

COURSE NAME	Ascent Engineering and Commissioning Certification
FORMAT	Instructor-led training in a combined classroom and lab environment; may be conducted in-person or virtually
DURATION	Five consecutive days
SCHEDULE	Monday-Thursday 8:00am to 5:00pm with one hour for lunch and periodic breaks. Friday 8:00am to 1:00pm. The exam on Friday is required in order to receive a certification of completion. No exceptions will be granted.
ASSESSMENT	Comprehensive lab examination and cumulative quiz scores

AUDIENCE

This course is intended for building automation and control system engineers and field personnel that work extensively with Alerton Ascent controls systems, including installing, designing, and starting up controls systems. A thorough understanding of building automation concepts is required. The Ascent Engineering and Commissioning Certification course is the second training in the Ascent Certification series, following Compass Operator Training.

OVERVIEW

This course emphasizes the design, development, and commissioning of an Alerton Compass system. Using mock plans and specifications, students will learn the fundamentals of engineering and commissioning an Ascent System.

During the design process, students will practice utilizing the engineering tools and standard library components provided by Alerton. After the design phase, students will create a Compass System database using the Alerton ACM and GC Builder tools.

Using Ascent hardware components and a training console to simulate an actual installation, students will check for system wiring accuracy, configure, and commission an Ascent System in accordance with their design documents and their developed databases.

OBJECTIVES

After completion of this course students will be able to:

- Interpret plans and specifications to select the proper hardware components of an Ascent System to fulfill the project requirements.
- Install the Compass Workstation software and BACnet protocol; plus configure a PC to be the primary workstation.

- Configure the Project to communicate using the BACnet/IP protocol.
- Utilize the Application Database to select the standard Alerton-supplied graphics, templates, DDC, and documentation that best match the project requirements.
- Create documentation, for depicting an Ascent system network architecture
- Use Alerton's ACM, VIP and GC Builders to create the necessary project database files.
- Install VisualLogic controllers, including power, inputs, and MS/TP communications.
- Use Device Manager's advanced utilities to perform a device scan, configure ACMs/AXMs, VIP-363 controllers and renumber VLCs.
- Utilize Device Manager's Send and Save functions to commission devices.
- Use the Alerton Standard Device Templates to verify controller inputs are reading correctly and outputs are functioning.
- Configure input and output parameters for Alerton ACM, VIP and AXM products
- Command data points in multiple controllers using the Object Scanner and Object Explorer features of Compass.
- Create custom displays and modify device templates to fulfill a specified graphical interface scheme.
- Configure Navtree to enhance the operator interface in the Compass Web-Browser and to populate the EASE scheduling interface.
- Perform basic troubleshooting procedures.

PREREQUISITES

- Knowledge of basic HVAC terms, principles, and concepts
- A working knowledge of computers and Microsoft operating systems & software, especially Excel
- One year of on-the-job experience working with Alerton's BACtalk and Ascent systems
- Completion of the Compass Operator Training course is strongly recommended

RESOURCES

- Compass 2 Installation and Upgrade Guide 31-00314
- ACM Builder Installation and Operations Guide
- VisualLogic Controllers Installation and Operations Guide

REGISTRATION

For more information on this course, please visit [AlertonTraining.com](https://www.alertontraining.com) or email the Alerton Training Team at info@alertontraining.com.