# ATS Niagara Operator Course

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| COURSE NAME | ATS Niagara Operator Course |
| FORMAT | Instructor-led training in a combined classroom and lab environment |
| DURATION | Two consecutive days (13 hours over two days) |
| SCHEDULE | 8:00am to 5:00pm with one hour for lunch and periodic breaks |
| ASSESSMENT | There is no final exam or certification for this class |

### AUDIENCE

Building automation and control system operators, technicians, installers, engineers, programmers, and sales persons. The Niagara Operator Course is the recommended first training course in the ATS Niagara training series.

### OVERVIEW

This course focuses on the operator's role in building automation systems by introducing BACnet concepts and Niagara hardware and software. Students will learn the fundamentals of the Niagara workbench and communication structures using a Tridium JACE and BACnet controllers to simulate a live building automation system. Students are introduced to the hardware architecture and hierarchy of building automation systems and will get hands-on experience identifying and working with controllers and field devices. Simulating real life scenarios, students will configure and edit the most commonly used features of a Niagara building automation system and learn to maximize the potential use of the associated software.

### OBJECTIVES

After completion of this course students will be able to:

- Describe building automation system architecture and be able to identify the various control system components, understanding their respective relationships to one another.
- Describe the BACnet protocol, how control system devices are addressed, and how a control system data points are represented using BACnet Objects and Properties.
- Describe how standard BACnet objects and properties are matched to Niagara objects and properties, including the use of extensions.
- Log in to the Niagara workbench and navigate its displays to monitor and control building systems, including understanding the use of platforms and stations.
- Use workbench to discover new devices and points, as well as understand the use of facets and how the JACE links data with the Supervisor.
- Create and edit schedules.
- Set up email service for distribution of alarm notifications, reports, charts, and more.

- Create and view charts and histories.
- Create and edit alarms as well as view and acknowledge alarms.
- Create and edit reports.
- Edit and link graphics through the Niagara workbench.

## PREREQUISITES

- Knowledge of basic HVAC terms, principles, and concepts.
- Exposure to basic BACnet and building automation concepts.
- A working knowledge of computers and current Microsoft operating systems.

## RESOURCES

*n/a*