



ASE Training Classes

OVERVIEW

Applied Systems Engineering (ASE) has been at the forefront of utility industry protocol technology and standards for over 30 years. Over the years, we have built immense knowledge and expertise in communication protocols and have built one of the most successful protocol test set products in the Utility Industry – the ASE2000. Our experience in protocols has been further enhanced by our merger with Kalkitech to expand into the latest IEC 61850 protocol as well. We offer one of the most comprehensive sets of protocol libraries and tools in the world including legacy as well as more recent ones.

Our training programs are specifically for utility technicians and engineers who are working to resolve critical SCADA communication issues. The programs mix essential protocol knowledge needed to understand and find communication problems together with in-depth training on the ASE 2000 and ASE 61850 tool suites.

We offer two options for our customers:

- Corporate Training Program
- Regional Training Program

CORPORATE TRAINING PROGRAM

A two-day on-site corporate training program at customer premises is available. We offer two standard options:

- ASE2000 V2 and DNP3 Protocol Course
- ASE 61850 Suite and IEC 61850 Protocol Course

Our corporate training program is focused on helping utility and OEM technicians and engineers to update their skills and knowledge on ASE tool sets and specific protocols. These tools and protocol knowledge are what technicians use to solve problems in the field. The training provides an understanding of the protocols and practical hands-on experience with the tool sets to make technicians highly effective in the field.

The corporate training can be customized for customers who have unique or legacy protocols in their service territory and desire specific training focused on these.

REGIONAL TRAINING PROGRAM

Two-day regional training is offered in different cities around the world, based on customer demand. We offer the following courses:

- ASE2000 V2 and DNP3 Protocol Course
- ASE 61850 Suite and IEC 61850 Protocol Course

Our regional training program is focused on helping utility and OEM technicians and engineers to update their skills and knowledge on ASE tool sets and specific protocols. The training includes both hands-on exercises as well as classroom presentations.

Regional training is conducted several times each year in different cities worldwide. The cities are chosen based on customer request and rotated to major cities convenient to our customer base. Currently scheduled regional training dates and locations are available at our website along with guidance on how to register.

COURSE OVERVIEW

DNP3 and ASE2000 V2 Communications Test Set Course

The ASE2000 V2 Communication Test Set Course includes both introductory material and advanced techniques. Also presented is DNP3 protocol, the most widely used SCADA protocol in North America.

Introduction to the ASE2000 V2 Test Set covers its operational modes: Exchange mode, where users may customise message structure and create command sequences and Task mode, where advanced configuration and operations may be easily performed. Master simulation of RTU simulation or monitoring communications between master and remote devices are each explained and demonstrated for both serial and network protocols. Hands-on exercises provide guidance on how to effectively use the ASE2000 V2 Test Set to solve problems in the field.

The advanced techniques section covers capturing and sharing communications data, modifying display options, definition of point database, RTU simulation of control operations, multiple RTU simulation and diagnosing problems.

Covered in the DNP3 protocol section is an understanding of the structure of DNP3 messages, data types, common operations, and device compliance with the specification. The ASE2000 V2 Test Set is used to demonstrate DNP3 concepts.

Optional material may include additional protocols such as Modbus, Conitel or CDC.

IEC 61850 and ASE 61850 Communication Test Set Course

The ASE 61850 Communication Test Set Course includes both introductory material and advanced techniques. IEC 61850 is an international standard for Intra Substation Communications between devices and between field sensors and IEDs. The standard expands its domain into Substation Engineering as well with the definition of a standards-based Substation Configuration Language.

Introduction to ASE 61850 course covers basic and advanced features of ASE 61850, device discovery in the substation and monitoring GOOSE messages and critical reports. The course also covers the basics of ASE 61850 SCL Manager and ASE 61850 IED Smart Substation Configuration and Server tools.

Introduction to IEC 61850 course also covers the theoretical aspects of IEC 61850 needed by technicians to work with IEC 61850 capable substation equipment by reviewing the salient features of IEC 61850 and supplement it with demonstrations of IEC 61850 communication between clients and servers, IED-to-IED communication using GOOSE messages, the philosophy of inter-operable engineering and configuration using Substation Configuration Language.

WHO SHOULD ATTEND?

Over the years, a large number of people have benefited from our training programs. Some of the major beneficiaries include customers from IOUs, co-ops, municipalities, equipment vendors, consultants and system integrators.

This training is intended but not limited to engineers and technical staff involved in design, configuration, installation and maintenance of metering products and systems using ASE2000 V2, DNP3 & IEC 61850 and also includes examples from successful customer implementations.

REASONS YOU SHOULD JOIN US!

Real-world training with introductory and advanced techniques

Introduction to our ASE2000 V2 Test Set covering its operational modes

Demonstration of Master simulation and RTU simulation along with serial and network communication monitoring

Practical presentation of DNP3 – the most widely used SCADA protocol in North America

Introduction to ASE 61850 and IEC 61850 Protocols

Introduction to IEC 61850 GOOSE, Reports and Interlocks

Increase in your knowledge and the value you will provide to your company

GLOBAL ASE/KALKITECH LOCATIONS



To register, please download and complete the Training Registration Form at: <https://www.ase-systems.com/wp-content/uploads/training-registration-orm.pdf> and fax it to (408) 364-0550

