Training Courses

Specialized education to help you fully utilize your SCADA, MES or Historian software
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New skills acquired + Immediate application + Visible return on investment = Successful training
Educational Services

Educational Services offers a suite of programs and courses designed for end-users, engineers, system integrators, technical colleges, universities and educational establishments. Our courses provide you with hands-on experience, leaving you feeling confident to design and configure your own systems. Our programs are designed to facilitate the latest knowledge and application of Citect™ SCADA, Vijeo Citect™ / CitectSCADA™, Vijeo Historian™ / CitectHistorian™ and Ampla™ MES software.

Courses include instructor-led, online and onsite offerings for the suite of SCADA, Historian and MES software and related complementary software products. They include configuration and programming courses, upgrade courses, as well as introductory courses for Citect SCADA / Vijeo Citect / CitectSCADA, Vijeo Historian / CitectHistorian and Ampla.

Our offers include:

> **Instructor Led Training**  live product training that includes lectures and hands-on labs to practice concepts and procedures. Accelerate learning by attending scheduled classes, both face-to-face and virtually.
> **eLearning**  new eLearning solution which provides learners with a high quality and engaging learning experience.
> **Self-paced Training Kits**  for customers who are willing to take self-paced training in their own time.
> **Certified Expert Program (CEP)**  distinguishes and recognizes individuals skilled in the integration of Schneider Electric technology-based automation projects.
> **Academic Program**  provides tertiary institutions with access to instructor courseware which may be used to construct your own courses in related fields.

Educational Services provides multi-level courses for end-users, engineers and system integrators.

All authorized courses have a limited number of spaces to ensure participating students get the most out of each course and access to an experienced Instructor.

For face-to-face Instructor Led Training, each student is allocated a PC which is pre-configured with the relevant applications and software needed throughout the course.

**Benefits**

> Ensure the future of your SCADA, MES or Historian system
> Minimize downtime and business interruption
> Network with peers and share experiences of working with SCADA, MES and Historian

**Course materials**

Supplied materials will depend on your location. Please consult your local Schneider Electric website or representative for further details.

**Bookings**

Contact your local representative at educational.services@schneider-electric.com or book online from:

Australia: https://industrialtraining.schneider-electric.com/citect/australia

North America: https://industrialtraining.schneider-electric.com/citect/northamerica
The Internet is becoming a classroom. I think eLearning is a growing market and these modules will make knowledge and information more accessible for more people around the world.

I find the interactive nature of the eLearning modules very engaging and the quizzes at the end of each module were really helpful.

For an older engineer with 20 years of experience with Citect, it is helpful to see the new capabilities and how to apply them instead of doing things the same old way.
eLearning Modules

The digital learning evolution has arrived.

Empower your workforce with easy online access to training content anytime, anywhere, on any device - and overcome training hurdles such as scheduling and travel, whilst saving time and money.

Schneider Electric Software's eLearning solution provides you with a high quality, engaging learning experience.

Features include:

> Concise, easy to absorb modules ranging 30-60 minutes in duration
> Experience-level based learning journeys/scenarios
> Animated & informative technical explanations
> Interactive software simulations
> Practise your skills right away with integrated exercises using real world examples
> Test your knowledge post-instruction with multiple choice questions/challenges
> Access to our technical support team if you have course related questions
> Access to our technical support team if you have course related questions

How to access the eLearning modules?

You can purchase the eLearning modules you are interested in from https://industrialtraining.schneider-electric.com/citect/online.

Note that pricing for all eLearning modules are in $USD.

We will be adding new eLearning titles to the library every few months, so remember to check back.

By purchasing a module, you will receive unlimited access for 12 months from date of registration. Your progress is bookmarked and completion is tracked.
Citect SCADA Configuration
Citect SCADA Programming with Cicode
Vijeo Historian / CitectHistorian Configuration
Ampla Performance
Ampla Express

“Very beneficial - I would eagerly send any staff to Schneider courses knowing they provide a high level of training and understanding.”

“Easy to follow, plenty of information to take home and awesome folder to take home as well...”
Citect SCADA Configuration

Course Description
Gain insight into Citect SCADA project design and become familiar with new integrated engineering interface called Citect Studio. Learn how to design a project from start to finish and configure various features, including equipment hierarchy. This interactive course includes hands-on practice with plant control, data collection, trending and reporting.

Audience
> Individuals who want to become familiar Citect SCADA project development techniques
> Citect SCADA users including engineering staff, maintenance staff and plant supervisors
> Technical users who maintain and improve their installed Citect SCADA and control systems
> Managers who want more than a basic understanding of Citect SCADA
> Citect SCADA system integrators and designers

Prerequisites
> It is essential that students are familiar with Microsoft® Windows operating systems
> Experience in PLC control system design and/or programming is desirable

Course outline
> Introduction to Citect
> Overview of the Citect Studio
> Project Management
> Define a Topology
> System Model
> Equipment
> Graphics
> Operator Input
> Genies
> Popup Pages
> Devices
> Events
> Alarms
> Process Analyst
> Page Management
> Reports
> Security
Programming with Cicode

Course Description
Get insight into the major features of the Cicode™ language and learn how to apply, formulate and troubleshoot Cicode programming solutions with this totally redesigned course. This hands-on, interactive course is aimed at users with no previous programming experience, and is also useful for experienced users who wish to become familiar with Cicode.

Audience
> Programmers and non-programmers who want to become familiar with the Cicode language
> Citect SCADA system integrators and designers
> Technical users who wish to maintain and improve their installed Citect SCADA and control systems

Prerequisites
> It is essential that students are familiar with Microsoft Windows operating systems
> It is also recommended that students attend the Citect SCADA Configuration course prior to attending Programming with Cicode course or have a good working knowledge of Citect SCADA
> A general understanding of PLC communication is desirable

Course outline
> The Cicode Development Environment
> Introduction to Programming
> Functions
> Variables and Data Types
> Arguments and Return Functions
> Logics and Statements
> Input and Output
> Flow Control
> Complex Data Structures
> Using Cicode Programming Standards
> Cicode Debugger
> Programming Projects
Vijeo Historian / CitectHistorian Configuration

Course Description
Vijeo Historian / CitectHistorian takes information gathered from your SCADA system and makes it available for display in industry standard applications. This course is designed for engineers who wish to configure and maintain a Vijeo Historian / CitectHistorian project and managers who wish to analyze the data in the client tools.

Audience
- Individuals who want detailed knowledge on how to set up and use Vijeo Historian / CitectHistorian
- Managers who require knowledge of how to use Vijeo Historian / CitectHistorian client tools to access data
- Vijeo Citect / Citect SCADA system integrators and designers

Prerequisites
- Solid experience in both Microsoft Windows operating systems and Vijeo Citect / Citect SCADA is required

Course outline
Day One provides an introduction to Vijeo Historian / CitectHistorian and its various components including hands-on technical training:
- Data sources
- Historian at-a-glance
- Historian status
- Publish information
- Backfill Manager

Day Two extends on the topics of day one and covers:
- Project management
- Tasks
- Events
- Excel client
- Web client

Day Three extends the techniques studied in the first two days to include reporting:
- Simple maintenance
- Historian interpolation
- Process Analyst
- Reports Deployment Manager
- Energy reports
- Case study

Intermediate Level
3 DAYS
Instructor-led course
Refreshments and lunch provided
Ampla Performance

Course Description
This training course introduces new users of Ampla to the basic concepts and methods involved in configuring and using Ampla Studio and Production Analyst to model performance.

Audience
> Engineers and system integrators who will be responsible for the design, implementation and maintenance of an Ampla system, as a starting point in their training journey
> Plant managers, IT managers and operators who will need to get an understanding of Ampla and to maintain an existing Ampla project

Prerequisites
> It is beneficial, but not necessary, that students have prior Vijeo Citect / Citect SCADA experience
> Students should have an understanding of important metrics that drive business decisions within their organization

Course outline
Day One introduces participants to the framework of Ampla and covers the following topics:
> Overview of overall equipment effectiveness (OEE)
> Product architecture and core components
> Managing projects
> Creating a plant hierarchy
> Configuring security
> Configuring the Production module
> Production Analyst

On Day Two, participants configure a performance solution for the case study introduced on day one. This covers the following topics:
> Configuring the Downtime module
> Configuring the Energy module
> Configuring the Metrics module
> Production Analyst
> Web Client

Intermediate Level
- 2 DAYS
- Instructor-led course
- Refreshments and lunch provided
Course Description
This training course introduces users to the Ampla Express: Insights™ and Ampla Express: OEE+E™ (Overall Equipment Effectiveness + Energy) components and gives them an overview of the Ampla Express features. It covers the basic concepts and methods involved in configuring and using Ampla Studio and Production Analyst to model performance and energy consumption.

Audience
> Engineers and system integrators who will be responsible for the design, implementation and maintenance of an Ampla system, as a starting point in their training journey
> Plant managers, IT managers and operators who will need to get an understanding of Ampla and to maintain an existing Ampla project

Prerequisites
> It is beneficial, but not necessary, that students have prior Vijeo Citect / Citect SCADA experience
> Students should have an understanding of important metrics that drive business decisions within their organization

Course outline
Day One introduces participants to the framework of Ampla Express and covers the following topics:
> Overview of OEE+E
> Managing projects
> Product architecture and core components
> Creating a plant hierarchy
> Configuring security
> Configuring the Production module
> Configuring the Metrics module - Insights
> Production Analyst

On Day Two, participants configure an energy efficiency and performance solution for the case study introduced on day one. This covers the following topics:
> Configuring the Downtime module
> Configuring the Energy module
> Configuring the Metrics module - OEE+E
> Production Analyst

Intermediate Level
2 DAYS
Instructor-led course
Refreshments and lunch provided
This training has saved me many potential hours of setup for future projects. It was very helpful and will be put to good use!

The training course I attended used up-to-date material which was presented in a user friendly manner that explained all aspects I needed to run the software successfully.
Citect SCADA Architecture and Redundancy

Course Description
Gain advanced networking skills and knowledge. Discover the new Topology and Deployment features of Citect SCADA 2016. Learn more about clustered control systems, online changes, and advanced security concepts.

Audience
> Engineers who are responsible for the design and maintenance of the SCADA network
> Network administrators who need to understand how Citect SCADA is configured on their network
> Citect SCADA system integrators and designers
> Technical users who maintain and improve their installed SCADA and control systems

Prerequisites
> It is essential that students are familiar with Microsoft Windows operating systems
> It is also recommended that students have attended a Citect SCADA Configuration course or have at least six months experience in Citect SCADA design

Course outline
> Citect SCADA Architecture
> Citect SCADA Redundancy
> Online Changes
> Clustered Control System
> Project Deployment
> System Security

Advanced Level
 Liberals
 2 DAYS
 Instructor-led
 Virtual or face-to-face
Due to possible changes in standards and equipment, the features described in this document in the form of text and images are subject to confirmation by Schneider Electric.

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For further information, contact your local Schneider Electric office or email us at educational.services@schneider-electric.com