> • Describe how validation workflow works in EnergyIP • Understand the role of Device Reads Processor in the validation process. • Understand validation in EnergyIP • Understand estimation in EnergyIP • Understand the framing in EnergyIP • Understand and Use EnergyIP Graphical Editing Features • Use EnergyIP to Complete Core validation-Related Tasks
EnergyIP® 7.6 - 8.1 Delta Self-paced (WBT) <i>EIP8Delta</i>	30 min	This web-based training explores the delta between EnergyIP® 7.6 and EnergyIP® 8. Each topic focuses on what's new and what's changed in each module.
EnergyIP® Billing and VEE Task Tool Self-paced (WBT) <i>BVTool</i>	Not Applicable	The Billing and VEE Task Tool is designed to help customers who work with EnergyIP® as a billing or VEE analyst. The tool is designed to provide just in time information and procedures on common tasks. When launched, a pop-up window will appear and you may move this tool to a second monitor if available so that you can find help on a task while logged-in to EnergyIP on a separate browser window. The Task Tool also includes a comprehensive glossary and a full text searching function.
EnergyIP® Meter Data Edit Task Tool Self-paced (WBT) <i>MDETTool</i>	Not Applicable	The Meter Data Edit Task Tool is designed to help customers who work with EnergyIP® as a billing or VEE analyst. The tool is designed to provide just in time information and procedures on common tasks. When launched, a pop-up window will appear and you may move this tool to a second monitor if available so that you can find help on a task while logged-in to EnergyIP on a separate browser window. The Task Tool also includes a comprehensive glossary and a full text searching function.

Title	Duration	Description
EnergyIP® System Administration Task Tool Self-paced (WBT) <i>SATool</i>	Not Applicable	The System Administration Task Tool is designed to help EnergyIP platform and system administrators as they work with the system. The tool is intended to provide just-in-time information and procedures on common tasks. When launched, a pop-up window will appear and you may move this window to a second monitor if available so that while you work with EnergyIP you can have the tool open in separate browser window. The Task Tool also includes a comprehensive glossary and a full text searching function.
EnergyIP® 8 - Data Synchronization Self-paced (Video) <i>CoreSync</i>	2 hours	Chris Dant, Technical Training Manger for Siemens, discusses EnergyIP® synchronization and how data flows from customer information systems to EnergyIP®. He then reviews the configuration properties and examines FlexSync. Next, he shows how to create rules and use rule sheets for synchronizing your data. Finally, he discusses core derive actions and effective dates and explains the rules processing context and data objects that enable synchronization.
EnergyIP® 8 - Introduction and Overview Self-paced (WBT) <i>EIP8IntroWBT</i>	30 min	This web-based training introduces the EnergyIP® 8 features and functionality. The topics included are: <ol style="list-style-type: none"> 1. EnergyIP® 8 overview 2. Core functionality 3. Smart grid application suite 4. High-level data model 5. Security architecture overview
EnergyIP® 8 - Navigation Self-paced (WBT) <i>EIP8UINav</i>	20 min	This course provides an overview of the user interface and standard navigation features of EnergyIP® 8. The topics include demonstrations of the following UI features: <ol style="list-style-type: none"> 1. Dashboard Tab 2. SDP Manager Tab 3. Administration Tab 4. Reports Tab
EnergyIP® 8 A2F Architecture Self-paced (WBT) <i>EIP8A2F</i>	10 min	This web-based training explores the Agile Application Framework (A2F) used in EnergyIP® 8. The topics included are: <ol style="list-style-type: none"> 1. Message Bus and A2F 2. A2F Processing Model 3. Service Invocation Patterns 4. Routing Approach
EnergyIP® 8 In-Memory Data Grid Self-paced (WBT) <i>EIP8eidg</i>	10 min	This introductory web-based training explores EnergyIP® 8 In Memory Data Grid (EIDG). The EIDG topics included are: <ol style="list-style-type: none"> 1. Overview of EIDG 2. EIDG Functionality 3. EIDG Reliability 4. EIDG Variations

Title	Duration	Description
EnergyIP® 8 Security Framework Self-paced (WBT) <i>EIP8Secr</i>	10 min	This course explores the EnergyIP® 8 Security Framework. The topics included are: <ol style="list-style-type: none"> 1. Security Features 2. Security Architecture 3. Security methods 4. Organization-based approach
EnergyIP® 8 Webinar Series Self-paced (Video and PDF) <i>EIP8Webs</i>	30 min to 8 hours	This EnergyIP® 8 webinar package includes technical presentations from eMeter product management and engineering experts. These technical webinars provide detailed information about the most important new and changed features of EnergyIP 8. To get the most out of these presentations, you should be familiar with EnergyIP 7.
EnergyIP® 8 Data Collection Self-paced (Video) <i>CoreDC</i>	75 min	Shelly Antony, Director of Application Development, provides an in-depth discussion of EnergyIP® 8 enablement for Meter Reads and Event Processing. The topics included in this video include technical briefings on key differences between EnergyIP 7.x and 8.x. Shelly also discusses the overview and architecture of Meter Reads and Meter Events, including a detailed account of the components and configurations required to make VEE applications work. Various scenarios of Reads and VEE subsystem are also explained towards the end of the video.
EnergyIP® 8 Data Delivery Self-paced (Video) <i>CoreDDS</i>	60 min	Shelly Antony, Director of Application Development, provides an in-depth discussion of EnergyIP® Data Delivery Services, which represents the delivery of metering data to an external system. The topics included in this video include an overview and architecture of DDS, key DDS differences from EnergyIP® 7.x and 8.x., and an in-depth discussion of DDS components and configuration.
EnergyIP® 8 Data Migration Self-paced (Video) <i>EIP82Migrate</i>	27 min	Ling Chien-Sha, Director of Engineering, walks through the process of migrating data to EnergyIP® 8. In this video, Ling outlines the high level approach to data migration, including database preparation. She then dives into the technical details and procedures for data migration and configuration for structural and transactional data. The video concludes with a short case study of a data migration project.
EnergyIP® 8 Data Migration 1.5 Self-paced (Video) <i>EIP_Data_Migration_1.5</i>	27 min	Ankit Jain, Manas Yadav present the incremental functional and performance improvements of Migration 1.5.
EnergyIP® Platform: Device Control Transactions Self-paced (Video) <i>EIP86_DCT-P1_v1.0</i>	45 min	<p>In this course you will be introduced to the types of Device Control Transactions and learn to understand the different device control components. You will also learn the different ways in which DCT is executed within EnergyIP.</p> <p>AMI devices are capable of two way communications with end devices. Such capability enables several high value business application scenarios in a cost effective manner by eliminating the need for expensive manual field service (truck roll).</p> <p>Through the variety of AMI adapters available, EnergyIP represents the AMI capabilities to the enterprise applications and insulates them from point to point integration with individual AMI technologies.</p>

Title	Duration	Description
EnergyIP® 8.2 - Introduction Self-paced (Video) <i>EIP8IntroVid</i>	3 min	Jeff Rank, Director of Product Management for Siemens, discusses the new features and enhancements of the EnergyIP® 8.2 platform. He begins by discussing the upgrade support from EnergyIP 7 and the target engagements for legacy features including the FlexSync adapter, upgrade scripts, extensive documentation and data migration tools. Next, he reviews the user interface enhancements to service requests, reports and meter data editing designed for EnergyIP meter data analysts. He then discusses the targeted enhancements to EnergyIP 8.2 for data transfer service, device control transactions and integration of weather data and mapping.
EnergyIP® 8.2 System Console Self-paced (Video) <i>EIP82SysCons</i>	72 min	In this session, Saurabh Saxena and Pushpa Penukonda from the Platform Development Team will review new features and changed aspects of the EnergyIP® 8.2 System Console. Topics include: <ol style="list-style-type: none"> 1. Dynamic Log Management 2. Log Viewer 3. System information 4. Authorization in System Console 5. Enhanced monitoring dashboard
EnergyIP® 8.2 User Interface Changes Self-paced (Video) <i>EIP82UIvid</i>	1 hour 22 min	In this recorded session, the new user interface changes in EnergyIP® 8.2 are discussed and shown.
EnergyIP® 8.2-8.4 Installation Self-paced (Video) <i>EIP8Install</i>	2 hours	This course provides learners with an overview of the installation steps used for EnergyIP® 8.2 (also applicable to EnergyIP 8.3, 8.4 and 8.5)
EnergyIP® 8.x App Installation Self-paced (Video) <i>EIPAppInstall</i>	13 min	Video showing installing an OPT app for the EnergyIP 8.x platform.
EnergyIP® 8.5 Release Overview Self-paced (Video) <i>EIP85_KT</i>	60 min	The EnergyIP® 8.5 release includes many new capabilities on the EnergyIP® user interface and also enhancements and improvements to enhance user experience and improve operational task efficiency. EnergyIP® product experts discuss and demonstrate these new features in this Knowledge Transfer session.
Reports Using BIRT Self-paced (Video) <i>EIPBIRT</i>	2 hours	This technical webinar is presented by an eMeter custom report expert. He focuses on reporting basics and then demonstrates how to create custom reports using BIRT.
Report Development Instructor Led <i>EIPREPORT</i>	2 Days	Hands-on workshop to give students the skills they need to write custom reports on EnergyIP 8. The focus of the session will be on EnergyIP database schemas, SQL queries, and the top significant / representative reports. The instructor will focus on the schemas, queries and report design, and students will use the open source BIRT Designer as the environment for creating custom reports.

Title	Duration	Description
Technical Certification - EnergyIP® 8.6 Blended (vILT) <i>EIP86Cert</i>	4 weeks	<p>The EnergyIP Certification Program is a hybrid training course and includes on-line, instructor-led and self paced learning. Students will attend eight, three hour virtual instructor-led sessions that meet twice a week. Students also complete assignments on their own and with peers. Assignments will require extensive practice and exercises in the Learning Cloud via each student's own sign-on to a supplied EnergyIP instance. At the end of the month, students will take the certification exam that enables them to implement EnergyIP.</p> <p>Goals: This comprehensive program provides a scenario-based, hands experience to guide participants through the major processes they will complete while installing and implementing EnergyIP. The topics included are.</p> <ol style="list-style-type: none"> 1. Introduction to the Course, Implementation Scenario, and Synchronization 2. Interpreting and applying the Project Functional Specifications (PFS) to configure and validate Meter Reads, Universal AMI Adapter, Device Reads Processor 3. Configuration Management, Using the System Console and Reference Data Utility 4. Using the PFS to configure and validate Validation, Estimation and Editing (VEE), Framing 5. Graphical Editing, Data Delivery, Using the PFS to configure and validate Billing 6. Using the PFS to configure and validate Billing, continued 7. Troubleshooting, Provisioning, Commissioning, Device Control Transactions 8. Reports, Course Review, Certification Exam <p>Certification Exams:</p> <ol style="list-style-type: none"> 1. In class, computer administered exam 2. Hands-On exam, completed using the Training Cloud EnergyIP instance
Technical Certification - EnergyIP® 8.6 CONDENSED Blended (vILT) <i>EIP86Cert</i>	2 weeks	<p>The condensed-schedule EnergyIP Certification Program is a hybrid training course and includes on-line, instructor-led and self paced learning. Students will attend eight, three hour virtual instructor-led sessions on subsequent days in two weeks.</p> <p>The goals, content, and exams of the condensed-schedule Certification are the same as the regular Certification.</p> <p>Indications – this version of the Certification is best for:</p> <ul style="list-style-type: none"> • A single partner or utility organization • Students experienced with MDM and EnergyIP, or a mix of experience as long as some are quite experienced • Students can attend webinars in one or two common locations such as conference rooms

Title	Duration	Description						
System Administration - EnergyIP® 8.6 Instructor (ILT) <i>SysAdmin</i>	3 days	<p>The goal of the System Administration course is to provide basic knowledge of EnergyIP System Admin functions and ensure smooth operations.</p> <table border="1"> <tr> <td>Day 1</td> <td> <ul style="list-style-type: none"> Product Overview Introduction - System Admin Role System Requirements and Security </td> </tr> <tr> <td>Day 2</td> <td> <ul style="list-style-type: none"> Performance Monitoring Performance Issues Starting and Stopping EnergyIP Application Management </td> </tr> <tr> <td>Day 3</td> <td> <ul style="list-style-type: none"> EnergyIP User Management Adapters Exception Processing Timelines and Checklist </td> </tr> </table> <p>This course is frequently customized to suit Utilities needs for content and duration. Please contact Training to discuss requirements and schedule this class.</p>	Day 1	<ul style="list-style-type: none"> Product Overview Introduction - System Admin Role System Requirements and Security 	Day 2	<ul style="list-style-type: none"> Performance Monitoring Performance Issues Starting and Stopping EnergyIP Application Management 	Day 3	<ul style="list-style-type: none"> EnergyIP User Management Adapters Exception Processing Timelines and Checklist
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Day 2	<ul style="list-style-type: none"> Performance Monitoring Performance Issues Starting and Stopping EnergyIP Application Management 							
Day 3	<ul style="list-style-type: none"> EnergyIP User Management Adapters Exception Processing Timelines and Checklist 							
EnergyIP 8 – Custom Application Development Instructor (ILT) <i>EIP8AppDev</i>	10 Days	<p>Training goals:</p> <ul style="list-style-type: none"> The goal of this training is to make you capable of developing application that can sit besides these applications or replace/enhance the existing applications. This training will tell you the hooks for altering the existing behavior of EnergyIP applications. <p>Training Components:</p> <ul style="list-style-type: none"> Classroom Instruction - instructor teaches and provides live demos via the web (vILT) or in person Lab Work - Hands On labs with each student having their own cloud instance of EnergyIP with an applicaiton and database server. Course materials include Lab Guide, Samples, Student Guide 						
Upgrade EnergyIP 8.x to EnergyIP 8.6 Self-paced (Video) <i>Upgrade-to-EIP86</i>	1 hour	<p>The basics of installing and upgrading EnergyIP are covered in this video prepared by Thaddeus Jimenez, Technical Director in eMeter Engineering. Note that EnergyIP 8.6 supports a new data storage paradigm that permits the data in the MUDR schema to be stored on Cassandra technology.</p>						
Cassandra Considerations for EnergyIP Self-paced (Video) <i>Cass4EIP86</i>	59 min	<p>In this video Shelly Antony reviews the purpose of Cassandra in EnergyIP - to provide new installations the option of storing the time-series data in MUDR on the Apache Cassandra database, and best practices for configuring and managing it.</p>						
Kafka Considerations for EnergyIP Self-paced (Video) <i>Kafka4EIP86</i>	24 min	<p>In this video Andrew Stefanick reviews the purpose of Kafka in EnergyIP, and considerations for managing and monitoring it.</p>						

Title	Duration	Description
Real Time Framework (RTF) 2.0 Self-paced (Video) <i>RTF2-OKT</i>	80 min	Elena Shur provides an overview of RTF, FEP, CDCI, and monitoring as it applies to EnergyIP.
Introduction to Virtual Channels Self-paced (Video) <i>VirtChan-Ovr</i>	40 min	In this course you will be introduced to Virtual Channels (VC) which is the aggregation of interval data from different channels into a non-physical asset representation. That asset representation is used to support advanced billing requirements. Virtual Channel functionality supports Net Metering, Subtractive Metering, and Totalized Metering business scenarios.
EnergyIP 8.6 SP4 Knowledge Transfer Self-paced (Video) <i>ENERGYIP86_SP4_KT</i>	60 min	Amit Prakaash, Product Manager, provides an update on new features introduced with the SP4 release of EnergyIP 8.6.
EnergyIP 8.6 SP6 Knowledge Transfer Self-paced (Video) <i>ENERGYIP86_SP6_KT</i>	72 min	Gautham Jayanna and Amit Prakaash, EnergyIP Product Managers, provides an update on new features introduced with the SP6 release of EnergyIP 8.6. The agenda includes: <ul style="list-style-type: none"> • Brief release overview, introduction • Device Reads Processor now has the ability to compute interval reads from register reads. RR to LP conversion • Implementation of RR2LP/SDP batching during DRP processing Recorded April 9, 2020
EnergyIP Expert Series Webinars FlexSync Self-paced (Video) <i>EIP-ES-Webinar-Sync</i>	40 min	Chris Dant provides an overview of FlexSync, the EnergyIP system that maintains a record of the devices, accounts, and other logical physical and logical entities of each Utility. Recorded July 7, 2020
EnergyIP 8.8 SP7 and 8.7 Release Knowledge Transfer Self-paced (Video) <i>EIP86SP7_EIP87_KT</i>	140 min	This knowledge transfer session is to cover MDM-related changes and enhancements that were released in EnergyIP 8.6 SP7 and EnergyIP 8.7. <ul style="list-style-type: none"> • Part 1 is on new changes and enhancements in EnergyIP 8.6 SP7 and EnergyIP 8.7, presented by Amit Prakaash, Product Manager. • Part 2 is on the new enhancements and updates to EnergyIP 8.7 Platform, presented by Gautham Jayanna, Product Manager.

Energy Solutions

Title	Duration	Description
A Rising Tide (Tidal Power) Self-paced (PDF) <i>OceanDoc</i>	10 min	The UK has a technological lead in both the development and the operation of tidal power. The Narec renewable test center is now expanding its services for tidal applications. Siemens, together with its Marine Current Turbines subsidiary, is using this service for testing of its new power train. This article is from Living Energy, May 2014.
Case Study: Burbank Water and Power Self-paced (PDF) <i>CaseBurb</i>	4 min	Southern California public utility addresses current and future requirements with advanced meter data management system capabilities

Title	Duration	Description
Case Study: DRMS at Wabash Valley Power Self-paced (PDF) <i>IDCDRMSDoc</i>	10 min	The case study covered in this document presents Wabash Valley Power Association's (WVPA's) decision and actions taken to implement a demand response management system (DRMS).
Case Study: Energy Engage Pepco/PowerCentsDC Self-paced (PDF) <i>EEpepco</i>	10 min	An award-winning pilot validates fast implementation, dynamic pricing and web-based consumer engagement result in load reduction and high customer satisfaction.
Case Study: EnergyIP® at Burbank Water & Power Self-paced (PDF) <i>EIP8Burb</i>	10 min	Southern California public utility addresses current and future requirements with advanced meter data management system capabilities
Case Study: Outage Management Self-paced (PDF) <i>OutManDoc</i>	10 min	How three utilities are enhancing their ability to detect and respond to outages using EnergyIP®.
DRMS at Wabash Self-paced (PDF) <i>DRMSWab</i>	10 min	The case study covered in this document presents Wabash Valley Power Association's (WVPA's) decision and actions taken to implement a demand response management system (DRMS). Wabash Valley Power Association provides electric generation and transmission (G&T) services for 26 member cooperative utilities operating in Illinois, Indiana, and Missouri that services over 320,000 homes, businesses, farms, and industrial sites. To meet anticipated 2020 power requirements, WVPA decided to deploy a centralized DRMS to manage demand response (DR) events.
Energy on Tap Self-paced (PDF) <i>GasInsDoc</i>	10 min	A gas-insulated line (GIL) tunnel allows a beer producer to make optimal use of the construction site for its new Munich brewery. Paulaner's COO Stefan Lustig talks about beer, Bavarian lifestyle, and energy transmission. This article from Living Energy, May 2014.
Energy Scenario 2050 Self-paced (PDF) <i>Energy2050</i>	10 min	This article discusses what the future of energy sources may look like in 2050, and features interviews with Robert Schlög and Michael Weinhold. Robert Schlög is head of the Fritz Haber Institute and founding director of the Max Planck Institute for Chemical Energy Conversion. Michael Weinhold is Chief Technology Officer of Siemens Energy and a member of the Siemens Sustainability Board.
Green Button Standard Self-paced (Video) <i>GrnBtnVid</i>	30 min	Chris King, Global Chief Regulatory Officer for Siemens Smart Grid, discusses the development, community adoption, and policy issues regarding the Green Button Standard, All electric users have meters that are used to measure how much energy they use. This metered data is used by energy service providers to calculate how much that energy will cost. Green Button is all about making that data available and secure to energy consumers.

Title	Duration	Description
IT-OT Solutions Self-paced (Video) <i>ITOTVid</i>	5 min	In this video, Michael Strebl, Managing Director of Salzburg Netz GmbH discusses the successful implementation of SmartGrid projects between Siemens and energy utilities in Salzburg, Austria.
OT and IT Go Hand in Hand Self-paced (PDF) <i>OTITDoc</i>	10 min	Utilities today face complex grid management tasks. The new Siemens and Accenture joint venture OMNETRIC Group is there to help, offering integrated solutions based on the companies' expertise in information technology (IT) and operations technology (OT). This article from Living Energy, May 2014.
Power for Mining in Mexico Self-paced (PDF) <i>PowMexDoc</i>	10 min	Grupo Mexico has developed the most innovative turnkey plant with the technological support of Siemens. It is the largest user-owned electric power plant in Latin America. La Caridad Power Plant will allow Grupo Mexico to cut costs in electricity by 40 percent and help the state of Sonora and the country by supplying power to the grid. This article from Living Energy, May 2014.
Smart Buildings Self-paced (Video) <i>ITOTBuild</i>	3 min	In this video Chris King discusses how buildings can act as a micro-grid and Michael Strebl demonstrates the development of a smart grid-ready apartment building in Salzburg, Austria.
The Future of the Smart Grid Self-paced (Video) <i>ITOTFuture</i>	3 min	In this video Chris King and Michael Strebl discuss the future roles and responsibilities of utilities acting as a transactional grid whereby energy is delivered and managed.
White Paper: Emergence of Meter Data Mgt Self-paced (PDF) <i>EmergeDoc</i>	10 min	The Meter Data Management (MDM) industry has recently emerged as a key to smart grid rollout in North America. MDM offers the ability to manage, store and employ consumption data, a crucial element of operating the smart grid as well as creating the value-added services that lead to consumer efficiency and economic viability.

Outage Event Management

Title	Duration	Description
Outage Event Management 3.0 & LVOMS 2.0 Product Overview Self-paced (Video) <i>OEM-LVOMS_23</i>	60 min	EnergyIP® uses the Outage Event Management module to process power outage and power restoration events sent from the meter. The Outage Event Management subscribes to outage and restoration events, filters the events based on configurable parameters, and passes the validated notification to the utility's OMS. Additionally, Outage Event Management allows EnergyIP to receive power verification requests from an OMS, process the response from the AMI system, and provide a response to an OMS with the status of a meter.

Prepay

Title	Duration	Description
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Title	Duration	Description
EnergyIP® Prepay Application Demonstration	15 min	EnergyIP® Prepay is an end-to-end solution that offers everything from connecting to the smart meter infrastructure, rating, and charging, up to the mobile payment system as one comprehensive package. It features flexible tariff management as well as intelligent energy consumption control features.
Self-paced (Video) <i>Prepay_App</i>		

Revenue Protection

Title	Duration	Description
Revenue Protection 2.5 – Product Overview	30 min	An introduction to Revenue Protection Analytics version 2.5, an application that uses analytics technology to increase the detection and reduction of non-technical losses. UPDATED February 2018: v2.5 plus new demo video.
Self-paced (Video) <i>RevPro25Over</i>		
Revenue Protection 2.5 – Installation and Configuration	60 min	This video discusses installation and configuration options and considerations for Revenue Protection 2.5.
Self-paced (Video) <i>RevPro-25_Config</i>		
Revenue Protection 2.4 – What's New	20 min	Revenue Protection 2.4 Product Overview. Presented by Vidya Raman, eMeter Product Management.
Self-paced (Video) <i>RevPro24Delta</i>		
Revenue Protection 2.4 – Install and Config	45 min	Installation and Configuration for Revenue Protection 2.4. Presented by eMeter Engineering. Major topics include: <ul style="list-style-type: none"> • Installation • Configuring Reference Data • Configuring System Console Properties • Configuring Job Properties
Self-paced (Video) <i>RevPro24Config</i>		
Revenue Protection 3.1 / 3.2 Overview	60 min	This knowledge transfer session includes a brief release overview and introduction to new features and enhancements made to Revenue Protection 3.1/3.2 including: <ul style="list-style-type: none"> • over 30 new algorithms have been introduced to identify non-technical losses of different types, • new KPI Dashboard with mapping provides useful insights into the status of investigation tickets and their outcomes, • new ML Scorer Accuracy Evaluation for self-selection of the most effective scorer for ticket generation.
Self-paced (Video) <i>RevPro31KT</i>		
Revenue Protection 4.0, Analytics Foundation 5.0 – Knowledge Transfer	50 min	Learn about what's new in Analytics Foundation 5.0 and Revenue Protection 4.0 from Seitaro Nagao, Product Manager.
Self-paced (Video) <i>AF5_RP4_KT</i>		

SAP Adapter

Title	Duration	Description
SAP Adapter 4 Self-paced (Video) <i>SAPAD4</i>	6 min	This video introduces you to the new features and benefits of the SAP Adapter 4. Listen to YanPei Chao, Senior Product Manager discuss how the SAP Adapter helps reduce the complex integration of SAP ISU and EnergyIP® for businesses.
SAP Adapter 4.4 Self-paced (Video) <i>SAP44</i>	30 min	This product introduction course to SAP Adapter 4.4 provides an overview of the product features and benefits, market overview, use cases and data flow.

EnergyIP 7x

Courses available for EnergyIP 7.x:

7.2 Billing Workbook	20	7x Cancel or Update Billing Request	21
7.2 Sys Admin Checklist	20	7x Create Billing Request	21
7.2 System Console Workbook.....	20	7x Exporting and Importing Data Using the Graphical Editor ..	21
7.2 VEE Files	20	7x Permanent Billing Hold and Release.....	22
7.5 Activity Gateway	20	7x Temporary Billing Hold and Release	22
7.5 Graphical Editing Workbook.....	20	7x Using the Graphical Editor	22
7.6 Introduction.....	21	AMI and EnergyIP® 7.5	22
7.6 Procedure Tool.....	21	App Dev Resources (EnergyIP® 7.6).....	22
7x Billing Exception Handling	21		
7x Billing Overview	21		

Title	Duration	Description
7.2 Billing Workbook Self-paced (PDF) <i>BA72doc</i>	30 min	This workbook of Billing Analyst exercises provides hands-on practice and reference for students with access to the Training lab environment, using course data.
7.2 Sys Admin Checklist Self-paced (PDF) <i>EnvL72doc</i>	10 min	This checklist can aid in the configuration, documentation and maintenance of an EnergyIP® 7.2 environment.
7.2 System Console Workbook Self-paced (PDF) <i>SCons72Doc</i>	30 min	This workbook of System Console exercises provides hands-on practice and reference for students with access to an EnergyIP® 7.2 environment.
7.2 VEE Files Self-paced (PDF) <i>EIVEE72doc</i>	10 min	This document provides a walkthrough of and reference for the process of exporting and importing files from Graphical Editing screen.
7.5 Activity Gateway Self-paced (PDF) <i>AG75Doc</i>	30 min	This document is intended to provide EnergyIP® end users with a review of the Activity Gateway concepts, procedures and best practices. Topics include: <ol style="list-style-type: none"> 1. DCT Architecture 2. Activity Gateway Overview 3. Activity Gateway Configuration 4. How to Run Activity Gateway, using JBOSS 5. Workflow Engine 6. How to Develop Workflows using JBPM 7. Simple Workflow Examples
7.5 Graphical Editing Workbook Self-paced (PDF) <i>GrEd75doc</i>	30 min	This workbook of Graphical Editing exercises provides hands-on practice and reference for students with access to the Training lab environment, using course data.

Title	Duration	Description
7.6 Introduction	30 min	This self-paced course provides customers, partners, and employees an understanding of Smart Metering, and the EnergyIP® platform.
Self-paced (WBT) <i>IntroAMI</i>		
7.6 Procedure Tool	30 min	Topics included in this tool include: <ol style="list-style-type: none"> 1. EnergyIP® Billing Overview 2. Operational Reports 3. Billing Service Exceptions 4. Configuration Check 5. Troubleshooting 6. Standard Procedures 7. FAQs
Self-paced (EPSS) <i>BILLEPSS</i>		
7x Billing Exception Handling	10 min	This procedure-cam shows you the steps to take to complete the task and has voice over for learning about best practices.
Self-paced (Cam) <i>STBExCam</i>		
7x Billing Overview	6 min	This procedure-cam shows you the steps to take to complete the task and has voice over for learning about best practices.
Self-paced (Cam) <i>STBOvCam</i>		
7x Cancel or Update Billing Request	3 min	This procedure-cam shows you the steps to take to complete the task and has voice over for learning about best practices.
Self-paced (Cam) <i>STBCUCam</i>		
7x Create Billing Request	3 min	This procedure-cam shows you the steps to take to complete the task and has voice over for learning about best practices.
Self-paced (Cam) <i>STBCrCam</i>		
7x Exporting and Importing Data Using the Graphical Editor	6 min	This procedure-cam shows you the steps to take to complete the task and has voice over for learning about best practices.
Self-paced (Cam) <i>STExpCam</i>		

Title	Duration	Description
7x Permanent Billing Hold and Release Self-paced (Cam) <i>STBPrCam</i>	3 min	This procedure-cam shows you the steps to take to complete the task and has voice over for learning about best practices.
7x Temporary Billing Hold and Release Self-paced (Cam) <i>STBTpCam</i>	2 min	This procedure-cam shows you the steps to take to complete the task and has voice over for learning about best practices.
7x Using the Graphical Editor Self-paced (Cam) <i>STBGrCam</i>	9 min	This procedure-cam shows you the steps to take to complete the task and has voice over for learning about best practices.
AMI and EnergyIP® 7.5 Self-paced (WBT) <i>IntroAMI</i>	30 min	This self-paced course provides customers, partners, and employees an understanding of Smart Metering, and the EnergyIP® platform.
App Dev Resources (EnergyIP® 7.6) Self-paced (Video) <i>AppDev76</i>	6 to 10 hours	This course combines a number of resources of value to application developers working on the EnergyIP® 7.6 platform, including self-paced courses, videos, hands-on exercise materials, and a student forum. Note that the hands-on exercises will require students have access to an EnergyIP 7.6 environment, which is not included as part of this course.

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