

Schneider Electric Gulf Training Catalogue 2009



People



Competency



Training Manuals

Training by Schneider Electric, making you more competitive!

- Qualified expert trainers G
- Dedicated training centres G
- Course catalogues



**Guaranteed acquisition
of new skills.**

Editorial	5
Calendar	6
2009 Technical Training - Q1 to Q4	
Electrical Distribution Courses	11
Industrial Control Courses	21
Industrial Automation Courses	29
Building Automation Courses	37
Solution Training Courses	51



“Making you more competitive”

New year, new challenges!! We, at Schneider Electric, are always optimistic that new challenges will bring new opportunities.

As a global specialist in energy management, we are proud to present you the training catalog- 2009 on behalf of Schneider Electric Gulf Countries. This catalog is designed to ensure that it reflects our latest wide range of training and development options to prepare for a future. We are confident that our training course will help our customers to design efficient & simple solutions to satisfy the end clients.

This year, we are introducing a very comprehensive range of Building Management System (BMS) Trainings and Solution Training offerings. Apart from this, there are 12 new Training offers (Electrical Distribution – 4, Industrial Control - 4 and Industrial Automation - 4) introduced for the existing categories.

Overall, all trainings are classified into 5 Categories:

→ Electrical Distribution Trainings

- 14 Training Courses (4 new)
- 63 Training Sessions

→ Industrial Control Trainings

- 11 Training Courses (4 new)
- 36 Training Sessions

→ Industrial Automation Trainings

- 11 Training Courses (4 new)
- 37 Training Sessions

→ Building Management Systems Trainings

- 22 Training Courses (All new)
- 50 Training Sessions

→ Solution Trainings

- 3 Training Courses (All new)
- 13 Training Sessions

Please refer to the schedules for each training and register your seats in advance.

Happy learning!

Amit Khakhar

Calendar

2009 Technical Training - Quarter 1

2009 Technical Training Calendar - Quarter 1

	January					February					March				
	ED	IC	IA	BMS new	Solution	ED	IC	IA	BMS new	Solution	ED	IC	IA	BMS new	Solution
1									BVSSB			CSSDI			
2						ESEPI	CZELB						AMAGI		
3						EPLGI new	CSSOI								
4								ATWDI	BBACB						SWATI new
5			AUAGA new												
6				BICLI											
7															
8							CVSDI								
9							CDRVI		BVSSI						
10										SHPCI new					
11						EDMVB new		ARTUI new					AVJCI		SHPCI new
12						EDMVB new									
13															
14															
15						EDLVB	CHPDI new								
16						ELBSI					EBSWB		AVJCA		
17									BWPLI					BWPLI	
18								AMIRI					AVCHA new		SEMCI
19															
20				BHVAB											
21				BBMSB											
22							CHVAI new								
23															
24									BVSTB			CTESI		AQTSA new	BNW8B
25						EOKKI		APREA							
26											ESEPA				
27	ESEPI														
28	EPLGI new	CINTB													
29															
30											EPPTI new				
31											EPFCI new				BVSPB

- Only Schneider Electric Employee
- Only Partners
- Anybody

2009 Technical Training Calendar - Quarter 2

	April					May					June				
	ED	IC	IA	BMS new	Solution	ED	IC	IA	BMS new	Solution	ED	IC	IA	BMS new	Solution
1											ELVDI				
2														BVSTI	
3							CSSOI		BVSSB			CSSDI			SWATI new
4									BBACB						
5															
6															
7			AUAGA new												
8													AVJCI		
9															
10							CVSDI				EMVPB		AVJCA		
11						ESEPI	CDRVI		BVSTA(10-12)						
12		CINTB							BVSTA(11-13)						
13						EPLGI new		AMIRI		SHPCI new					
14															
15	EDMVB new		ATWDI								EBSWB				
16	EDMVB new										ENSTI				
17													BMCNI	SEMCI	
18						ELBSI	CMVDI new				EDSCS				
19															
20						ESEPI									
21				BVSTI		EPLGI									
22	EMVPB											CTESI			
23		CZELB													
24											ESEPA				
25							CLIFI new								
26						EOKKI									
27															
28											EPPTI new				
29			BMCNI								EPFCI new				
30														BSIGB	
31						ELVDI		AMAGI							

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- Only Partners
- Anybody

Calendar

2009 Technical Training - Quarter 3

2009 Technical Training Calendar - Quarter 3

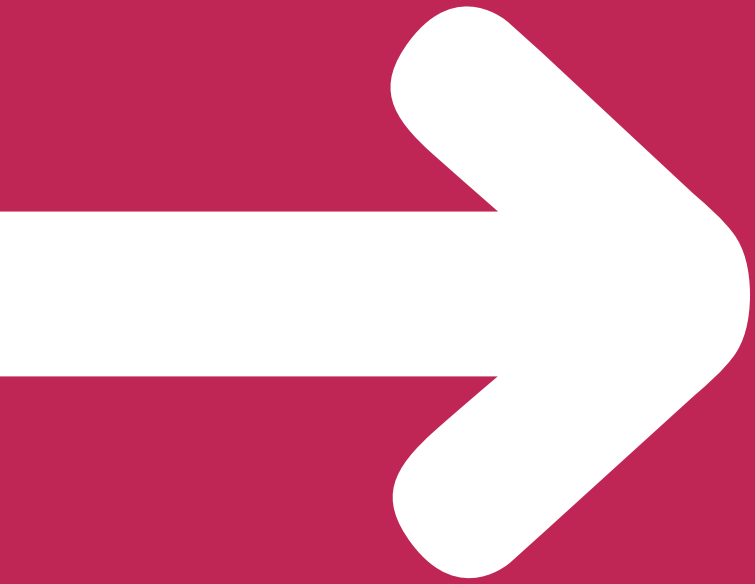
	July					August					September				
	ED	IC	IA	BMS new	Solution	ED	IC	IA	BMS new	Solution	ED	IC	IA	BMS new	Solution
1				BSIGB											
2							CSSOI		BVSSB			CSSDI		BVSTI	
3									BBACB						SWATI new
4															
5								ARTUI new							
6			AUAGA new											AVJCI	
7				BICLI											
8														AVJCA	
9							CVSDI								
10							CDRVI		BVSTA(9-11)						
11						ESEPI			BVSTA(10-12)						
12								AMIRI		SHPCI new					
13						EPLGI new								AVCHA new	
14			ATWDI	BNW8B							EBSWB				
15	EDMVB new														
16	EDMVB new					EDLVB	CHPDI new				ENSTI			BMCNI	SEMC
17						ELBSI					EDSCS				
18						ESEPI		APREA							
19															
20						EPLGI new									
21															
22		CINTB		BHVAD										AQUAA	
23		CZELB		BBMSB			CHVAI new								
24												CTESI			
25						EOKKI			BWPLI						
26															
27											EPPTI new				
28				BVSTB							EPFCI new			AQTSA new	
29	EMVPB										ESEPA				BSIGB
30						ELVDI		AMAGI							
31									BVSTI						

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- Only Partners
- Anybody

2009 Technical Training Calendar - Quarter 4

	October					November					December				
	ED	IC	IA	BMS new	Solution	ED	IC	IA	BMS new	Solution	ED	IC	IA	BMS new	Solution
1	ESEPA		AQTS				CSSOI		BVSSB						
2									BBACB						
3															
4								ARTUI new							
5			AUAGA												
6			new	BICLI											
7															
8							CVSDI				ESEPA	CSSDI		BVSTI	
9							CDRVI		BVSTA(10-12) BVSTA(11-13)						SWATI new
10						ESEPI		AMIRI		SHPCI new			AMAGI		
11		CINTB				EPLGI new									
12															
13				BNW8B											
14	EDMVB new		ATWDI								ELVDI				
15	EDMVB new		new												
16						ELBSI	CMVDI new	APREA			EBSWB			BMCNI	SEMCI
17						ESEPI									
18						EPLGI									
19				BHVAB											
20				BBMSB											
21												CTESI	AVJCI		
22		CZELB													
23							CLIFI new	AQUAA	BWPLI		ENSTI				
24						EOKKI					EDSCS		AVJCA		
25															
26															
27				BVSTB							EPPTI new				
28	EMVPB										EPFCI new				
29															BSIGB
30															
31															

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- Only Partners
- Anybody



Electrical Distribution Courses

Electrical Distribution Courses

Index of the courses

SI No.	Code	Level	Course Title	Days	Schedule	Page
1	EDLVB	L1	Basics on LV Distribution and IEC Standards for LV Switchgear and Controlgear Assemblies	1	Feb 15 / Aug 16	12
2	EBSWB	L2	Busway Specification, Design Concept and Software for Drawings	1	Mar 16 / Jun 15 / Sep 14 / Dec 16	12
3	ELVDI	L2	Design of a Low Voltage Electrical Installation and Ecodial LV Design Software	2	May 31 / Aug 30 / Dec 14	13
4	ENSTI	L2	Detailed Understanding of Compact NS and Masterpact NT/NW	2	Jun 16 / Sep 15 / Dec 22	13
5	EDSCS	L2	Source Changeover Systems and Schneider Electric Solutions	1	Jun 18 / Sep 17 / Dec 24	14
6	ELBSI	L2	Detailed Understanding of LV Assembly Blokset	1	Feb 16 / May 18 / Aug 17 / Nov 16	14
7	EOKKI	L2	Detailed Understanding of LV Assembly Okken	1	Feb 25 / May 26 / Aug 25 / Nov 24	15
8	EPTTI	L2	Detailed Understanding of LV Assembly Prisma TT - new	1	Mar 29 / Jun 28 / Sep 27 / Dec 27	15
9	EPFCI	L2	Detailed Understanding of Power Factor Correction and Harmonics Filtering - new	1	Mar 30 / Jun 29 / Sep 28 / Dec 28	16
10	EDMVB	L1	Introduction to Medium Voltage Electrical Distribution Products - new	1	Feb 11 / Feb 12 / Apr 15 / Apr 16 / Jul 15 / Jul 16 / Oct 14 / Oct 15	16
11	EPLGI	L2	Power Monitoring and Control with PowerLogic meters - new	1	Jan 28 / Feb 4 / May 13 / May 21 / Aug 13 / Aug 20 / Nov 12 / Nov 19	17
12	EMVPB	L1	Medium Voltage Protection Principles	3	Apr 21 / Jun 9 / Jul 28 / Oct 27	17
13	ESEPI	L2	Sepam Series 20, 40, 80 Bringing into Operation	2	Jan 26 / Feb 2 / May 11 / May 19 / Aug 11 / Aug 18 / Nov 10 / Nov 17	18
14	ESEPA	L3	Sepam Series 80 Advanced Protection Functions	3	Mar 24 / Jun 23 / Sep 29 / Dec 8	18

* L1 - Basic Level
L2 - Intermediate Level
L3 - Advanced Level

Electrical Distribution Courses

Basics on LV Distribution and IEC Standards for LV Switchgear and Controlgear Assemblies

Code: **EDLVB - Basic Level**
(1 Day , 9 AM to 5 PM)

Audience

Sales personnel, marketing and Engineering personnel who want to acquire basic knowledge about LV distribution and Schneider Electric Solutions

Prerequisites

None

Equipments

- > Blokset Assembly
- > Masterpact ACB
- > Compact NS MCCB

Contents

- > Basic functions of low voltage Electrical Distribution Systems
 - Disconnection
 - Control
 - Protection
 - Characteristics and Technology
 - Breaking devices
 - Protection devices connections
- > Technical Features of LV switchgear Assemblies/Products and their corresponding IEC Standards
- > Brief Overview of Merlin Gerin Low Voltage Switchgear Assemblies
 - Okken System
 - Blokset System
 - Prisma Plus System
- > Brief Overview of Merlin Gerin Low Voltage Switchgear Products
 - Air Circuit Breakers type NT/NW
 - Moulded Case Circuit Breakers type
 - NS/NBD / Easycompact
 - Miniature Circuit Breakers

Cost: US\$700
Schedule: Feb 15 / Aug 16

Busway specification, design concept and software for drawings

Code: **EBSWB - Intermediate Level**
(1 Day , 9 AM to 5 PM)

Audience

Those responsible for designing and selecting Busway for various building and industrial applications.

Prerequisites

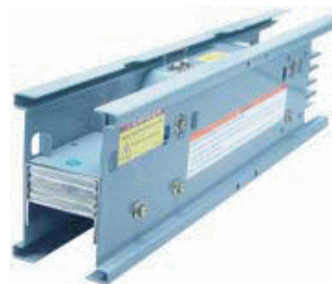
EDLVB and ELVDI

Equipments

None

Contents

- > Introduction to Busway
 - Ranges of Busway and Selection Criteria
 - Offers from Schneider Electric
- > Specification of Busway
 - Understanding the need of Busway
 - Specifying criteria
- > Designing of Busway system
 - Selection of Busway type and ratings
 - Aspects to consider for proper designing of Busway
 - How to route the Busway system
- > Use of BRASS Software
 - What is BRASS Software
 - Application of BRASS software for preparing Busway route drawings
 - Practice on BRASS



Cost: US\$700
Schedule: Mar 16 / Jun 15 / Sep 14 / Dec 16

Electrical Distribution Courses

Design of a Low Voltage Electrical Installation and Ecodial LV Design Software

Code: **ELVDI - Intermediate Level**
(2 Days , 9 AM to 5 PM)

Audience

Those responsible for the study and design of an electrical distribution system.

Prerequisites

EDLVB

Equipments

Ecodial Software

Contents

- > Power assessment
 - Calculate the absorbed power: motors, heating devices, lighting
 - Calculate the rated power, the choice of sources
- > Calculating the cable way and cable cross sections
 - Taking into account the parameters and the coefficients according to IEC Standards
 - Calculating voltage drops manual overriding features for cable selection
- > Protection of the installation against overloads and short-circuits
 - Calculation of different short-circuits: impedance method based on the IEC 60909 standard
 - Determination of the breaking capacity of the circuit breakers
 - Determination of the thermal stress of the wires and the circuit breakers
 - Discrimination, cascading
- > Protection of people against direct and indirect contacts
 - Different earthing systems
 - Study of TT, TN, IT earthing systems
- > Calculation of reactive energy compensation
 - Improving the power factor
 - Calculation of the capacitor banks
- > How to control and protect asynchronous motors
 - Protection and control
 - Co-ordination type 1, type 2 start-up and use classes of contactors
- > Reports
 - Detailed reports for calculation with discrimination curves

Cost: US\$1,400

Schedule: May 31 / Aug 30 / Dec 14

Detailed Understanding of Compact NS and Masterpact NT/NW

Code: **ENSTI - Intermediate Level**
(2 Days , 9 AM to 5 PM)

Audience

Panel Builder Technicians, Site and Installation Officials.

Prerequisites

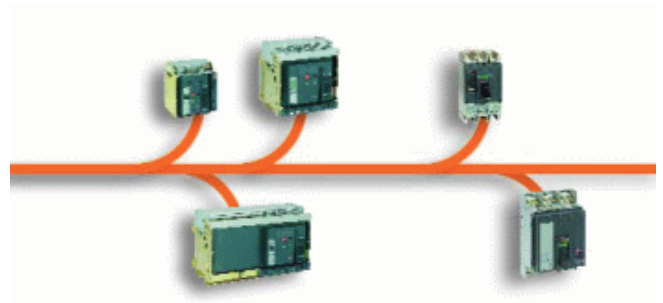
EDINTRO

Equipments

- > Compact NS
- > Masterpact NT/NW
- > Mechanical Interlocking Devices

Contents

- > Detailed look at Masterpact NT/NW breakers
- > Detailed look at Compact NS breakers
- > Study of Trip Units for Masterpact NT/NW breakers
- > Study of Trip Units for Compact NS breakers
- > Principle of mechanical & electrical interlocking
- > Operating principle of UA/ BA controller and troubleshooting procedure



Cost: US\$1,400

Schedule: Jun 16 / Sep 15 / Dec 22

Electrical Distribution Courses

Source Changeover Systems and Schneider Electric Solutions

Code: **EDSCS - Intermediate Level**
(1 Day , 9 AM to 5 PM)

Audience

Those responsible for the study and design of an Electrical Distribution system.

Prerequisites

EDLVB

Equipments

Source Changeover type UA/BA Controller with Compact NS MCCBs.

Contents

- > The purpose of source changeover systems
- > Areas of use for these systems
- > Examples of source changeover applications
- > Schneider Electric offers for source changeover systems
- > Possible configurations with Schneider Electric source changeover solutions
- > Protection of networks supplied by generators
- > IEC standards for source changeover systems



Cost: US\$700

Schedule: Jun 18 / Sep 17 / Dec 24

Detailed Understanding of LV Assembly Blokset

Code: **ELBSI - Intermediate Level**
(1 Day , 9 AM to 5 PM)

Audience

Designers, End Users, Installation Officials, Panel Builders.

Prerequisites

EDLVB and ELVDI

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



Cost: US\$700

Schedule: Feb 16 / May 18 / Aug 17 / Nov 16

Electrical Distribution Courses

Detailed Understanding of LV Assembly Okken

Code: **EOKKI - Intermediate Level**
(1 Day , 9 AM to 5 PM)

Audience

Designers, End Users, Installation Officials, Panel Builders.

Prerequisites

EDLVB and ELVDI

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



Cost: **US\$700**

Schedule: Feb 25 / May 26 / Aug 25 / Nov 24

Detailed Understanding of LV Assembly Prisma TT

New

Code: **EPTTI - Intermediate Level**
(1 Day , 9 AM to 5 PM)

Audience

Sales and Engineering personnel

Prerequisites

EDLVB

Equipments

Prisma TT prototype

Contents

Sales, Tendering, Design, Production and Quality inspection of Prisma TT switch boards



Cost: **US\$700**

Schedule: Mar 29 / Jun 28 / Sep 27 / Dec 27

Electrical Distribution Courses

Detailed Understanding of Power Factor Correction and Harmonics Filtering

New

Code: **EPFCI - Intermediate Level**
(1 Day , 9 AM to 5 PM)

Audience

Sales and Engineering personnel

Prerequisites

EDLVB and Utility Regulations

Equipments

- > Samples of Capacitors
- > Harmonics Simulation Software

Contents

Selection, design and implementation of power factor correction techniques including harmonics filtering as per Utility regulations



Cost: US\$700

Schedule: Mar 30 / Jun 29 / Sep 28 / Dec 28

Introduction to Medium Voltage Electrical Distribution Products

New

Code: **EDMVB - Basic Level**
(1 Day , 9 AM to 5 PM)

Audience

Those responsible for the study and design of an Medium Voltage Electrical Distribution System.

Prerequisites

None

Equipments

Samples

Contents

- > CGSet, CBGSO, F400
- > MCset4, MCset 1,2,3
- > Genie EVO
- > NexGulf,
- > RM6, RingMaster
- > MVCB
- > SEPAM
- > PowerLogic Meters
- > Easeargy

Cost: US\$700

Schedule: Feb 11 / Feb 12 / Apr 15 / Apr 16 /
Jul 15 / Jul 16 / Oct 14 / Oct 15

Electrical Distribution Courses

Power Monitoring and Control with PowerLogic meters

New

Code: **EPLGI - Intermediate Level**
(1 Day , 9 AM to 5 PM)

Audience

Sales, Design, Commissioning, Application Engineers

Prerequisites

EDMVB

Equipments

- > PowerLogic Meter
- > ION Enterprise software

Contents

- > Basic Metering principles
- > Overview of PowerLogic metering range
 - ION 7650 / 7550
 - PM800 / 700 / 200
 - ION 6200
 - PM9C
 - Energy Meter
- > Operation of Meters
- > Introduction to PowerLogic Software



Cost: US\$700

Schedule: Jan 28 / Feb 4 / May 13 / May 21 /
Aug 13 / Aug 20 / Nov 12 / Nov 19

Medium Voltage Protection Principles

Code: **EMVPB - Basic Level**
(3 Days , 9 AM to 5 PM)

Audience

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

Prerequisites

EDMVB

Equipments

- > Laptop
- > Scientific Calculator

Contents

- > Electrical Network Structures
- > Electrical Networks & Machine Faults
- > Source of Short Circuit Currents
- > MV Earthing Systems
- > Protection Current/ Voltage Transformers
- > Protection Function General Characteristics
- > Discrimination Principles



Cost: US\$2,100

Schedule: Apr 21 / Jun 9 / Jul 28 / Oct 27

Electrical Distribution Courses

Sepam Series 20, 40, 80 Bringing into Operation

Code: **ESEPI - Intermediate Level**
(2 Days, 9 AM to 5 PM)

Audience

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

Prerequisites

EDMVB and EMVPB

Equipments

- > Laptop with SFT2841 Software installed
- > Sepam Series 40 Demo Case
- > Sepam Series 80 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



Cost: US\$1,400

Schedule: Jan 26 / Feb 2 / May 11 / May 19 /
Aug 11 / Aug 18 / Nov 10 / Nov 17

Sepam Series 80 Advanced Protection Functions

Code: **ESEPA - Advanced Level**
(3 Days , 9 AM to 5 PM)

Audience

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

Prerequisites

EMVPB and ESEPI

Equipments

- > Laptop with SFT2841 Software installed
- > Sepam Series 80 Demo Case
- > LogiPam Software

Contents

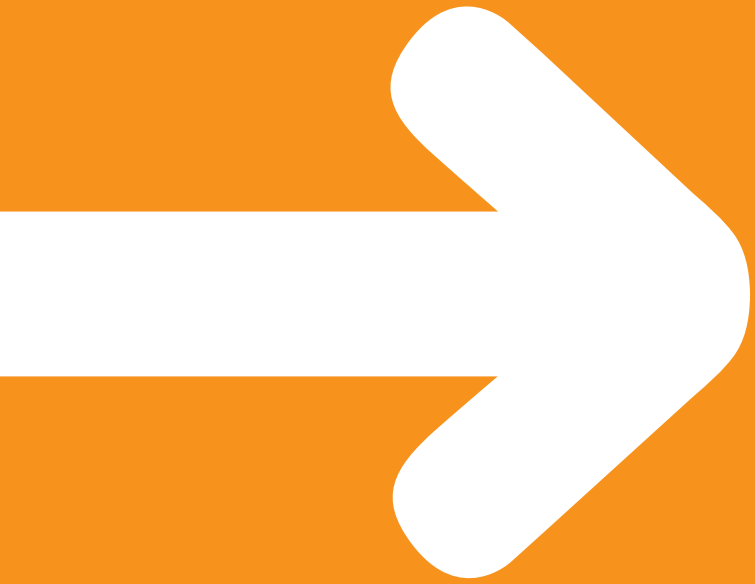
- > All Sepam Series 80 Protection Functions
- > Motor protection functions
- > Transformer protection functions
- > Generator protection functions
- > Feeder protection functions



Cost: US\$2,100

Schedule: Mar 24 / Jun 23 / Sep 29 / Dec 8





Industrial Control Courses

Industrial Control Courses

Index of the courses

SI No.	Code	Level	Course Title	Days	Schedule	Page
1	CINTB	L1	Overview of Industrial Control Offer	0.5	Jan 28 / Apr 12 / Jul 22 / Oct 11	22
2	CZELB	L1	Smart Relay Selection and Zelio Logic Programming	1	Feb 2 / Apr 23 / Jul 23 / Oct 22	22
3	CSSOI	L2	Operation and Maintenance of Softstarters	1	Feb 3 / May 3 / Aug 2 / Nov 1	23
4	CVSDI	L2	Operation and Maintenance of Variable SpeedDrives ATV21/ATV31	1	Feb 8 / May 10 / Aug 9 / Nov 8	23
5	CDRVI	L2	Operation and Maintenance of Variable Speed Drives ATV61/ATV71	1	Feb 9 / May 11 / Aug 10 / Nov 9	24
6	CHPDI	L2	Developing Solutions with ATV61Plus/ATV71Plus High Power Drives - new	1	Feb 15 / Aug 16	24
7	CMVDI	L2	Developing Solutions with ATV1000 Medium Voltage Drives - new	1	May 18 / Nov 16	25
8	CHVAI	L2	Selection and Commissioning of Variable Speed Drives for HVAC and Booster Pump Applications - new	1	Feb 22 / Aug 23	25
9	CSSDI	L2	Developing a Soft Starter and a Variable Speed Drive Solution	1	Mar 1 / Jun 3 / Sep 2 / Dec 8	26
10	CLIFI	L2	Selection and Commissioning of Variable Speed Drives for Lifts and Cranes -ATV31Lift/ATV71Lift - new	1	May 25 / Nov 23	26
11	CTESI	L2	Industrial Motor Management and System Interface - TeSys	1	Sep 24 / Dec 21	27

* L1 - Basic Level
L2 - Intermediate Level
L3 - Advanced Level

Industrial Control Courses

Overview of Industrial Control Offer

Code: **CINTB - Basic Level**
(0.5 Day, 9 AM to 5 PM)

Audience

Those responsible for sales, selection Industrial Control products

Prerequisites

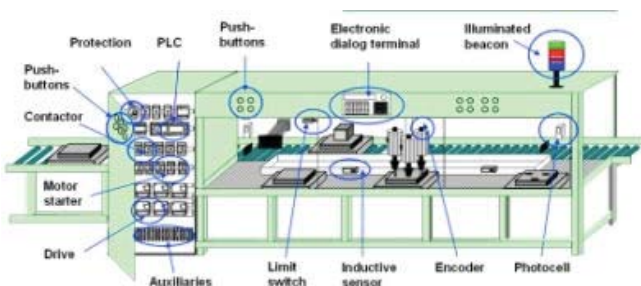
None

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



Cost: US\$350

Schedule: Jan 28 / Apr 12 / Jul 22 / Oct 11

Smart Relay Selection and Zelio Logic Programming

Code: **CZELB - Basic Level**
(1 Day, 9 AM to 5 PM)

Audience

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

Prerequisites

Basic Control System Knowledge

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



Cost: US\$700

Schedule: Feb 2 / Apr 23 / Jul 23 / Oct 22

Operation and Maintenance of Softstarters

Code: **CSSOI - Intermediate Level**
(1 Day, 9 AM to 5 PM)

Audience

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

Prerequisites

CSSDI

Equipments

- > ATS01, ATS48
- > Powersuite Software

Contents

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



Cost: US\$700

Schedule: Feb 3 / May 3 / Aug 2 / Nov 1

Operation and Maintenance of Variable Speed Drives ATV21/ATV31

Code: **CVSDI - Intermediate Level**
(1 Day, 9 AM to 5 PM)

Audience

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

Prerequisites

CSSDI

Equipments

- > Variable Speed Drive Training Bench
- > ATV21 / ATV31
- > Powersuite Software

Contents

- > Main ATV21 feature
- > Product range
- > Base product architecture
- > Option cards
- > Composition of the reference
- > Specifications
- > Options and accessories
- > Current harmonic
- > ATV21 commissioning
- > Programming keypad
- > Simplified commissioning
- > Programming
- > Advanced functions
- > Power suit software
- > Workshop
- > Main ATV31 feature
- > Product range
- > Base product architecture
- > Option cards
- > Composition of the reference
- > Specifications
- > Options and accessories
- > ATV31 commissioning
- > Programming keypad
- > Programming
- > Powersuite software
- > Workshop
- > Maintenance
- > Common faults and diagnostics
- > Troubleshooting



Cost: US\$700

Schedule: Feb 8 / May 10 / Aug 9 / Nov 8

Industrial Control Courses

Operation and Maintenance of Variable Speed Drives ATV61/ATV71

Code: **CDRVI - Intermediate Level**
(1 Day, 9 AM to 5 PM)

Audience

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

Prerequisites

CSSDI

Equipments

- > ATV61 / ATV71 Training bench
- > Powersuite Software

Contents

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



Cost: US\$700

Schedule: Feb 9 / May 11 / Aug 10 / Nov 9

Developing Solutions with ATV61 Plus / ATV71 Plus High Power Drives

New

Code: **CHPDI - Intermediate Level**
(1 Day, 9 AM to 5 PM)

Audience

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

Prerequisites

CSSDI

Equipments

- > ATV61 Training Bench
- > Powersuite Software

Contents

- > ATV61plus selection & feature
 - Base product architecture
 - Option cards
 - Composition of the reference
 - Specifications
 - Options and accessories
 - Current harmonic
- > Operation and commissioning
 - Application functions
 - Pump switching card
 - Powersuite software
 - Workshop
- > Maintenance
 - Common faults and diagnostics
 - Troubleshooting



Cost: US\$700

Schedule: Feb 15 / Aug 16

Developing Solutions with ATV1000 Medium Voltage Drives

New

Code: **CMVDI - Intermediate Level**
(1 Day, 9 AM to 5 PM)

Audience

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

Prerequisites

CSSDI

Equipments

None

Contents

- > ATV1000 selection & features
- > Base product architecture
- > Option cards
- > Composition of the reference
- > Specifications
- > Options and accessories
- > Current harmonic

Selection and Commissioning of Variable Speed Drives for HVAC and Booster Pump Applications

New

Code: **CHVAI - Intermediate Level**
(1 Day, 9 AM to 5 PM)

Audience

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

Prerequisites

Strong 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



Cost: US\$700
Schedule: May 18 / Nov 16



Cost: US\$700
Schedule: Feb 22 / Aug 23

Industrial Control Courses

Developing a Soft Starter and a Variable Speed Drive Solution

Code: **CSSDI - Intermediate Level**
(1 Day, 9 AM to 5 PM)

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 Solutions

Equipments

- > Variable Speed Drive Training Bench
- > ATS01 / ATS48
- > ATV21 / ATV31 / ATV61
- > Powersuite Software

Contents

- > Introduction
- > Motor basics review
- > 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



Cost: **US\$700**

Schedule: Mar 1 / Jun 3 / Sep 2 / Dec 8

Selection and Commissioning of Variable Speed Drives for Lifts and Cranes-ATV31Lift/ATV71Lift

New

Code: **CLIFI - Intermediate Level**
(1 Day, 9 AM to 5 PM)

Audience

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

Prerequisites

CVSDI or CDRVI or CSSDI

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



Cost: **US\$700**

Schedule: May 25 / Nov 23

Industrial Motor Management and System Interface - TeSys

Code: **CTESI - Intermediate Level**
(1 Day, 9 AM to 5 PM)

Audience

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

Prerequisites

Basic Knowledge of Motor Starting and Protection Solutions

Equipments

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

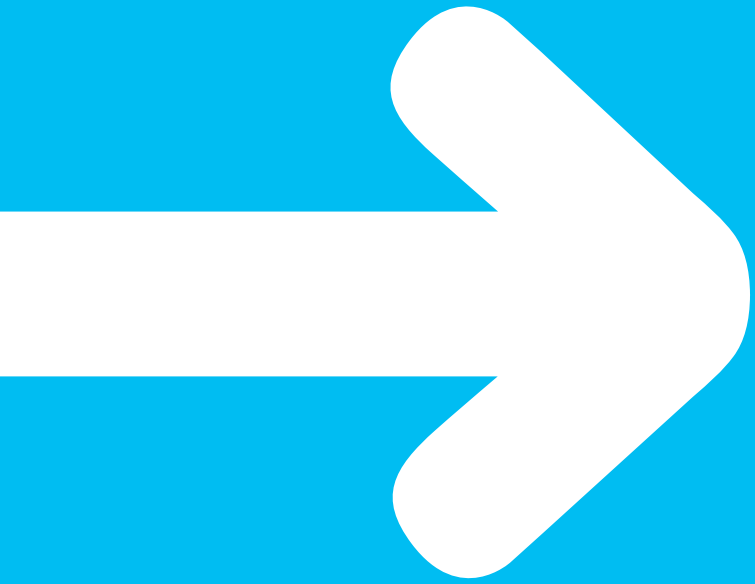
Contents

- > TeSys-T
 - Offer presentation
 - Protection function
 - Metering & monitoring functions
 - Control functions
 - Mounting and cabling
 - Setting
 - Troubleshooting
- > TeSys-U
 - Starter offer presentation
 - Controller offer presentation
 - Multifunction control unit
 - Main communication offer presentation
- > Modbus Communication
 - Modbus presentation and workshop



Cost: US\$700

Schedule: Mar 23 / Jun 22 / Sep 24 / Dec 21



Industrial Automation Courses

Industrial Automation Courses

Index of the courses

SI No.	Code	Level	Course Title	Days	Schedule	Page
1	ATWDI	L2	Twido PLC Configuration and Programming using TwidoSuite	2	Feb 4 / Apr 15 / Jul 14 / Oct 14	30
2	ARTUI	L2	RTU Configuration - new	2	Feb 11 / May 6 / Aug 5 / Nov 4	30
3	AMIRI	L2	M340 PLC Configuration and Programming using Unity Pro	3	Feb 17 / May 12 / Aug 11 / Nov 10	31
4	APREA	L3	Premium PLC Configuration and Programming using Unity Pro	4	Feb 23 / Aug 17 / Nov 16	31
5	AQUAA	L3	Quantum PLC Configuration and Programming using Unity Pro	4	May 25 / Sep 21 / Nov 23	32
6	AQ TSA	L3	Configuration and Programming of Quantum Safety PLC - new	5	Mar 22 / Sep 27	32
7	AMAGI	L2	Magelis HMI Configuration and Graphics Design using Vijeo Designer	1	Mar 2 / May 31 / Aug 30 / Dec 10	33
8	AVJCI	L2	Vijeo Citect SCADA Configuration and Graphics Design	3	Mar 10 / Jun 7 / Sep 6 / Dec 20	33
9	AVJCA	L3	Vijeo Citect SCADA Networking and Cicode Programming	2	Mar 15 / Jun 10 / Sep 9 / Dec 23	34
10	AVCHA	L3	Vijeo Citect SCADA Historian Configuration - new	2	Mar 17 / Sep 13	34
11	AUAGA	L3	Automation Project Design using UAG - new	5	Jan 5 / Apr 5 / Jul 5 / Oct 4	35

* L1 - Basic Level
 L2 - Intermediate Level
 L3 - Advanced Level

Industrial Automation Courses

Twido PLC Configuration and Programming using TwidoSuite

Code: **ATWDI - Intermediate Level**
(2 Days, 9 AM to 5 PM)

Audience

Those who are responsible for developing PLC solutions for small to medium size applications.

Prerequisites

Basic Knowledge in Automation

Equipments

- > Twido PLC
- > Altivar Drive
- > HMI
- > Modbus Device
- > 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
- > Twido Advanced features
- > Configure Drive Communication Macro
- > Configure Modbus Communications
- > Configure HMI Communications
- > Twido Documentation



Cost: US\$1,400

Schedule: Feb 4 / Apr 15 / Jul 14 / Oct 14

RTU Configuration

New

Code: **ARTUI - Intermediate Level**
(2 Days , 9 AM to 5 PM)

Audience

Those who are responsible for configuring and developing 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
 - DN P3 Protocol



Cost: US\$1,400

Schedule: Feb 11 / May 6 / Aug 5 / Nov 4

Industrial Automation Courses

M340 PLC Configuration and Programming using Unity Pro

Code: **AMIRI - Intermediate Level**
(3 Days, 9 AM to 5 PM)

Audience

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

Prerequisites

Basic Knowledge in Automation

Equipments

- > M340 PLC
- > Advantys STB I/O
- > Unity Pro Software
- > Advantys I/O Configuration 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
- > Overview of Networking
- > Overview of Advantys island Configuration
- > Configure and Connect to Advantys I/O
- > Assignment Exercise
- > Quiz



Cost: US\$2,100

Schedule: Feb 17 / May 12 / Aug 11 / Nov 10

Premium PLC Configuration and Programming using Unity Pro

Code: **APREA - Advanced Level**
(4 Days, 9 AM to 5 PM)

Audience

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

Prerequisites

Basic Automation Knowledge

Equipments

- > Premium PLC Kit
- > Advantys STB
- > TeSys, Altivar Drive
- > Unity Pro Software

Contents

- > Premium PLC Hardware offer
- > Premium Architecture
- > Configure a Premium system using Unity Pro
- > Develop programs in Ladder Diagram, Function Block Diagram
- > Develop Sequential Function Charts
- > Overview of Structured Text and Instruction List
- > Create and use DFBs
- > Create and use Macros
- > Create and use DDT
- > Global Data configuration
- > I/O Scan with Advantys STB I/O island with Drives and TeSys on CANOpen
- > I/O Scan with Momentum I/Os
- > Quantum Hot Standby Configuration
- > Assessment



Cost: US\$2,800

Schedule: Feb 23 / Aug 17 / Nov 16

Industrial Automation Courses

Quantum PLC Configuration and Programming using Unity Pro

Code: **AQUAA - Advanced Level**
(4 Days, 9 AM to 5 PM)

Audience

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

Prerequisites

Intermediate Automation Knowledge

Equipments

- > Quantum PLC Kit
- > Advantys STB
- > TeSys, Altivar Drive
- > Unity Pro Software

Contents

- > Quantum PLC Hardware offer
- > Quantum Architecture
- > Configure a Quantum system using Unity Pro
- > Develop programs in Ladder Diagram, Function Block Diagram
- > Develop Sequential Function Charts
- > Overview of Structured Text and Instruction List
- > Create and use DFBs
- > Create and use Macros
- > Create and use DDT
- > Configure Remote I/Os and Distributed I/O
- > Global Data configuration
- > I/O Scan with Advantys STB I/O island with Drives and TeSys on CANOpen
- > I/O Scan with Momentum I/Os
- > Quantum Hot Standby Configuration
- > Assessment



Cost: US\$2,800

Schedule: May 25 / Sep 21 / Nov 23

Configuration and Programming of Quantum Safety PLC

New

Code: **AQTSA - Advanced Level**
(5 Days , 9 AM to 5 PM)

Audience

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

Prerequisites

AQUAA

Equipments

- > Quatum Safety PLC
- > Unity Pro XLS Software

Contents

- > Introduction to Process Safety and PLC Safety Systems
- > Quantum Safety CPU Project and Architecture
- > Quantum Safety I/O Modules
- > Quantum Safety Programming Notes and Restrictions
- > Unity Pro XLS Safety Software & Safety Function Block Library
- > Non-Safety to Safety Migration / 984 Migration
- > Quantum Safety Hot Standby Solution



Cost: US\$3,500

Schedule: Mar 22 / Sep 27

Industrial Automation Courses

Magelis HMI Configuration and Graphics Design using Vijeo Designer

Code: **AMAGI - Intermediate Level**
(1 Day, 9 AM to 5 PM)

Audience

Project Engineers, Maintenance Engineers and Technicians, who are responsible for selecting, configuring and maintaining operator terminals.

Prerequisites

Basic Knowledge in Automation

Equipments

- > Quantum or Premium PLC
- > Vijeo Designer Software

Contents

- > Introduction to Magelis HMI
- > Structure of Magelis operator control panels and its functions
- > Basic tasks and possibilities, definition and positioning
- > Keypads, their functions and accessories
- > Various modes and their functions
- > Keys and pilot LEDs, communication with PLC Software
- > Creation of a new application
- > Dialog table and its configuration
- > Creating application pages and alarm pages
- > Practical exercises for various applications
- > Quiz



Cost: US\$700

Schedule: Mar 2 / May 31 / Aug 30 / Dec 10

Vijeo Citect SCADA Configuration and Graphics Design

Code: **AVJCI - Intermediate Level**
(3 Days, 9 AM to 5 PM)

Audience

SCADA Design Engineers, Maintenance Engineers and Plant Supervisors.

Prerequisites

Intermediate Automation Knowledge

Equipments

Vijeo Citect SCADA Software

Contents

- > Vijeo Citect Capabilities & Feature
- > Vijeo Citect Installation
- > Setting up Communication
- > Graphics
- > Command & Controls
- > Genie & Super Genie
- > Trends
- > Alarms
- > Reports
- > Security
- > Navigation
- > Troubleshooting
- > Quiz



Cost: US\$2,100

Schedule: Mar 10 / Jun 7 / Sep 6 / Dec 20

Industrial Automation Courses

Vijeo Citect SCADA Networking and Cicode Programming

Code: **AVJCA - Advances Level**
(2 Days, 9 AM to 5 PM)

Audience

SCADA Design Engineers, Maintenance Engineers and Plant Supervisors.

Prerequisites

AVJCI

Equipments

Vijeo Citect Distributed Configuration

Contents

- > Vijeo Citect Networking Overview
- > Configuring Distributed SCADA Project
- > I/O Server Redundancy
- > Alarm, Report, Trend Server Redundancy
- > File Server Redundancy
- > I/O Device Path Redundancy
- > Web Gate Configuration
- > Web Client configuration
- > Vijeo Citect as OPC Server
- > Vijeo Citect as OPC Client
- > Kernel Debugging
- > Cicode functions
- > Cicode Debugging
- > Quiz



Cost: US\$1,400

Schedule: Mar 15 / Jun 10 / Sep 9 / Dec 23

Vijeo Citect SCADA Historian Configuration

New

Code: **AVCHA - Advanced Level**
(2 Days , 9 AM to 5 PM)

Audience

SCADA Design Engineers, Maintenance Engineers and Plant Supervisors.

Prerequisites

AVJCI and AVJCA

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



Cost: US\$1,400

Schedule: Mar 17 / Sep 13

Automation Project Design using UAG

New

Code: **AUAGA - Advanced Level**
(5 Days, 9 AM to 5 PM)

Audience

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

Prerequisites

APLUNI and ASVVCB

Equipments

UAG Software

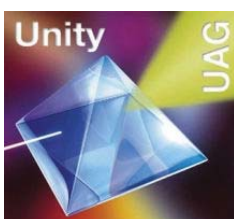
- > Unity Pro Software
- > Vijeo Citect SCADA Software

>

Contents

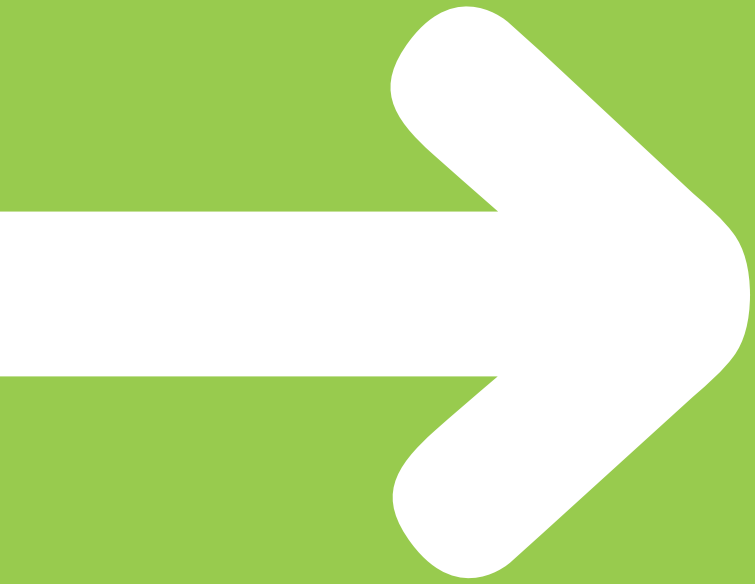
Introduction

- > System Requirements
 - > Physical Model
 - > Topological Model
 - > Generating HMI
 - > Fieldbus
 - > Generation
 - > Customization Editor
 - > DFB for Concept
 - > DFB for Unity
 - > SCOD Editor
 - > Structured Data
 - > PLC Channels
 - > PLC - PLC Communication
 - > Net Partner
 - > Workflow to build an Application
 - > Citect Connector
 - > Develop a New SCoD
- >



Cost: US\$3,500

Schedule: Jan 5 / Apr 5 / Jul 5 / Oct 4



Building Automation Courses

Building Automation Courses

Index of the courses

SI No.	Code	Level	Course Title	Days	Schedule	Page
1	BBMSB	L1	Introduction to Building Management Systems - new	1	Contact us	38
2	BHVAB	L1	HVAC and Control Basics - new	2	Contact us	38
3	BBACB	L1	BACnet Protocol Fundamentals - new	1	Contact us	39
4	BICLI	L2	Programming of a Sigma Lon Controller - new	2	Contact us	39
5	BMCNI	L2	Micronet View Usage and Programming - new	4	Contact us	40
6	BNW8B	L1	Network 8000 System Basic - new	3	Contact us	40
7	BNW8I	L2	Network 8000 System Intermediate - new	3	Contact us	41
8	BNW8A	L3	Network 8000 System Advanced - new	4	Contact us	41
9	BSIGB	L1	Sigma Basic - new	3	Contact us	42
10	BSIGI	L2	Sigma Intermediate - new	3	Contact us	42
11	BSIGA	L3	Sigma Advanced - new	4	Contact us	43
12	BSPRB	L1	Standard Integration Protocols - new	2	Contact us	43
13	BVSSB	L1	Vista Product for Sales - new	1	Contact us	44
14	BVSPB	L1	Vista Product Overview and Design - new	2	Contact us	44
15	BVSTB	L1	Vista Programming Basic - new	5	Contact us	45
16	BVSSI	L2	Vista Security	3	Contact us	45
17	BVSTI	L2	Visisat Programming tool for Micronet controllers - new	3	Contact us	46
18	BWPBI	L2	Workplace Tech programming for BACnet controllers - new	3	Contact us	46
19	BWPLI	L2	Workplace Tech programming for LON controllers - new	3	Contact us	47
20	BWPRB	L1	Workplace Pro Fundamentals - new	3	Contact us	47
21	BWPRI	L2	Workplace Pro Intermediate - new	2	Contact us	48
22	BCXXX	L?	Continuum Courses	-	Contact us	48

* L1 - Basic Level L2 - Intermediate Level L3 - Advanced Level

Building Automation Courses

Introduction to Building Management Systems

New

Code: **BBMSB - Basic Level**
(1 Day, 9 AM to 5 PM)

Audience

Engineers, Supervisors, Operators who are involved in BMS related field

Prerequisites

None

Equipments

None

Contents

- > Elements of a Modern building
- > Systems of a modern building
- > Discussion of how a BMS maximizes the features of any building



Cost: US\$700
Schedule: Contact us

HVAC and Control Basics

New

Code: **BHVAB - Basic Level**
(2 Days , 9 AM to 5 PM)

Audience

Engineers, Supervisors, Operators who are involved in HVAC operation

Prerequisites

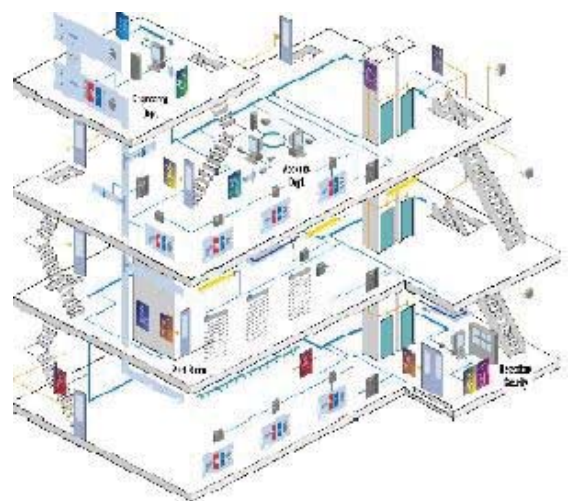
None

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 valave sizing and rules of thumb
- > Discussion of analaog controllers and Direct Digital Controllers



Cost: US\$1,400
Schedule: Contact us

Building Automation Courses

BACnet Protocol Fundamentals

New

Code: **BBACB - Basic Level**
(1 Day, 9 AM to 5 PM)

Audience

Engineers and Technicians

Prerequisites

None

Equipments

None

Contents

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



Cost: US\$700
Schedule: Contact us

Programming of a Sigma Lon Controller

New

Code: **BICLI - Intermediate Level**
(2 Days, 9 AM to 5 PM)

Audience

Field Engineers and technicians

Prerequisites

Basic Sigma Knowledge

Equipments

IC-LON, MNL 200, MNL V2RV2

Contents

- > 5 step programme for setting up an IC-LON
- > Building a network in LonMaker
- > Use of the Sigma LonMaker plugin
- > Commissioning the completed scheme in LonMaker
- > Viewing the data on the Sigma front-end



LONMARK®
INTERNATIONAL

Cost: US\$1,400
Schedule: Contact us

Building Automation Courses

Micronet View Usage and Programming

New

Code: **BMCNI - Intermediate Level**
(4 Days, 9 AM to 5 PM)

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



Cost: US\$2,800
Schedule: Contact us

Network 8000 System Basic

New

Code: **BNW8B - Basic Level**
(3 Days , 9 AM to 5 PM)

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

Cost: US\$2,100
Schedule: Contact us

Building Automation Courses

Network 8000 System Intermediate

New

Code: **BNW8I - Intermediate Level**
(3 Days, 9 AM to 5 PM)

Audience

Engineers and Technicians

Prerequisites

BNW8B

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 instalations



Cost: US\$2,100
Schedule: Contact us

Network 8000 System Advanced

New

Code: **BNW8A - Advanced Level**
(4 Days, 9 AM to 5 PM)

Audience

Engineers and Technicians

Prerequisites

BNW8I

Equipments

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

Contents

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



Cost: US\$2,800
Schedule: Contact us

Building Automation Courses

Sigma Basic

New

Code: **BSIGB - Basic Level**
(3 Days, 9 AM to 5 PM)

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



Cost: US\$2,100
Schedule: Contact us

Sigma Intermediate

New

Code: **BSIGI - Intermediate Level**
(3 Days, 9 AM to 5 PM)

Audience

Engineers and Technicians

Prerequisites

BSIGB

Equipments

DNN, UNC786, UNC632 and various field equipment

Contents

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



Cost: US\$2,100
Schedule: Contact us

Building Automation Courses

Sigma Advanced

New

Code: **BSIGA - Advanced Level**
(4 Days, 9 AM to 5 PM)

Audience

Engineers and Technicians

Prerequisites

None

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



Cost: US\$2,800
Schedule: Contact us

Standard Integration Protocols

New

Code: **BSPRB - Basic Level**
(2 Days, 9 AM to 5 PM)

Audience

Engineers and Technicians

Prerequisites

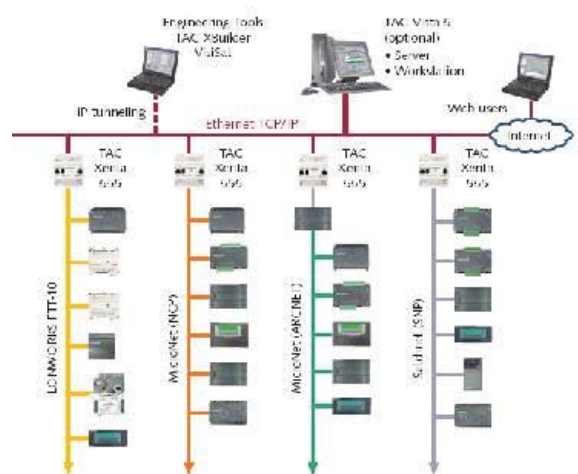
BBACB

Equipments

Altvar 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 BMS



Cost: US\$1,400
Schedule: Contact us

Building Automation Courses

Vista Product for Sales

New

Code: **BVSSB - Basic Level**
(1 Day, 9 AM to 5 PM)

Audience

Sales engineer, design engineer

Prerequisites

HVAC / Electrical Knowledge

Equipments

None

Contents

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

Vista Product Overview and Design

New

Code: **BVSPB - Basic Level**
(2 Days , 9 AM to 5 PM)

Audience

Sales engineer, design engineer, project engineer

Prerequisites

HVAC / Electrical Knowledge

Equipments

None

Contents

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



Cost: US\$700
Schedule: Contact us



Cost: US\$1,400
Schedule: Contact us

Building Automation Courses

Vista Programming Basic

New

Code: **BVSTB - Basic Level**
(5 Days, 9 AM to 5 PM)

Audience

Operators, service engineer, project engineer, design engineer

Prerequisites

HVAC / Electrical Knowledge

Equipments

TAC xenta training Board+ a laptop with TAC vista S/W

Contents

- > Bus topology
- > Controllers Used
- > Field devices
- > Basic Programming
- > Introduction in general
- > TAC offering - overview
- > TAC Xenta Hardware
- > Basics about a LonWorks technology, the architecture etc.
- > Creating a simple application (TAC Xenta, Menta)
- > Simulation of the application
- > How to use the 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 (TAC Menta) applications
- > Commissioning TAC and LonWorks devices in a LonWorks network
- > Color graphics
- > Alarm processing
- > Time functions
- > Notes, TrendViewer
- > Backup



Cost: **US\$3,500**
Schedule: **Contact us**

Vista Security

New

Code: **BVSSI - Intermediate Level**
(3 Days, 9 AM to 5 PM)

Audience

Operators, service engineer, project engineer, design engineer

Prerequisites

HVAC / Electrical Knowledge

Equipments

TAC xenta training Board+ a laptop with TAC vista S/W

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



Cost: **US\$2,100**
Schedule: **Contact us**

Building Automation Courses

Visat Programming tool for Micronet controllers

New

Code: **BVSTI - Intermediate Level**
(3 Days, 9 AM to 5 PM)

Audience

Engineers and Technicians

Prerequisites

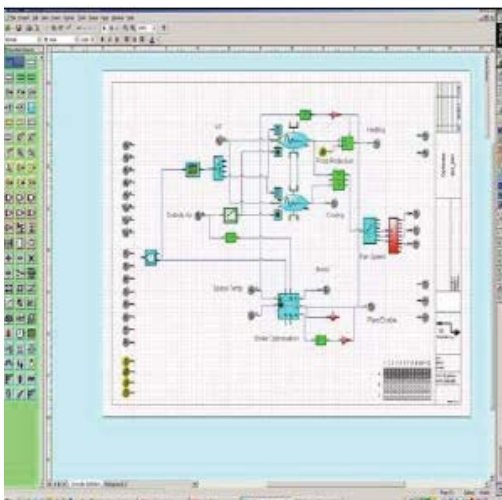
BHVAB

Equipments

MN-MI, MNN650, MNA550, MNL650, Unifact

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



Cost: US\$2,100
Schedule: Contact us

Workplace Tech programming for BACnet controllers

New

Code: **BWPBI - Intermediate Level**
(3 Days, 9 AM to 5 PM)

Audience

Engineers and Technicians

Prerequisites

BHVAB

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



Cost: US\$2,100
Schedule: Feb 16

Building Automation Courses

Workplace Tech programming for LON controllers

New

Code: **BWPLI - Intermediate Level**
(3 Days, 9 AM to 5 PM)

Audience

Engineers and Technicians

Prerequisites

BHVAB

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



LONMARK®
INTERNATIONAL

Cost: US\$2,100
Schedule: Contact us

Workplace Pro Fundamentals

New

Code: **BWPRB - Basic Level**
(3 Days, 9 AM to 5 PM)

Audience

Engineers and Technicians

Prerequisites

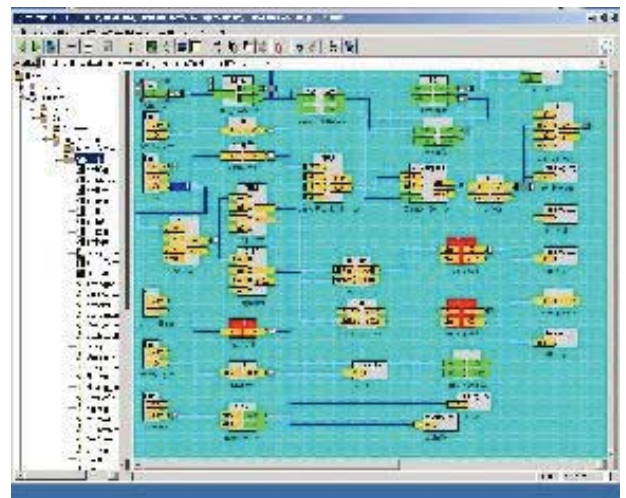
BHVAB

Equipments

MNB1000, MNB300 and various field equipment

Contents

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



Cost: US\$2,100
Schedule: Contact us

Building Automation Courses

Workplace Pro Intermediate

New

Code: **BWPRI - Intermediate Level**
(2 Days, 9 AM to 5 PM)

Audience

Engineers and Technicians

Prerequisites

BWPRB

Equipments

UNC 510

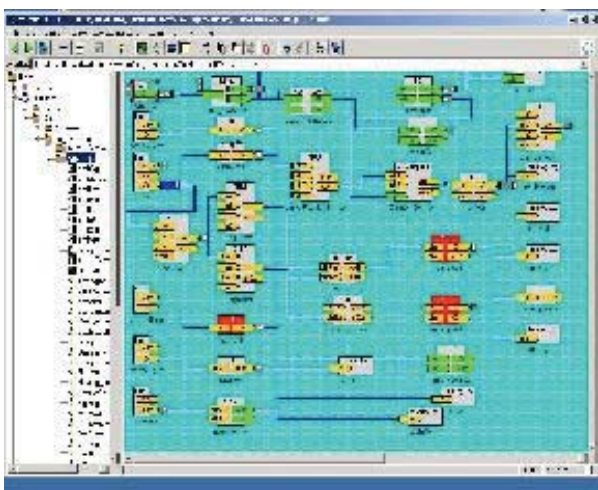
Contents

- > 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

Continuum Courses

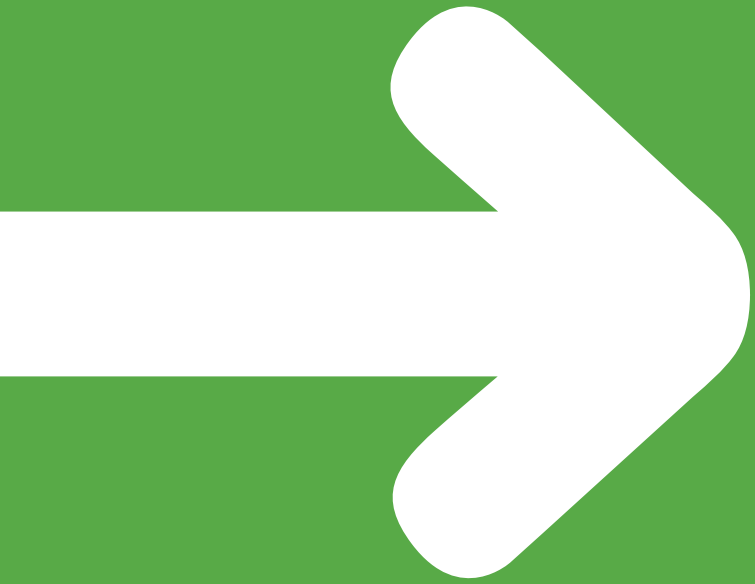
New

Code: **BCXXX**
(To be confirmed)



Cost: US\$1,400
Schedule: Contact us





Solution Training Courses

Solution Training Courses

Index of the courses

SI No.	Code	Level	Course Title	Days	Schedule	Page
1	SWATI	L2	Water Segment Solution Training - New	2	Mar 4 / Jun 3 / Sep 2 / Dec 8	52
2	SEMCI	L2	Design and Programming of Energy Monitoring Control Systems - New	3	Mar 17 / Jun 16 / Sep 15 / Dec 15	52
3	SHPCI	L2	Hotel Solution Training - New	4	Feb 9 / Mar 9 / May 11 / Aug 10 / Nov 9	53

* L1 - Basic Level
L2 - Intermediate Level
L3 - Advanced Level

Solution Training Courses

Water Segment Solution Training

New

Code: **SWATI - Intermediate Level**
(2 Days, 9 AM to 5 PM)

Audience

Sales Engineers who want to sell Schneider Solution offer for Water Pumping and Water Treatment Applications.

Prerequisites

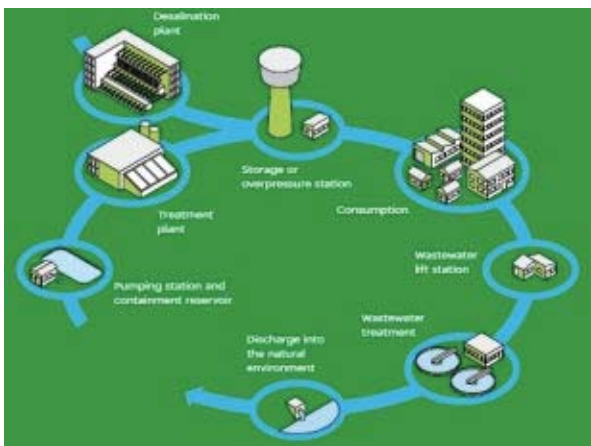
Basic Control System Knowledge

Equipments

- > iMCC, TeSys, VFD, SS Sample/Demo
- > PLC, RTU, HMI, SCADA, UAG Demo

Contents

- > Water Pumping and Treatment Process
- > Schneider Electric Solution offer
- > Value proposition and Success Stories
- > Control Products - iMCC, TeSys, VFD, SS
- > Automation Products - PLC, RTU, HMI, SCADA, UAG



Cost: US\$1,400

Schedule: Mar 4 / Jun 3 / Sep 2 / Dec 8

Design and Programming of Energy Monitoring Control Systems

New

Code: **SEMCI - Intermediate Level**
(3 Days , 9 AM to 5 PM)

Audience

Those responsible for Programming and Commissioning Substation Automation EMCS systems

Prerequisites

Knowledge in Unity Pro and Vijeo Citect

Equipments

- > Quantum HSBY set
- > SiS/ETG100 Gateway
- > SEPAM80 kit
- > TesysT
- > PM80 Meters
- > Vijeo Citect SCADA

Contents

- > Quantum PLC architecture and HSBY Configuration
- > Modbus TCP Communication
- > Gateway (SiS/ETG100) Configuraion
- > SEPAM Parameters and Communication
- > TesysT Parameters and Communication
- > PM80 Meters parameters and Communication
- > Quantum PLC I/O Scan communication
- > Bus Coupler programming
- > Vijeo Citect Screen creation



Cost: US\$2,100

Schedule: Mar 17 / Jun 16 / Sep 15 / Dec 15

Hotel Solution Training

New

Code: **SHPCI - Intermediate Level**
(4 Days, 9 AM to 5 PM)

Audience

MEP & Project management Consultants, Hotel operators & Sales Engineers who want to sell a complete Solution offer to the Hospitality, Commercial Buildings.

Prerequisites

Basic Application & systems knowledge

Equipments

Visit to Hotel Competency Center

Contents

- > Power distribution & management with metering
- > Building Automation & Controls
- > Security(CCTV+Access Control), Critical power & Fire alarm systems
- > Room management systems with auxillary applications



Cost: **US\$2,800**

Schedule: Feb 9 / Mar 9 / May 11 / Aug 10 / Nov 9

Notes



Training Registration Form

Company name: _____

Address: _____

City: _____ Country: _____ P.O. Box: _____

Telephone: _____ Fax: _____

Training Code _____ Date: _____

Participants

Sl No.	Name	Designation	Email address

Payment by: DD Cheque Wire Transfer

DD / Cheque / WT No: _____ Date: _____

Payable to: **Schneider Electric FZE** Amount(US\$): _____

Notes: _____

Date: _____

Stamp

Authorized signature: _____
Name: _____

Note: Kindly send this form back to us thru, Fax: +971 04 7099101 Email: ae-tc-gulf@ae.schneider-electric.com or Mail: Schneider Electric FZE, Training Department, PO Box No: 341057, Dubai, UAE

Terms and Conditions

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 writing 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 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.

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 tuition 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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