

## Insight 3.9 for New Users (4-6 hours)

159-144 (Student Guide); 159-143 (Instructor Guide)

Learn how to use Insight 3.9 to monitor and control a facility.

Topic:	You will learn to:
Reports	<ul style="list-style-type: none"> <li>Identify the components of a Point Log.</li> <li>Run various Point Log reports.</li> </ul>
Commander	<ul style="list-style-type: none"> <li>Command points and return them to system control.</li> </ul>
Alarm Management	<ul style="list-style-type: none"> <li>Acknowledge and erase alarms.</li> <li>View messages for points in alarm.</li> </ul>
Scheduler	<ul style="list-style-type: none"> <li>Define zones and events.</li> <li>Discuss scheduling events and overriding schedules.</li> </ul>
Point Group Editor	<ul style="list-style-type: none"> <li>Organize points into groups.</li> </ul>
Trending	<ul style="list-style-type: none"> <li>Determine when to trend a point by time and when to trend a point by change-of-value (COV).</li> </ul>
Graphics	<ul style="list-style-type: none"> <li>Display and navigate dynamic graphics.</li> </ul>

**Participants:** Building personnel who need operating skills with Insight systems.

**Prerequisite:** None

## New Features of Insight 3.9 for Existing 3.8 or 3.8.1 Users (4-6 hours)

159-141 (Student Guide); 159-142 (Instructor Guide)

Learn about the new features and capabilities of Insight 3.9.

Topic:	You will learn to:
Enhancements	<ul style="list-style-type: none"> <li>List the new features of Insight 3.8.1 and 3.9.</li> </ul>
Graphics	<ul style="list-style-type: none"> <li>Set default properties for a control.</li> <li>Create Command Control object.</li> <li>Command the values of points with a single click.</li> <li>Control Point information Block grouping.</li> </ul>
System Profile	<ul style="list-style-type: none"> <li>Maintain a list of wireless access points.</li> <li>View installed field panel licenses.</li> </ul>
Reports	<ul style="list-style-type: none"> <li>Create a Point Data Sorter report.</li> </ul>
Hardware	<ul style="list-style-type: none"> <li>Support for new PXC Modular controller.</li> </ul>

**Participants:** Existing Insight 3.8 or 3.8.1 users who are upgrading to Insight 3.9.

**Prerequisite:** Information is presented in a manner that assumes students are familiar with the day-to-day operation of an Insight 3.8 or 3.8.1 system.

## Overview Courses

As revisions to Insight software are released, training for new users and existing users will be offered. Please contact your local Siemens office for more information.



# Overview Courses

## Field Panel GO (4-6 hours)

**159-135 (Student Guide); 159-136 (Instructor Guide)**

Learn about the new features and capabilities of Field Panel GO.

Topic:	You will learn to:
Alarms	<ul style="list-style-type: none"> <li>Acknowledge alarm states.</li> </ul>
Graphics	<ul style="list-style-type: none"> <li>Configure the default graphic.</li> <li>View a list of available graphics.</li> <li>Command analog points from a graphic.</li> </ul>
Point Commander	<ul style="list-style-type: none"> <li>Command point values and priorities.</li> <li>Command a point to alarm.</li> </ul>
Scheduler	<ul style="list-style-type: none"> <li>View and modify properties of a mode schedule.</li> <li>Override a mode schedule on a selected date.</li> </ul>
Trend Data Report	<ul style="list-style-type: none"> <li>Generate and print a Trend Data report.</li> </ul>
Point Log Report	<ul style="list-style-type: none"> <li>Generate and print a Point Log report.</li> </ul>

**Participants:** Building personnel who need operating skills with Field Panel GO systems.

**Prerequisite:** None

## Communicating with Your APOGEE Field Panel (4-6 hours)

**159-074 (Student Guide); 159-075 (Instructor Guide)**

Learn how to use an operator interface terminal to communicate with an APOGEE Field Panel.

Topic:	You will learn to:
Operating	<ul style="list-style-type: none"> <li>Log on and off a system.</li> </ul>
Monitoring	<ul style="list-style-type: none"> <li>Define the components of a point log.</li> <li>Run a point log for one point or a group of points using wildcards.</li> <li>Pause, resume and cancel the scrolling of reports.</li> <li>Add points to Point Monitor and remove points from Point Monitor.</li> <li>Run a Point Totalization Report.</li> </ul>
Performing Diagnostics and Troubleshooting	<ul style="list-style-type: none"> <li>Determine when to trend a point by time and when to trend a point by change-of-value (COV).</li> <li>Add points to trend and remove points from trend.</li> </ul>
Points	<ul style="list-style-type: none"> <li>Command points.</li> <li>Return commanded points to system control.</li> </ul>

**Participants:** Building personnel who need to communicate with an APOGEE Field Panel.

**Prerequisite:** None

## APOGEE Terminal Equipment Controllers (4-6 hours)

159-103 (Student Guide); 159-104 (Instructor Guide)

Learn how to use APOGEE Terminal Equipment Controllers (TECs) for effective building equipment management.

Topic:	You will learn to:
Identifying TECs	<ul style="list-style-type: none"> <li>• Make a sketch of some or all of the Field Level Networks (FLNs) at your facility.</li> </ul>
TECs on the FLN	<ul style="list-style-type: none"> <li>• Explain the purpose of TECs.</li> <li>• Describe how TECs control building equipment.</li> </ul>
Controller Subpoints	<ul style="list-style-type: none"> <li>• Explain the difference between logical points and subpoints.</li> </ul>
Unbundling Subpoints	<ul style="list-style-type: none"> <li>• Explain why TEC subpoints are unbundled in a network.</li> </ul>
Communicating	<ul style="list-style-type: none"> <li>• Communicate with a TEC from a room thermostat and through a field panel or Insight.</li> </ul>

**Participants:** Building personnel who need basic operating skills with APOGEE TECs.

**Prerequisite:** None

## Introduction to Pneumatic Controls (4-6 hours)

159-175 (Student Guide); 159-176 (Instructor Guide)

Learn about pneumatic components and how they work together in a system.

Topic:	You will learn to:
Components	<ul style="list-style-type: none"> <li>• Define pneumatic control.</li> <li>• Identify the major components of a pneumatic system from air compressor to controlled devices.</li> <li>• Describe how pneumatic devices can interact with DDC control.</li> <li>• Identify pneumatic components and explain their function.</li> <li>• Explain direct acting and reverse acting, and normally open and normally closed.</li> <li>• Describe the differences in the response of a direct acting and reverse acting thermostat.</li> </ul>
Simple Control Strategies	<ul style="list-style-type: none"> <li>• Describe a closed control loop.</li> <li>• Describe the operation and function of components in a simple control strategy that uses pneumatic controls.</li> </ul>

**Participants:** Building personnel who work with pneumatic systems and components.

**Prerequisite:** None

## Overview Courses



# Overview Courses

## Introduction to Heating, Ventilation, and Air Conditioning (HVAC) Basics (4-6 hours)

159-091 (Student Guide); 159-092 (Instructor Guide)

Learn basic HVAC concepts and how they apply to buildings.

Topic:	You will learn to:
Thermodynamic Calculations	<ul style="list-style-type: none"> <li>Calculate basic CFM/BTU requirements.</li> </ul>
Heating and Cooling Systems	<ul style="list-style-type: none"> <li>Identify and describe major systems at your site for heating and cooling.</li> </ul>
Warm and Cold Air Production and Distribution	<ul style="list-style-type: none"> <li>Trace the path of warm and cold air from its source to its final distribution into rooms and other spaces.</li> <li>Describe the specific equipment at your site for heating and cooling.</li> <li>Describe the type of terminal equipment at your site, if any, for the distribution of warm and cold air.</li> </ul>
Room and Building Pressurization	<ul style="list-style-type: none"> <li>Discuss why pressurization in an entire building and in specific spaces is important.</li> <li>Identify any special-needs areas you have such as: labs, computer rooms, process areas, etc.</li> </ul>
Filtration	<ul style="list-style-type: none"> <li>Explain how air is filtered at your facility.</li> </ul>
Mechanical Equipment Terminal Equipment	<ul style="list-style-type: none"> <li>Identify mechanical and terminal equipment at your facility.</li> </ul>

**Participants:** Building personnel who need a basic introduction to HVAC concepts as applied to their building.

**Prerequisite:** None

## Fume Hood Hardware and Controls (4-6 hours)

**159-045 (Student Guide); 159-046 (Instructor Guide)**

Learn how to identify types of chemical fume hoods, their components and their purpose.

Topic:	You will learn to:
Fume Hood Identification	<ul style="list-style-type: none"> <li>Define the purpose of a fume hood.</li> <li>Identify the components of a fume hood and the different sash types.</li> </ul>
Fume Hood Exhaust Terminal (FHET)	<ul style="list-style-type: none"> <li>Describe the function of the FHET.</li> <li>Identify the components of the FHET.</li> </ul>
Fume Hood Controller (FHC)	<ul style="list-style-type: none"> <li>Describe the function of the FHC.</li> </ul>
Operator Display Panel (ODP)	<ul style="list-style-type: none"> <li>Describe the function of the ODP.</li> <li>Identify the components of the ODP.</li> <li>Interpret the LEDs, display and alarms of the ODP.</li> </ul>
Fume Hood Monitor (FHM)	<ul style="list-style-type: none"> <li>Describe the function of the FHM.</li> <li>Interpret the LEDs, display and alarms of the FHM.</li> </ul>
Laboratory Room Controller (LRC)	<ul style="list-style-type: none"> <li>Describe the function of the LRC.</li> <li>Identify the components of the LRC.</li> <li>Describe the function of the fume hood flow module.</li> </ul>
Differential Pressure Monitor (DPM)	<ul style="list-style-type: none"> <li>Describe the function of the DPM.</li> </ul>
Datamate Base Software	<ul style="list-style-type: none"> <li>Logon to Datamate Base.</li> <li>Run reports using Datamate Base.</li> <li>Override point values.</li> </ul>

**Participants:** Building engineers, building administrators or anyone responsible for maintaining and troubleshooting fume hoods.

**Prerequisite:** None

## Fume Hood Safety (4-6 hours)

**159-047 (Student Guide); 159-048 (Instructor Guide)**

Learn how fume hoods function and basic safety guidelines.

Topic:	You will learn to:
Fume Hood Components	<ul style="list-style-type: none"> <li>Describe the purpose of a fume hood.</li> <li>Identify fume hood components.</li> </ul>
Safety Guidelines	<ul style="list-style-type: none"> <li>Identify procedures for safe fume hood operation.</li> </ul>
Operator Display Panel and Monitor Components	<ul style="list-style-type: none"> <li>Interpret information from the Operator Display Panel and the Fume Hood Monitor.</li> </ul>

**Participants:** Intended for laboratory personnel who operate fume hoods.

**Prerequisite:** None

## Overview Courses

