

COURSE NAME Ascent Engineering and Commissioning.

FORMAT Instructor Led Training in a lab-intensive classroom environment.

DURATION One Week (32 hours over five days).

SCHEDULE Mon-Thu 8:30am to 5:00pm with one hour for lunch and two 15-minute breaks.

Friday 8:30am to 1:00pm – The exam on Friday is required in order to receive a certification of completion. No exceptions will be granted.

Do not arrange for travel home before 2:00pm on Friday.

ASSESSMENT A comprehensive lab examination on Thursday afternoon and Friday. Final grade is a composite of quizzes and lab exam.

AUDIENCE

This training course is targeted to building automation and control system application/field engineers who work with Alerton's Ascent and BACtalk control systems.

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 Alerton's ACM and GC Builder tools.

Using Ascent hardware components and a training console to simulate an actual installation, students then wire-up, 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 (Ethernet, MS/TP, and Internal Virtual networks); as well as indicating all Ascent addressing requirements.

- Use Alerton's ACM 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/VLXs, and renumber VLCs.
- Utilize Device Manager's Send and Save functions to commission devices.
- Use Alerton's VisualLogic program utility to set up and verify proper scaling of VLC inputs.
- Configure input and output parameters for the ACM via diagnostic displays.
- 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 and Summary pages to enhance the operator interface in the Compass Web-Browser.
- 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.
- At least twelve months on-the-job experience working with Alerton's BACtalk and Ascent systems.
- Although not required, a successful completion of the Ascent Fundamentals Online Course would be advantageous.