

AAON Technical Academy General Information 2024

Billing	Billing is handled through the sponsoring AAON Sales Rep.
Sponsorship	• Every student must be sponsored by an AAON Sales Representative.
Enrollment	 Contact your local AAON Representative. If you are unsure who that is, you can click on <u>Find Your Rep</u> at the top of our main web page.
Schedule	 All classes run from 8:00 AM to 4:30 PM each day except the last day which ends at 12:30 PM.
	 Students should arrive at the training facility no later than 15 minutes prior to class. We start promptly at 8:00 AM each day.
Hotel Accommodations	 Individual hotel rooms for each enrolled student will be provided at no additional cost. One night per day of training.
	 If the person attending does not need a hotel room, a discount will be applied.
	 Transportation to and from the hotel will be provided each day. On the last day, the shuttle will take anyone to the Airport from the training facility at 12:30 PM.
Cancellation Policy	 Cancellations must be made by 3 weeks prior to the start of class. Any cancellations less than this time frame will be billed 50% of the class cost.
	 This cancellation policy is in place to prevent last minute changes and provide seats for everyone who needs to attend. However, we try to be as flexible as possible. Our goal is to keep every class as full as possible to accommodate the high demand we have.
	 If there are any problems with a student not being able to attend, please send us an email. We will do our best to accommodate your individual situation. The sooner you contact us, the better options we have.





Package Unit Startup 5 Days (Tulsa, OK)

This class is designed to teach the technician basic knowledge to start up and test an AAON Package unit.

Target Units	RQ/RN Units Through C Box
	 Non-VFD driven compressors (On/Off, Digital, 2-Step)
	• Focus on most common features we utilize in the RQ/RN lines of equipment
Prerequisites	Must have basic HVAC knowledge
	 Must have basic skills working with Meters, Gauges, Tools
	Basic computer skills recommended
Skills Learned	 Using Prism II software to interface and test an AAON unit
	 Verifying configuration in the Controls (VCCX, Modules)
	Setting application/location specific configurations
	Setting up Modulating Gas Valves
	 Verifying and adjusting VFD settings for Supply/Exhaust Fan applications
	Verifying unit operation using control force modes
	Basic Electro-Mechanical troubleshooting
	 Adjusting appropriate setpoints for specific applications



Split System Startup 5 Days (Longview, TX)

This class is designed to teach the technician basic knowledge to start up and test an AAON Split System Unit.

Target Units	 CB/CF Condensing Units M2/H3/V3 AHU's Non-VFD Driven compressors (On/Off, Digital, 2-Step)
Prerequisites	 Must have basic HVAC knowledge Must have basic skills working with Meters, Gauges, Tools Basic computer skills recommended
Skills Learned	 Verifying Line-Set installation and sizing Adding additional charge for Line-Set Using Prism II software to interface and test an AAON unit Verifying configuration in the Controls (VCCX, Modules) Verifying unit operation using control force modes Basic Electro-Mechanical troubleshooting Refrigeration system troubleshooting



Controls 1 5 Day (Kansas City, MO)

This class is designed to teach the technicians knowledge on the AAON VCCX Control System.

Note: Includes more in-depth details than the Startup classes offered in Longview or Tulsa.

Target Controllers	VCCX Controller
	ModGas-X & ModGas-XWR Modules
	• MHGRV-X (Hot Gas Reheat) Module
	PreHeat-X Module
	RSMx Modules for C box and smaller
Prerequisites	Must have basic HVAC knowledge
	Must have experience with AAON Equipment
	Basic Computer skills recommended
Skills Learned	Basic and Intermediate Prism II Operation
	Configuring VCCX Controller for various applications (Focus on RQ/RN Units)
	 Working with ModGas, MHGRV, and Preheat Modules
	Working with RSMx Modules
	Basic VCCX Sequence of Operation
	Interfacing VCCX with other AAON Controllers



Xtend (Upgrade) Class 5 Day (Kansas City, MO)

This class is designed to teach the technicians knowledge on the AAON Xtend (upgrade) Program.

Target Controllers	 AAON Legacy Controllers to VCCX2 upgrade ModGas-X MHGRV-X (Hot Gas Reheat) Module RSMD (Refrigerant System Module for Digital, On/Off, 2-Step Compressors) 	
Prerequisites	 Must have basic HVAC knowledge Must have basic wiring skills Must have experience with AAON Equipment Basic Computer skills recommended 	
Skills Learned	 Overview of existing components and new replacement components Recovering existing configurations and setpoints Properly labeling wires for termination on replacement boards Installing new boards Wire Management techniques Basic and Intermediate Prism II Operation Configuring VCCX Controller for various applications Working with ModGas, MHGRV, and Preheat Modules Working with RSMD Module Basic VCCX Sequence of Operation Interfacing VCCX with other AAON Controllers Updating software of the current controllers 	



VAV & Systems Class 5 Day (Kansas City, MO)

This class is for anyone who wants detailed knowledge on how the AAON VAV Control System works with VCCX-2. It will also cover System Integration with the AAON line of controls.

Note: Pioneer Gold and AAON RTU Touch controller not covered.

Class Targets	· VCCX-2
	MiniLink PD
	VAV/Zone Controllers
	• GPC-XP
	BACnet for VCCX-2 and VAV/Zone Controllers
Prerequisites	Must have reasonable computer skills
	AAON Academy Controls 1 class is required
Skills Learned	Overview of components used in an AAON VAV system
	Overview of VAV and VVT systems
	System Wiring
	System Programming
	Communications Basics and Troubleshooting
	BACnet Interface
	GPC-XP programming



Controls 2 5 Day (Kansas City, MO)

This class is a continuation of the Controls 1 Class.

Target Controllers	•	VCCX Controller for C box and larger ModGas-XWR Modules RSMx Modules for C box and larger • Includes VFD Compressor modules
Prerequisites	•	Must have completed Controls 1 with at least a 75% or better on the assessment
Skills Learned	•	 Configuring VCCX for features found on C box and larger units RSMV, RSMV-HP, RSMZ, ETC. ModGas-XWR for Large Units VCCX Hands-On Troubleshooting Simulations of scenarios using "Smart" training panels Troubleshooting Configuration, Setpoints, Etc.



About the Instructors

Andrew Hodges

Technical Training Manager



Andrew started in the HVAC controls industry in 1997 after earning his Associates in Applied Science in Electronics Technology. He started his career evaluating and repairing controls coming back from the field. In 2000, he moved to the Engineering department designing circuit boards, much of which was purchased by AAON. During this time, he also provided support to the field techs over the phone as well as job site visits. In 2012, Andrew started to develop Sequence of Operations as well as write the software that goes into the controls. Now Andrew is fully dedicated to providing training for field techs as well as internal personnel since 2018. He also leads the AAON Academy team and continues to use his expertise in electronics and software to improve the learning experience at AAON.

Paul Margwarth

Technical Trainer



Paul has been in the industry since 1994, after earning his Associates in Applied Science in Air Conditioning and Refrigeration Technology at Oklahoma State University, Institute of Technology. He began his career as a Service Technician in the Dallas/Fort Worth area, primarily working on commercial package equipment both constant and variable air volume, as well as chilled water and hot water systems. In 1997, he returned to Oklahoma and worked for a residential and commercial contractor in Tulsa, OK. During his tenure there, he was promoted to the company's technical trainer and coordinator. He also began to teach night classes at the Tulsa Career Center in conjunction with his role as a Service Technician/Technical Trainer. In 2004, he returned to his alma mater accepting a role as an instructor in the Air Conditioning and Refrigeration Department. He completed a Bachelor of Science in Career and Technical Education from Oklahoma State University, and has been training technicians and future technicians for over 20 years.

Stan Horton

Technical Trainer



Stan has been with AAON since 1993. He began his career at AAON as a welder on the assembly lines. In 2000, he moved into a management role for the assembly lines, testing, and paint booth areas. Stan spent the next 18 years supervising many different aspects of the AAON production dept. and has vast experience in the assembly process for all AAON products. He also helped to develop the water piping assembly areas. In 2018, Stan used his experience to assist in developing AAON's onboarding program training all of the newly hired employees so that they could more easily adapt to AAON's production environment. This is where he found his passion for teaching and eventually was able to join the AAON Academy to assist in training field techs as well as AAON's internal team members. He is currently studying for his Bachelor degree in Business Management and plans to go on into the Master's program for Project Management.

Bryan Chadwell

Technical Trainer



Bryan first started his HVAC career in 1992 getting an HVAC certificate from Climate Control Institute in Wichita Kansas. He then worked in the field doing residential and light commercial applications. He also attended Kansas State University, Agriculture Education, for 2 years after High School. In 2013, he started attending Metropolitan Community College Kansas City. He graduated in 2015 with an Associates in Applied Science, Instrumentation and Controls. In 2015, he started working at Watt Master Controls in the Controls Support Department. AAON purchased Watt Master 2018. He helped the technicians with controls, mechanical and applications questions on the phone. He also traveled to job sites to help with controller updates and complete controller replacements. Because of his experience in the field and helping technicians, Bryan is the newest addition to the AAON Academy.

