

Training by Schneider Electric, making you more competitive

Course Catalogue

Gulf Countries | 2010 - 2011



Training by Schneider Electric, making you more competitive

Training courses focused on your needs

- Solve specific technical problems
- Bring your new staff up to speed
- Optimise your equipment maintenance
- Acquire skills for the modernisation of your installations
- Optimise the management of your teams
- Reduce your energy bill

Courses for all your technical and business issues

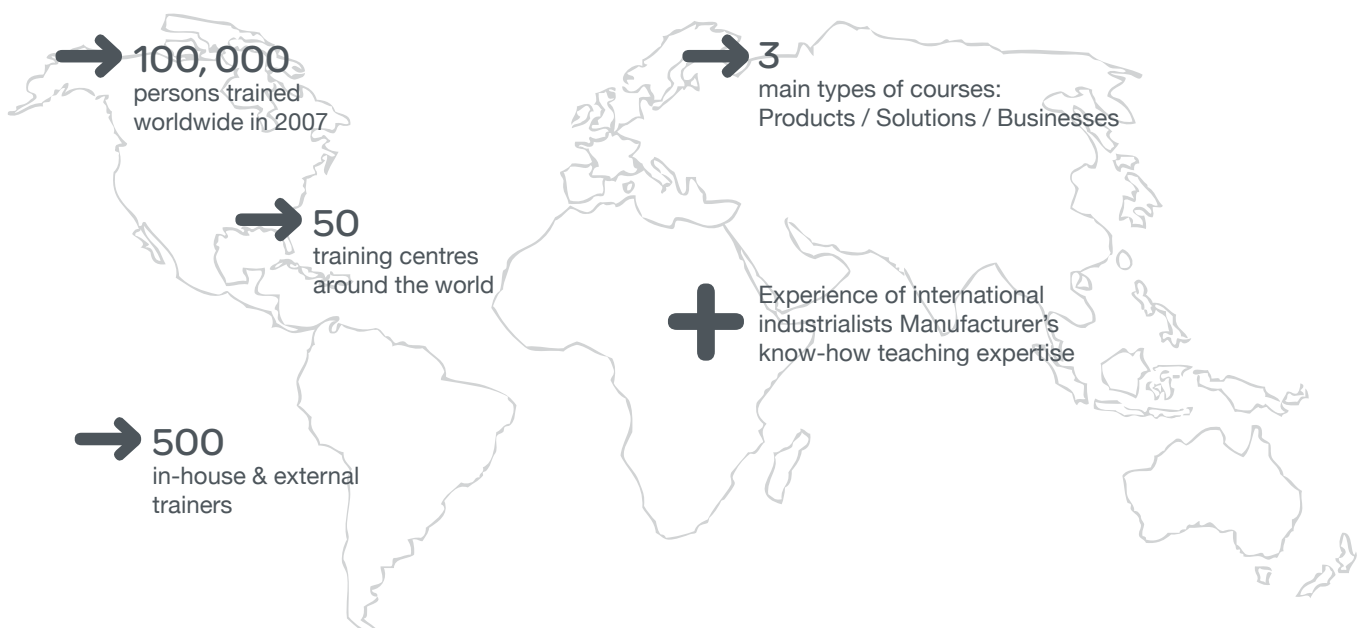
Training on

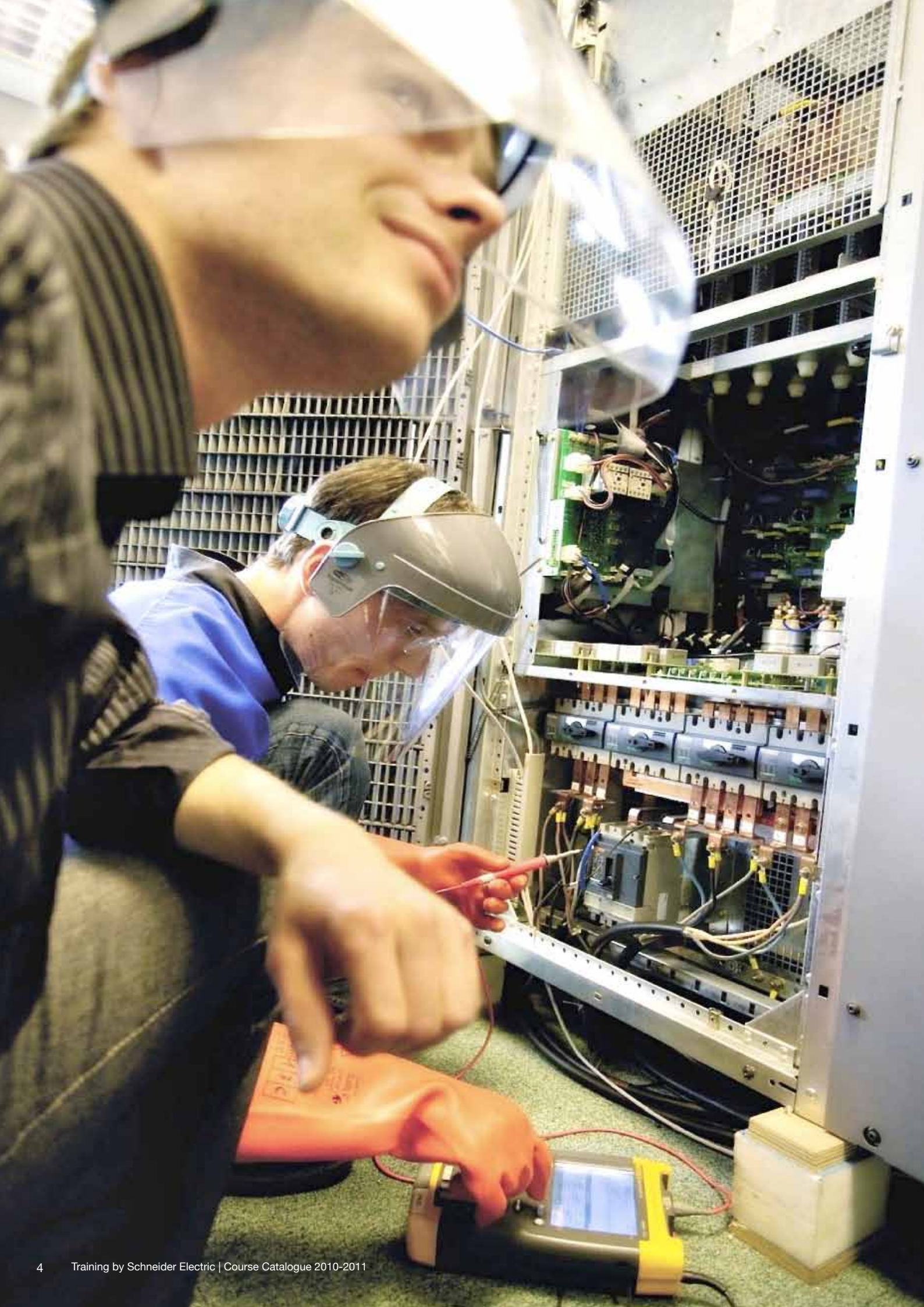
- Schneider Electric **Products**
- Schneider Electric **Solutions**
- your day-to-day **Business issues**



**Training Solutions
throughout your
installation lifecycle**

Dedicated training teams close to you





Editorial



Global business environment is witnessing a challenging period because of the economic downturn worldwide; the need for human capital competency development has become ever more important for any business to stay responsive and competitive. Employee's lack of understanding, resulting from a lack of training and knowledge assessments, can be very costly for businesses; not only in terms of time and money, but also affects customer relations, business reputation and future business opportunities. On the other hand, sharpening the skills of employees on regular interval will bring direct results on their outputs, and same time reflects on the employee loyalty and high morale which indirectly help you boost customer happiness.

Schneider Electric Gulf is pleased to offer a wide range of comprehensive training modules covering Products and Solutions from our Power, Industry and Building Business Segments. All our training modules are scheduled on customer need basis either at our state-of-the art facilities in Dubai or at your convenience at your sites. In case you are not able to find the right courses for your requirement, we are here to help by offering customised training modules for your specific requirements.

Vinod Kumar KG
Training Manager

Contents

Choosing your **best training paths** according to

- Your job (end-users, OEM, reseller, contractors...)
 - Your business (Automation, Power, Building...)
 - Customised courses
-

Training on **Industry Products & Solutions**

- PLC Hardware / Software Configuration & Programming
 - PLC Hardware / Software Troubleshooting & Maintenance
 - HMI/SCADA Configuration & Graphics Design
 - Variable Speed Drives and Soft Starters
-

Training on **Building Products & Solutions**

- Building Management Systems and HVAC basics
 - Sigma Building Controllers and Protocols
 - TAC Vista
 - Andover Continuum
-

Training on **Power Products & Solutions**

- Low Voltage equipment and switchgear
 - Medium Voltage switchgear
 - Protective relaying
-

Joining information

- Registration
- Logistics
- Contacts to go further

Choosing your best training paths



Choosing your best training paths

Depending on your role and requirements

Recommended courses to fit your job

> Contractors	p 46
> End users	p 11
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> Panel builders	p 46
> System Integrators	p 11

Courses sorted out by training topic

> Industrial Automation	.....	p 11
> Building Automation	.....	p 27
> Industrial Control	.....	p 20
> Low Voltage Distribution	.....	p 46
> Medium Voltage Distribution	.....	p 47

Training on Schneider Electric Industry Solution

A photograph showing two men in an industrial or training environment. The man in the foreground, wearing a white long-sleeved shirt and a watch, is focused on working on a piece of electrical equipment. The man in the background, wearing a dark patterned shirt, is looking on, likely observing or assisting. The background features yellow safety railings and industrial machinery.

Industry Solution Courses

Index

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Industry Solution Courses

Introduction to Industrial Automation



Code : **AINTB**
Level : **Basic**
Day : **1**
Time : **9am - 5pm**

Audience

Anybody who want to acquire the basic knowledge in Industrial Automation

Prerequisites

None

Equipments

Sample PLCs

Contents

- Introduction to Industrial Automation
- What is a PLC
- Components, Programming languages
- What is SCADA
- What is communication
- How the PLCs communicate
- Schneider Electric PLC products
- Schneider Electric HMI/SCADA solutions
- Communication protocols
- Assessment

Twido PLC Configuration and Programming using TwidoSuite



Code : **ATWDI**
Level : **Intermediate**
Day : **1**
Time : **9am - 5pm**

Audience

Those who are responsible for developing PLC solutions for small size applications

Prerequisites

Basic Knowledge in Automation

Equipments

- Twido PLC
- TwidoSuite Software

Contents

- Introduction and Course Overview
- Twido Product Range Overview
- TwidoSuite Overview and Demo
- Describing Application
- Configuring Application
- Editing programs
- Editing Symbols
- Building an Application Exercise
- Debugging Demo
- Debugging Exercise
- Assessment



Deliverables:

- Training documents
- Training Certificates
- Lunch



For schedule, training fee and other inquiries related to the course, please email ae-tc-gulf@ae.schneider-electric.com

Industry Solution Courses

Twido PLC Advanced Configuration using TwidoSuite



Code : **ATWDA**
Level : **Advanced**
Day : **1**
Time : **9am - 5pm**

Audience

Those who are responsible for developing PLC solutions for small size applications

Prerequisites

ATWDI Course

Equipments

- Twido PLC
- TwidoSuite Software

Contents

- Introduction and Course Overview
- Twido Advanced features
- Configure Drive Communication Macro
- Configure Modbus Communications
- Configure HMI Communications
- Twido Documentation

RTU Configuration



Code : **ARTUI**
Level : **Intermediate**
Days : **2**
Time : **9am - 5pm**

Audience

Those who are responsible for configuring RTUs

Prerequisites

Basic Knowledge in Automation

Equipments

- Wade RTU
- Twido PLC

Contents

- Water application presentation
- Wade range Presentation
- Webserver
- Communication with PLC
- Creation and Management of Tags
- Setting up Communication with SCADA
 - > GSM/GPRS/PSTN
 - > Ethernet Communication
 - > Modbus/Modbus TCP
 - > IEC 101/104
 - > DNP3 protocol



Deliverables:

- Training documents
- Training Certificates
- Lunch



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Industry Solution Courses

M340 PLC Configuration and Programming using Unity Pro



Code : **AMIRI**
Level : **Intermediate**
Days : **2**
Time : **9am - 5pm**

Audience

Project Engineers, Maintenance Engineers and Technicians who are responsible for selecting, configuring and maintaining small to medium size PLC systems

Prerequisites

Basic Knowledge in Automation

Equipments

- M340 PLC
- Unity Pro Software

Contents

- Introduction to Unity Pro
- Overview of M340 Hardware
- Configuration of an application
- Overview of all IEC languages
- Ladder programming
- Function Block programming
- Troubleshooting
- Assessment

Premium PLC Configuration and Programming using Unity Pro



Code : **APREA**
Level : **Advanced**
Days : **3**
Time : **9am - 5pm**

Audience

Project Engineers, Maintenance Engineers and Technicians who are responsible for selecting, configuring and maintaining medium to large size PLC systems

Prerequisites

Basic Knowledge in Automation

Equipments

- Premium PLC station
- Unity Pro Software

Contents

- Premium PLC Hardware Architecture
- Configure a Premium system using Unity Pro
- Develop programs in LD, FBD, SFC
- Overview of ST and IL
- Create and use DFBS
- Global Data configuration
- I/O Scan
- Hot Standby Configuration
- Assessment



Deliverables:

- Training documents
- Training Certificates
- Lunch



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Industry Solution Courses

Quantum PLC Configuration and Programming using Unity Pro



Unity Pro
a SoCollaborative Software



Code : **AQUAA**
Level : **Advanced**
Days : **3**
Time : **9am - 5pm**

Audience

Project Engineers, Maintenance Engineers and Technicians who are responsible for selecting, configuring and maintaining Large size PLC systems

Prerequisites

Basic Knowledge in Automation

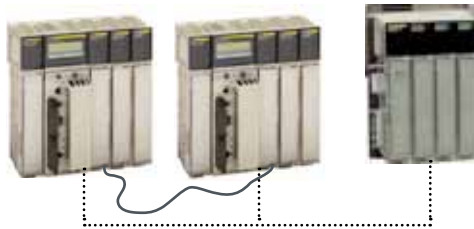
Equipments

- Quantum PLC station
- Unity Pro Software

Contents

- Quantum PLC Architecture
- Unity Pro Overview
- PLC Configuration
- Variables
- Application Structure
- FBD, LD, SFC Programming
- Overview of ST and IL
- Application Debugging
- Online Changes
- Operator Screens
- Utilities
- Assessment

Quantum PLC Advanced Configuration using Unity Pro



Code : **AQUAE**
Level : **Expert**
Days : **2**
Time : **9am - 5pm**

Audience

Project Engineers, Maintenance Engineers and Technicians who are responsible for selecting, configuring and maintaining large size PLC systems

Prerequisites

AQUAA Course

Equipments

- Quantum PLC Station
- Unity Pro Software

Contents

- Quantum Topologies
- Local I/O and Remote I/O Configuration
- Communication
- Modbus TCP/IP I/O Scanning
- Global Data Configuration
- Quantum Modbus Communication
- Quantum Hot standby
- Assessment



Deliverables:

- Training documents
- Training Certificates
- Lunch



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Industry Solution Courses

Quantum SIL3 Safety PLC Configuration using Unity Pro XLS



Code : **AQTSA**
Level : **Advanced**
Days : **2**
Time : **9am - 5pm**

Audience

Project Engineers, Maintenance Engineers and Technicians who are responsible for selecting, configuring and maintaining Large size **Safety PLC** systems

Prerequisites

AQUAA / AQUAE Course

Equipments

- Quantum SIL3 PLC station
- Unity Pro XLS Software

Contents

- Safety CPU Project and Architectures
- Programming with Unity Pro XLS: Specifics Restrictions
- Starting a project
- Maintenance mode/Safety mode
- Application protection
- UMA and module declaration
- Safety I/O modules
- High-availability blocks
- Communication with UMA
- Safety Hot Standby
- Assessment

Quantum PLC Configuration and Programming using Concept



Code : **APLQI**
Level : **Intermediate**
Days : **3**
Time : **9am - 5pm**

Audience

Project Engineers, Maintenance Engineers

Prerequisites

Basic Knowledge in Automation

Equipments

- Quantum PLC Station and Concept Software

Contents

- Concept and IEC Programming Overview
- Project Structure and Theory of Operation
- PLC Configuration and I/O Mapping
- Concept and Variables
- FBD Programming
- IEC Derived Function Blocks and Macros
- Ladder Diagram Programming
- Structured Variables and Derived Data Types
- SFC, ST and IL Programming
- Concept Utility Functions
- RIO Configuration
- Hot Standby
- Assessment



Deliverables:

- Training documents
- Training Certificates
- Lunch



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Industry Solution Courses

Quantum PLC Configuration and Programming using Proworx32



Code : **APRWI**
Level : **Intermediate**
Days : **2**
Time : **9am - 5pm**

Audience

Project Engineers, Maintenance Engineers and Technicians who are responsible for selecting, configuring and maintaining Large size PLC systems

Prerequisites

Basic Knowledge in Automation

Equipments

- Quantum PLC station
- Proworx32 Software

Contents

- Quantum system hardware
- Controller configuration
- I/O configuration
- Communicating with the controller
- Programming
- Variable name and exporting the variable file
- Documenting the application
- Practical exercises on various applications
- Assessment

Automation Project Design using UAG



UAG
a SoCollaborative Software

Code : **AUAGA**
Level : **Advanced**
Days : **3**
Time : **9am - 5pm**

Audience

Project Engineers, Maintenance Engineers and Technicians who are responsible for selecting, configuring and maintaining Large size PLC and SCADA systems

Prerequisites

Knowledge in UnityPro and Vijeo Citect

Equipments

- UAG Software
- Unity Pro Software
- Vijeo Citect SCADA Software

Contents

- Introduction
- System Requirements
- Physical Model
- Topological Model
- Generating PLC Code
- Generating HMI Screens
- Customization Editor
- DFB for Unity
- SCOD Editor
- Structured Data
- PLC Channels, PLC - PLC Communication
- Develop a New SCoD



Deliverables:

- Training documents
- Training Certificates
- Lunch



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Industry Solution Courses

Magelis HMI Configuration and Graphics Design using Vijeo Designer



Code : **AMAGI**
Level : **Intermediate**
Day : **1**
Time : **9am - 5pm**

Audience

Project Engineers, Maintenance Engineers and Technicians who are responsible for selecting, configuring and maintaining Operator terminals/HMIs

Prerequisites

Basic Knowledge in HMI

Equipments

- XBTGT Magelis HMI
- Vijeo Designer Software

Contents

- Introduction to Magelis HMI
- Structure of Magelis operator panels and its functions
- Creation of a new application
- Panels and its configuration
- Creating application pages and alarm pages
- Trend, Recipe and Actions
- Assessment

Vijeo Citect SCADA Academic Basic Course



Code : **AVJCB**
Level : **Basic**
Day : **1**
Time : **9am - 5pm**

Audience

Users who are new to Vijeo Citect

Prerequisites

Basic Knowledge in Automation

Equipments

- Vijeo Citect SCADA Software

Contents

- Introduction to Vijeo Citect
- The Citect Explorer, Citect Project Editor, Citect Graphics Builder
- Managing Projects
- Setting up communications
- Graphics
- Alarms
- Trends
- Commands and Controls
- Process Analyst



Deliverables:

- Training documents
- Training Certificates
- Lunch



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Industry Solution Courses

Vijeo Citect SCADA Configuration and Graphics Design



Vijeo Citect
a SoCollaborative Software

Code : **AVJCI**
Level : **Intermediate**
Days : **3**
Time : **9am - 5pm**

Audience

Users who are new to Vijeo Citect

Prerequisites

Basic Knowledge in HMI

Equipments

- Vijeo Citect SCADA Software

Contents

- Introduction to Vijeo Citect
- The Citect Explorer, Citect Project Editor, Citect Graphics Builder
- Project Management
- Communications
- Graphics
- Commands and Controls
- Genies
- Popup Pages and Super Genies
- Devices ,Events, Alarms, Trends
- Process Analyst
- Navigation, Reports, Security
- Introduction to Cicode (Elective)

Vijeo Citect Networking and Architecture



Vijeo Citect
a SoCollaborative Software

Code : **AVJCA**
Level : **Advanced**
Days : **2**
Time : **9am - 5pm**

Audience

SCADA Design Engineers, Maintenance Engineers and Plant Supervisors.

Prerequisites

AVJCB or AVJCI Course

Equipments

- Vijeo Citect Distributed Configuration

Contents

- Networking
- Vijeo Citect Architecture
- Vijeo Citect Redundancy
- Clustered Control System
- Network Management and the Kernel
- Publish-Subscribe Model of Communications
- OFS Server and Speedlink (Elective)
- Webgate (Elective)
- Web Client
- Windows Integrated Security



Deliverables:

- Training documents
- Training Certificates
- Lunch



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Industry Solution Courses

Vijeo Historian Configuration



Vijeo Historian
a SoCollaborative Software

Code : **AVCHA**
Level : **Advanced**
Days : **2**
Time : **9am - 5pm**

Audience

SCADA Design Engineers, Maintenance Engineers and Plant Supervisors

Prerequisites

AVJCI and AVJCA Courses

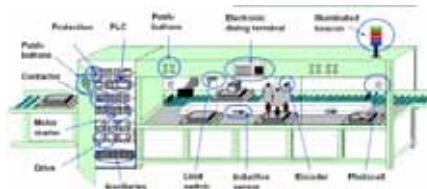
Equipments

- Vijeo Citect SCADA Software
- Vijeo Citect Historian

Contents

- Vijeo Historian at a Glance
- System requirements for Vijeo Historian
- Connecting Vijeo Historian to data Sources
- Publishing Data
- Email and ActiveX Tasks
- Events and Tasks in Combination
- Vijeo Historian Web Client
- Statistical Analysis in Excel
- SQL Server Reporting Services
- User Functions in SQL Reporting Services
- Publishing Data to Clients

Overview of Industrial Control Offer



Code : **CINTB**
Level : **Basic**
Day : **0.5 (Half day)**
Time : **9am - 1pm**

Audience

Those responsible for selection and sales of Industrial Control products

Prerequisites

None

Equipments

- Samples

Contents

- Industrial Control Components
- Power Control and Protection (PCP)
- Contactors
- Thermal relays
- Tesys
- Low End Control (LEC)
- Timers
- Zelio Logic Smart relays
- Power supplies
- Control Transformers
- Machine Control
- Pushbuttons
- Man Machine Dialogue
- Detection - Sensors, Limit switches
- Velocity Speed Drives and Soft Starters



Deliverables:

- Training documents
- Training Certificates
- Lunch



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Industry Solution Courses

Zelio Logic Smart Relay Configuration and Programming



Code : CZELB
Level : Basic
Day : 1
Time : 9am - 5pm

Audience

Those interested to upgrade the relay solutions to automated solutions for their basic applications.

Prerequisites

None

Equipments

- Zelio Smart Relay Demo Case
- Zeliosoft Software

Contents

- Zelio offer presentation
- Product characteristics
- Zelio programming using the module keypad
- Zelio programming using Zeliosoft software
- Ladder programming
- Zelio + GSM Communication
- Programming examples

Operation and Maintenance of Soft starters



Code : CSSOI
Level : Intermediate
Day : 1
Time : 9am - 5pm

Audience

Operators, Service Engineers, Maintenance Engineers, Technicians, Project and Design Engineers

Prerequisites

None

Equipments

- ATS01, ATS48
- Powersuite Software

Contents

- Selection
- Theory of soft starters
- Internal structure of soft starters
- Selection criteria of soft starters
- Solution examples for different applications
- Operation and commissioning
- Installing, programming and commissioning ATS01
- Installing, programming and commissioning ATS48
- Communicating with soft starter
- Maintenance
- Common faults and diagnostics
- Troubleshooting



Deliverables:

- Training documents
- Training Certificates
- Lunch



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Industry Solution Courses

Operation and Maintenance of Variable Speed Drives ATV21/ATV312



Code : **CVSDI**
Level : **Intermediate**
Day : **1**
Time : **9am - 5pm**

Audience

Those interested to upgrade the relay solutions to automated solutions for their basic applications

Prerequisites

None

Equipments

- ATV21 / ATV312 Training Bench
- Powersuite Software

Contents

- Product features and range
- Base product architecture and option cards
- Current harmonic
- ATV21/312 commissioning
- Programming keypad
- Advanced functions
- Power suit software
- Workshop
- Maintenance
- Common faults and diagnostics
- Troubleshooting

Operation and Maintenance of Variable Speed Drives ATV61/ATV71



Code : **CDRVI**
Level : **Intermediate**
Day : **1**
Time : **9am - 5pm**

Audience

Operators, Service Engineers, Maintenance Engineers, Technicians, Project and Design Engineers

Prerequisites

None

Equipments

- ATV61 / ATV71 Training Bench
- Powersuite Software

Contents

- ATV61/ATV71 Product range
- Base product architecture and Option cards
- Composition of the reference
- Current harmonic
- Operation and commissioning
- Application functions
- Pump switching card
- Powersuite software
- Workshop
- Maintenance
- Common faults and diagnostics
- Troubleshooting



Deliverables:

- Training documents
- Training Certificates
- Lunch



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Industry Solution Courses

Developing Low & Medium Voltage HHP Drive solutions



Code : **CHPDA**
Level : **Advanced**
Day : **1**
Time : **9am - 5pm**

Audience

Operators, Sales Engineers, Service Engineers, Maintenance Engineers, Technicians, Project and Design Engineers

Prerequisites

Knowledge of Variable Speed Drives

Equipments

- ATV61Plus / MV Drive
- Powersuite Software

Contents

- ATV61/71plus/ ATV1000 selection & feature
- Base product architecture
- Current harmonic
- Operation and commissioning
- Application functions
- Powersuite software
- Workshop
- Maintenance
- Common faults and diagnostics
- Troubleshooting

Variable Speed Drives for HVAC and Booster Pump Applications



Code : **CHVAI**
Level : **Intermediate**
Day : **1**
Time : **9am - 5pm**

Audience

Operators, Service Engineers, Maintenance Engineers, Technicians, Project and Design Engineers

Prerequisites

Knowledge of Variable Speed Drives and Basic principles of Pump and Fan applications

Equipments

- ATV61 Booster Pump Demo bench
- Powersuite Software
- ECO8 Software

Contents

- To Know the main HVAC application
- ECO8 Presentation
- ATV21/ATV61 HVAC functions - Workshop
- Pump Switching Card Presentation Workshop



Deliverables:

- Training documents
- Training Certificates
- Lunch



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Industry Solution Courses

Developing a Soft Starter and a Variable Speed Drive Solution



Code : **CSSDI**
Level : **Intermediate**
Day : **1**
Time : **9am - 5pm**

Audience

Those responsible for selecting, operating and commissioning electronic variable speed drives and soft starters for electric motors

Prerequisites

Basic Knowledge of Motor Starting

Equipments

- Variable Speed Drive Training Bench
- ATS01 / ATS48
- ATV21 / ATV312 / ATV61
- Powersuite Software

Contents

- Introduction & Motor basics
- Power electronics review
- Major types of motor starters
- Soft starter solution
- Selection criteria of soft starters
- Soft starters offer and applications
- Speed Variation in asynchronous motors
- Speed drives solution
- Selection criteria of a variable speed drives
- Variable speed drive offer and applications

Variable Speed Drives for Lifts and Cranes - ATV31Lift / ATV71Lift



Code : **CLIFI**
Level : **Intermediate**
Day : **1**
Time : **9am - 5pm**

Audience

Operators, Service Engineers, Maintenance Engineers, Technicians, Project and Design Engineers

Prerequisites

Knowledge of Variable Speed Drives

Equipments

- Powersuite Software

Contents

- Overview of Lift technology and market
- ATV31Lift/ATV71Lift offers and lift functions
- Choice of the VSD and options for lift
- Demo using Powersuite Software



Deliverables:

- Training documents
- Training Certificates
- Lunch



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Industry Solution Courses

Motor Management and Protection solution using TeSys T / TeSys U



Code : **CTESI**
Level : **Intermediate**
Day : **1**
Time : **9am - 5pm**

Audience

Those responsible for selecting, operating and commissioning electronic variable speed drives and soft starters for electric motors

Prerequisites

Basic Knowledge of Motor Starting and Protection

Equipments

- TeSys-U Demo Case
- TeSys-T Panel
- Powersuite Software
- LTMR conf Software

Contents

- TeSys-T / TeSys U Overview
- Protection, Metering & monitoring functions
- Settings & Control functions
- Troubleshooting
- Multifunction control unit
- Main communication offer presentation
- Modbus Communication
- Modbus presentation and workshop



Deliverables:

- Training documents
- Training Certificates
- Lunch



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Training on Schneider Electric Building Solution



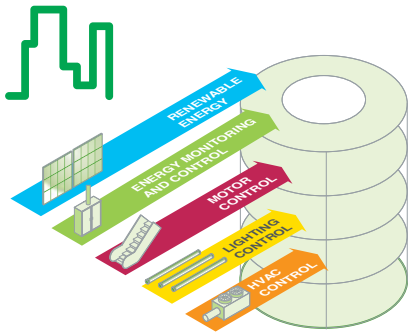
Building Solution Courses

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Building Solution Courses

Introduction to Building Management Systems



Code : **BBMSB**
Level : **Basic**
Day : **1**
Time : **9am - 5pm**

Audience

Anyone who want to acquire basic Knowledge in Building Automation Domain

Prerequisites

None

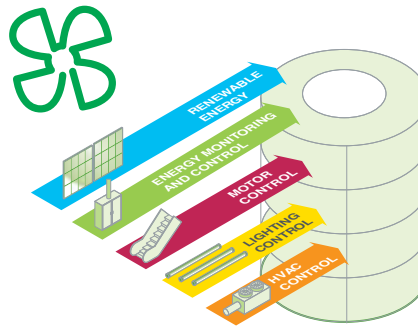
Equipments

None

Contents

- Elements of a Modern building
- Systems of a modern building
- Role of BMS in modern building

HVAC and Control Basics



Code : **BHVAB**
Level : **Basic**
Days : **2**
Time : **9am - 5pm**

Audience

Engineers, Supervisors, Operators who are involved in HVAC operation

Prerequisites

None

Equipments

None

Contents

- Discussion of Typical HVAC equipments
- Discussion of typical HVAC Schemes
- Values required for various Comfort levels
- Basic Control theory
 - > Proportional control
 - > Integral control
- Simple valve sizing and rules of thumb
- Discussion of analog controllers and Direct Digital Controllers



Deliverables:

- Training documents
- Training Certificates
- Lunch



For schedule, training fee and other inquiries related to the course, please email ae-tc-gulf@ae.schneider-electric.com

Building Solution Courses

BACnet Protocol Fundamentals



Code : **BBACB**
Level : **Basic**
Day : **1**
Time : **9am - 5pm**

Audience
Engineers and Technicians

Prerequisites
None

Equipments
None

Contents

- The BacNET standard
- The development of BacNET
- The use of BacNET in the BMS field

Micronet View Usage and Programming



Code : **BMCNI**
Level : **Intermediate**
Days : **4**
Time : **9am - 5pm**

Audience
Engineers and Technicians

Prerequisites
None

Equipments

- MNN 550, 650

Contents

- Installing MicoNet View
- Setting up I/O servers
- Creating internal Tags
- Creating I/O tags
- Creating graphic elements
- Attaching Tags to graphic elements
- Use of the Monitor Tool for Alarms and reporting



Deliverables:

- Training documents
- Training Certificates
- Lunch



For schedule, training fee and other inquiries related to the course, please email ae-tc-gulf@ae.schneider-electric.com

Building Solution Courses

Network 8000 System Basic



Code : **BNW8B**
Level : **Basic**
Days : **3**
Time : **9am - 5pm**

Audience

Engineers and Technicians

Prerequisites

None

Equipments

MZII,RTD sensors, MN-FLO,PEM

Contents

- Bus topology
- Controllers Used
- Field devices
- Basic Programming
- Use of Overrides for field testing

Network 8000 System Intermediate



Code : **BNW8I**
Level : **Intermediate**
Days : **3**
Time : **9am - 5pm**

Audience

Engineers and Technicians

Prerequisites

BNW8B Course

Equipments

- GCM,MZII,RTD sensors, MN-FLO,PEM

Contents

- Setup and programming of a GCM controller
- Advanced programming techniques for field controllers
- Servicing Signal and InVue GUI
- Upgrade path for existing installations



Deliverables:

- Training documents
- Training Certificates
- Lunch



For schedule, training fee and other inquiries related to the course, please email ae-tc-gulf@ae.schneider-electric.com

Building Solution Courses

Network 8000 System Advanced



Code : **BNW8A**
Level : **Advanced**
Days : 4
Time : **9am - 5pm**

Audience

Engineers and Technicians

Prerequisites

BNW8I Course

Equipments

- GCM, MN-ASDI, MZII, RTD sensors, MNFLO, PEM

Contents

- Interface to LON controllers using GCM and Lonmaker
- Setup and program complete networks into the GUI
- Signal
- InVue
- Interfacing to the MN-ASDI
- Troubleshooting site networks

Sigma Basic



Code : **BSIGB**
Level : **Basic**
Days : 3
Time : **9am - 5pm**

Audience

Engineers and Technicians

Prerequisites

None

Equipments

- UNC 796, UNC 632 and various field equipment

Contents

- Bus Topology and TCP/IP
- Ethernet, Arcnet and the Sigma protocols
- Field controllers, setting up and their capabilities
- Basic programming - I/O objects
- Commissioning a simple control scheme



Deliverables:

- Training documents
- Training Certificates
- Lunch



For schedule, training fee and other inquiries related to the course, please email ae-tc-gulf@ae.schneider-electric.com

Building Solution Courses

Sigma Intermediate



Code : **BSIGI**
Level : **Intermediate**
Days : **3**
Time : **9am - 5pm**

Audience

Engineers and Technicians

Prerequisites

BSIGB Course

Equipments

- DNN,UNC786,UNC632 and various field equipment

Contents

- Use of the Sigma graphic editor
- Advanced programming objects
- Use of programmable objects

Sigma Advanced



Code : **BSIGA**
Level : **Advanced**
Days : **4**
Time : **9am - 5pm**

Audience

Engineers and Technicians

Prerequisites

BSIGI Course

Equipments

- DNN,IC-Modbus,UNC 796,UNC 632 and various field equipment

Contents

- Integrating third party equipment through the IC controller
- Making sigma graphics appear as web pages
- Setup system security levels
- Review complicated control schemes from commissioned projects
- Trouble shoot network issues



Deliverables:

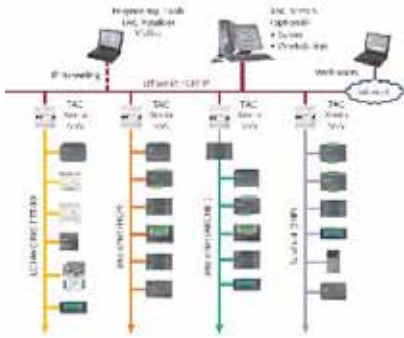
- Training documents
- Training Certificates
- Lunch



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Building Solution Courses

Standard Integration Protocols



Code : **BSPRB**
 Level : **Basic**
 Days : **2**
 Time : **9am - 5pm**

Audience
 Engineers and Technicians

Prerequisites
 BBACB Course

Equipments
 • Altivar VFD, MNL 200, MNB1000

Contents

- What you need to know from equipment supplier
- 3rd Party tools to prove the Data before integration
- Integration tools available for integration to Schneider Electric BMS

Vista Product for Sales



Code : **BVSSB**
 Level : **Basic**
 Day : **1**
 Time : **9am - 5pm**

Audience
 Sales engineer, Design engineer

Prerequisites
 Basic HVAC/Electrical Course

Equipments
 None

Contents

- Introduction in general
- TAC offering - overview
- TAC Xenta Hardware description
- TAC Vista software module description



- Deliverables:
- Training documents
 - Training Certificates
 - Lunch



For schedule, training fee and other inquiries related to the course, please email ae-tc-gulf@ae.schneider-electric.com

Building Solution Courses

Vista Product Overview and Design



Code : **BVSPB**
Level : **Basic**
Days : 2
Time : 9am - 5pm

Audience

Sales Engineer, Design Engineer, Project Engineer

Prerequisites

Basic HVAC/Electrical Course

Equipments

None

Contents

- Introduction in general
- TAC offering - overview
- TAC Xenta Hardware description
- TAC vista software module description
- Exercise with TAC network design

Vista / Menta Programming Basic



Code : **BVSTB**
Level : **Basic**
Days : 5
Time : 9am - 5pm

Audience

Operators, Service Engineer, Project Engineer, Design Engineer

Prerequisites

Basic HVAC/Electrical Course

Equipments

- TAC Xenta Training Board
- Laptop loaded with TAC Vista software

Contents

- Bus topology, Controllers Used, Field devices
- Basic Programming, Introduction in general
- TAC offering – overview, TAC Xenta Hardware
- LonWorks Basics, Architecture
- Creating a simple application (Xenta/Menta)
- Simulation of the application
- OP-unit to view and change set values.
- Operator panel, programming
- TAC Vista Classic scenario (setup a TAC Vista system)
- TAC Vista Workstation
- Vista classic interfacing with TAC Xenta
- Download TAC Xenta/Menta applications
- Commissioning TAC and LonWorks devices
- Color graphics, Alarm processing
- Time functions, Notes, TrendViewer
- Backup



Deliverables:

- Training documents
- Training Certificates
- Lunch



For schedule, training fee and other inquiries related to the course, please email ae-tc-gulf@ae.schneider-electric.com

Building Solution Courses

TAC Vista Security with I/net Hardware



Code : **BVSSI**
Level : **Intermediate**
Days : **3**
Time : **9am - 5pm**

Audience

Operators, Service Engineer, Project Engineer, Design Engineer

Prerequisites

Basic HVAC/Electrical Course

Equipments

- TAC Xenta Training Board
- Laptop loaded with TAC Vista software

Contents

- General System Overview
- Controller Hardware
- System Software – TAC INET Host Tool
- 12 Steps to Access Control
- System Points
- Alarms, Messages and Transactions
- Graphics
- Password Controls
- Standard Reports
- AIC, Time schedules, Events and Calculations

Visisat Programming tool for Micronet controllers



Code : **BVSTI**
Level : **Intermediate**
Days : **3**
Time : **9am - 5pm**

Audience

Engineers and Technicians

Prerequisites

Basic HVAC/Electrical Course

Equipments

- MN MI, MNN620, MNA 550, MNL 650, Unifac

Contents

- Introduction to MicroNet series of controllers.
- Attributes of each model.
- Network topology and protocols.
- Commissioning and programming controller schemes.
- Downloading and uploading completed schemes.
- Trouble shooting



Deliverables:

- Training documents
- Training Certificates
- Lunch



For schedule, training fee and other inquiries related to the course, please email ae-tc-gulf@ae.schneider-electric.com

Building Solution Courses

Workplace Tech programming for BACnet controllers



Code : **BWPBI**
Level : **Intermediate**
Days : **3**
Time : **9am - 5pm**

Audience
Engineers and Technicians

Prerequisites
BHVAB Course

Equipments
• MNB1000, MNB300 and various field equipment

Contents
• Introduction to BacNET series of controllers
• Attributes of each model
• Network topology and protocols
• Commissioning and programming controller schemes
• Downloading and uploading completed schemes
• Trouble shooting

Workplace Tech programming for LON controllers



LONMARK®
INTERNATIONAL

Code : **BWPLI**
Level : **Intermediate**
Days : **3**
Time : **9am - 5pm**

Audience
Engineers and Technicians

Prerequisites
BHVAB Course

Equipments
• MNL50, MNL100, MNL200, MNLVAV

Contents
• Introduction to MicroNet series of controllers
• Attributes of each model
• Network topology and protocols
• Commissioning and programming controller schemes
• Downloading and uploading completed schemes
• Trouble shooting



- Deliverables:
- Training documents
 - Training Certificates
 - Lunch



For schedule, training fee and other inquiries related to the course, please email ae-tc-gulf@ae.schneider-electric.com

Building Solution Courses

Workplace Pro Fundamentals



Code : **BWPRB**
Level : **Basic**
Days : **3**
Time : **9am - 5pm**

Audience

Engineers and Technicians

Prerequisites

None

Equipments

- UNC510

Contents

- Discuss I/A Niagara Framework software installation and licensing
- Use the Administration Tool
- Discuss the features of UNCs 410 and 520
- Configure Niagara objects
- Backup the I/A Niagara Framework database
- Configure scheduling

Workplace Pro Intermediate



Code : **BWPRI**
Level : **Intermediate**
Days : **2**
Time : **9am - 5pm**

Audience

Engineers and Technicians

Prerequisites

BWPRB Course

Equipments

- UNC 510

Contents

- Discuss I/A Niagara Framework software installation and licensing
- Use the Administration Tool
- Use I/A Niagara Servlets
- Build GX (Graphics) pages
- Use of Bundle containers



Deliverables:

- Training documents
- Training Certificates
- Lunch



For schedule, training fee and other inquiries related to the course, please email ae-tc-gulf@ae.schneider-electric.com

Building Solution Courses

Vista TGML (Graphic) Advanced



Code : **BVTGA**
Level : **Advanced**
Days : 2
Time : **9am - 5pm**

Audience

Engineers and Technicians

Prerequisites

TAC Vista / Menta/ Xenta Basic Course

Equipments

- Demo kit 3 + 1

Contents

- TGML introduction
- TGML features and License
- Create a common TGML slide
- Creating animation/binding/linking
- Create a master slide
- Assessment

Vista Menta Advanced



Code : **BVMTA**
Level : **Advanced**
Days : 2
Time : **9am - 5pm**

Audience

Engineers and Technicians

Prerequisites

TAC Vista / Menta/ Xenta Basic Course

Equipments

- Demo kit 3 + 1

Contents

- Tac Menta introduction
- Features and License
- Create a common application file
- Creating duty standby application with rotation
- Simulation /downloading/on line checking
- Assessment



Deliverables:

- Training documents
- Training Certificates
- Lunch



For schedule, training fee and other inquiries related to the course, please email ae-tc-gulf@ae.schneider-electric.com

Building Solution Courses

Vista LNS Integration



Code : **BVLNA**
Level : **Advanced**
Days : **3**
Time : **9am - 5pm**

Audience

Engineers and Technicians

Prerequisites

TAC Vista / Menta/ Xenta Basic Course

Equipments

- Demo kit 3 + 1

Contents

- Introduction - LonWorks Technology Basic Theory
- TAC LonWorks Technology
- TAC Vista Architecture network
- LonWorks Trouble Shooting
- Where to find Information
- LNS and Lonmaker as management tool
- Software Installation
- Creating project
- Installing and commissioning router
- Installing and commissioning TAC Xenta base unite with its I/O module
- Installing and commissioning third party device x100
- Creating Function Block
- SNVT Binding
- Update TAC Vista
- Managing DB , Managing Devices

Vista Xenta Web Server



Code : **BVWBA**
Level : **Advanced**
Days : **2**
Time : **9am - 5pm**

Audience

Engineers and Technicians

Prerequisites

TAC Vista / Menta/ Xenta Basic Course

Equipments

- Demo kit 3 + 1

Contents

- TAC Xenta server Introduction
- Build a network with TAC Xenta 511 as LTA, using XBuilder
- Bring data direct to TAC Vista
- Build web pages and store inside TAC Xenta 511



Deliverables:

- Training documents
- Training Certificates
- Lunch



For schedule, training fee and other inquiries related to the course, please email ae-tc-gulf@ae.schneider-electric.com

Building Solution Courses

Vista Xenta 700



Code : **BV70A**
Level : **Advanced**
Days : **2**
Time : **9am - 5pm**

Audience

Engineers and Technicians

Prerequisites

TAC Vista / Menta/ Xenta Basic Course

Equipments

- Demo kit 3+1

Contents

- TAC Xenta web server introduction
- Build a LON network with TAC vista web station
- Using xbuilder as tool
- Create graphic /application/ alarm/tend inside TAC Xenta web server
- Bring the data direct to web browser

Vista Integration (913)



Code: **BVSIA**
Level : **Advanced**
Days : **2**
Time : **9am - 5pm**

Audience

Engineers and Technicians

Prerequisites

TAC Vista / Menta/ Xenta Basic Course

Equipments

- Demo kit 3 + 1

Contents

- TAC Xenta 913 introduction
- Explaining all protocol with their limitation
- Build a network with modbus integration PMU 810
- Using xbuilder as tool, bring the data direct to vista
- Bring the data to vista through LON device



Deliverables:

- Training documents
- Training Certificates
- Lunch



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Building Solution Courses

Continuum Product for Sales



Code : **BCFSB**
Level : **Basic**
Day : **1**
Time : **9am - 5pm**

Audience

Sales Engineers, Design Engineers and Technicians

Prerequisites

BHVAB Course

Equipments

None

Contents

- Continuum offer-Overview
- Capabilities of Hardware and Software

Continuum Product Overview and Design



Code : **BCFDB**
Level : **Basic**
Days : **2**
Time : **9am - 5pm**

Audience

Sales Engineers, Design Engineers and Technicians

Prerequisites

BHVAB Course

Equipments

None

Contents

- Continuum offer-Overview.
- Capabilities of Hardware and Software
- Network design
- Sample design selection.



Deliverables:

- Training documents
- Training Certificates
- Lunch



For schedule, training fee and other inquiries related to the course, please email ae-tc-gulf@ae.schneider-electric.com

Building Solution Courses

Continuum Boot Camp for HVAC



Code : **BCVBB**
Level : **Basic**
Days : **5**
Time : **9am - 5pm**

Audience

Sales Engineers, Design Engineers and Technicians

Prerequisites

BHVAB Course

Equipments

- Cyberstation, B3 series controllers

Contents

- Continuum Product Overview
- Continuum Software Installation
- Continuum Hardware Installation
- Inputs, Outputs, Alarms and Schedules.
- Continuum Graphics.Plain English Core.
- Plain English for HVAC.

Continuum Boot Camp for Security



Code : **BCSBB**
Level : **Basic**
Days : **5**
Time : **9am - 5pm**

Audience

Sales Engineers, Design Engineers and Technicians

Prerequisites

BHVAB Course

Equipments

- Cyberstation, ACX controller

Contents

- Continuum Product Overview
- Continuum Software Installation
- Continuum Hardware Installation
- Inputs, Outputs, Alarms and Schedules
- Door Access
- Continuum Graphics
- Plain English Core
- Plain English for Security



Deliverables:

- Training documents
- Training Certificates
- Lunch



For schedule, training fee and other inquiries related to the course, please email ae-tc-gulf@ae.schneider-electric.com

Building Solution Courses

Svea Lighting Product for Sales



Code : **BLSSB**
Level : **Basic**
Day : **1**
Time : **9am - 5pm**

Audience

Sales Engineers, Design Engineers and Technicians

Prerequisites

None

Equipments

None

Contents

- Svea offer-Overview
- Capabilities of hardware

Svea Lighting Product Overview and Design



Code : **BLSDB**
Level : **Basic**
Days : **2**
Time : **9am - 5pm**

Audience

Sales Engineers, Design Engineers and Technicians

Prerequisites

None

Equipments

None

Contents

- Svea offer-Overview
- Capabilities of hardware
- Network design
- Integration into Vista



Deliverables:

- Training documents
- Training Certificates
- Lunch



For schedule, training fee and other inquiries related to the course, please email ae-tc-gulf@ae.schneider-electric.com

Training on Schneider Electric Power Products



Power Solution Courses

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Power Solution Courses

Detailed Understanding of Low Voltage Assembly Blokset



Code : **ELBSI**
Level : **Intermediate**
Day : **1**
Time : **9am - 5pm**

Audience

Designers, End Users, Installation Officials, Panel Builders

Prerequisites

Knowledge in LV switchgear and Panel Boards

Equipments

Blokset Assembly

Contents

- Low Voltage switchboard
- The functions of LV switchboard
- The IEC 60439-1 standard and compliance of BLOKSET assembly
- Blokset Switchboards
 - > Structured switchboard on function units
 - > Forms of partitions
 - > Type Tested solution

Detailed Understanding of Low Voltage Assembly Okken



Code : **EOKKI**
Level : **Intermediate**
Day : **1**
Time : **9am - 5pm**

Audience

Designers, End Users, Installation Officials, Panel Builders

Prerequisites

Knowledge in LV switchgear and Panel Boards

Equipments

None

Contents

- Low Voltage switchboard
- The functions of LV switchboard
- The IEC 60439-1 standard and compliance of OKKEN
- OKKEN Switchboards
 - > Structured switchboard on function units
 - > Forms of partitions
 - > Type Tested solution



Deliverables:

- Training documents
- Training Certificates
- Lunch



For schedule, training fee and other inquiries related to the course, please email ae-tc-gulf@ae.schneider-electric.com

Power Solution Courses

Sepam Series 20, 40, 80 Bringing into Operation



Code : **ESEPI**
Level : **Intermediate**
Days : **2**
Time : **9am - 5pm**

Audience

Those responsible for setting ,
commissioning and operating electrical
installation with SEPAM protection Relays

Prerequisites

Knowledge in Protection Relaying

Equipments

Laptop with SFT2841 Software installed
Sepam Demo Case

Contents

- Sepam relays Offer
- Sepam Installation & Communications
- Sepam Control & Monitoring Functions
- Sepam Metering & Diagnosis
- Sepam User Machine Interface (UMI)
- SFT 2841 Software
- Logic Equation Editor
- Mimic Display Editor

Operation and Maintenance of McSet Switchgear



Code : **EMCSI**
Level : **Intermediate**
Days : **2**
Time : **9am - 5pm**

Audience

Operation Engineers, Maintenance Engineers

Prerequisites

Knowledge in MV switchgear

Equipments

McSet Breaker Panel

Contents

- Introduction about the switchgear MC set
- Breaker rack in and rack out operations and
draw out in the trolley
- Earth switch close / open operations.
- VT rack out and rack in operations
- Interlocks



Deliverables:

- Training documents
- Training Certificates
- Lunch



For schedule, training fee and
other inquiries related to the
course, please email
[ae-tc-gulf@ae.schneider
-electric.com](mailto:ae-tc-gulf@ae.schneider-electric.com)

Power Solution Courses

Operation and Maintenance of GenieEvo Switchgear



Code : **EGNVI**
Level : **Intermediate**
Days : **2**
Time : **9am - 5pm**

Audience

Operation Engineers, Maintenance Engineers

Prerequisites

Knowledge in MV switchgear

Equipments

GenieEvo Panel

Contents

- Introduction
- Defines the main variants and ratings
- Architecture and main components
- Evolis vacuum circuit breaker
- Controlled air disconnecter
- Voltage transformer
- Endurance characteristics
- Isolator and CB mechanism operation
- Cable testing facility
- Voltage transformer compartment
- Protection reset.
- Visual checks

Operation and Maintenance of Ringmaster RN2C



Code : **ERNGI**
Level : **Intermediate**
Day : **1**
Time : **9am - 5pm**

Audience

Operation Engineers, Maintenance Engineers

Prerequisites

Knowledge in MV switchgear

Equipments

Ringmaster RN2C

Contents

- Introduction
- Defines the main variants and ratings
- Architecture and main components
- Interruption system
- Gas pressure indication
- Endurance characteristics
- Overview of protection system
- Mechanism operation
- Cable testing facility
- Circuit Breaker reset
- Protection reset.
- Visual checks



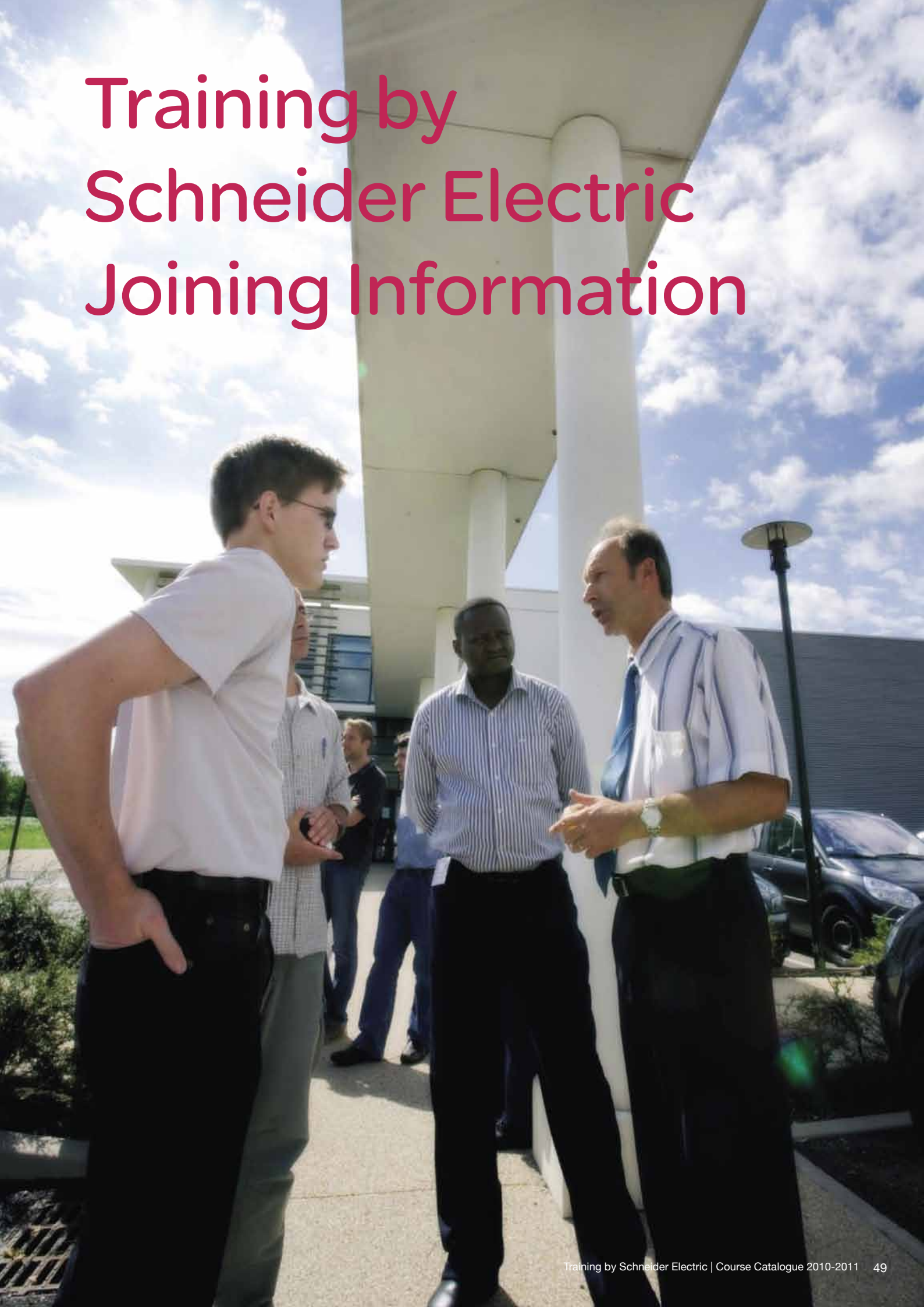
Deliverables:

- Training documents
- Training Certificates
- Lunch



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Training by Schneider Electric Joining Information



Terms and Conditions

Please read carefully

Unless stated otherwise, following terms and conditions applies to all training courses listed in the catalogue

Registration

- Registration, together with payment, should be made 10 working days prior to the course commencement date.
- Confirmation of acceptance will be made 10 working days prior to the course commencement date by email, fax or mail.
- If a class is filled, you will be placed on the waiting list or offered a later course. In any event, you will be kept notified of your status.

Tuition Fee

- Course fees are payable in advance. A Cheque, Demand Draft or Purchase order for the full amount of tuition fee must accompany the Training registration form.
- Payment can be made by DD/Cheque payable to Schneider Electric FZE, payable in Dubai, UAE or by wire transfer to Account number: 02 042488 001 02 0/93, Calyon Corporate and Investment bank, Dubai World Trade Centre, level 32, PO Box No: 9256, Dubai, UAE. SWIFT Code: BSUIAEAD
- The Cost of training course provided in the catalogue is applicable per participant and when the training is conducted in Schneider Electric office in Dubai.
- Supplying of all course materials, all relevant technical reference material, lunch, refreshments, and the use of training equipment are included in the tuition fee.
- Prices are shown in US dollars and are subject to change without notice.
- Provisional reservations without payment are subject to cancellation without notice 10 working days prior to the course commencement date in order to accommodate those on the waiting list.

Cancellation Policy

- No refund will be made in case of cancellation or absence of participants. However, suitably qualified replacements can be accommodated against cancellation, provided they register prior to commencement on the first day of the course. Training registration form.

Expenses

- Participants are responsible for arranging and paying their travel, hotel and living expenses. Information on local hotels and transportation is available upon request.

General

- Insufficient enrolment - Schneider Electric FZE reserves the right to cancel any course. In this event, you will be notified immediately, and either fully refunded, or the fee applied to a future course.
- It is the responsibility of your organisation to ensure that the trainees attending have sufficient prior knowledge and experience to benefit from attendance at the course. Please note the pre-requisites shown in the detailed descriptions of the courses.
- A Training Certificate based on the performance and attendance will be issued to the participants
- Schneider Electric FZE reserves the right to change course schedules, discontinue courses, modify course content, limit class size, and cancel courses.

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