



2017 Daikin Learning Institute Training Catalog



HVAC Theory, Design & Technical Service Training



Daikin Applied is accredited by the International Association for Continuing Education and Training (IACET) and is authorized to issue the IACET CEU.



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Welcome to Daikin Applied

Daikin Applied delivers engineered, flexible solutions for commercial, industrial and institutional HVAC requirements with reliable products, knowledgeable applications expertise and responsive support. As part of Daikin Industries, a Fortune 1000 company, Daikin Applied is the largest air conditioning, heating, ventilating and refrigeration company in the world. We have earned a worldwide reputation for providing a full line of quality products and expertise to meet the demands of our customers.

Daikin Learning Institute

The Daikin Learning Institute offers industry-leading training programs for heating, ventilating and air conditioning (HVAC) professionals, owner/operators, contractors, service technicians, building and systems engineers, designers, distributors, sales reps and internal employees. Once you have made the investment in efficient, flexible Daikin HVAC equipment, taking care of your investment should be a top priority. Daikin Learning Institute offers technical service training courses to learn first hand, from the manufacturer, what it takes to get the most out of your mechanical system.

Daikin Applied is Accredited by IACET

Daikin Applied is accredited by the International Association for Continuing Education and Training (IACET) and is authorized to issue the IACET CEU. IACET is known as the premier standard-setting organization for continuing education and training providers. Daikin Applied has completed an extensive application process, has undergone review and evaluation by IACET representatives, and has successfully demonstrated adherence to all IACET criteria and guidelines under the ANSI/IACET 1-2013 Standard. Daikin Applied will comply with IACET continuing education standards for courses awarding Continuing Education Units (CEU's).

Daikin Learning Institute Safety Statement

The goal of Daikin Learning Institute is to provide product specific training and information necessary to establish a high level of proficiency in operating and servicing Daikin products. While product specific safe work procedures are built into our training program, knowledge and formal training of an applicable safe working culture, competency, practices and procedures for working in the HVAC field is the obligation of the employer and individual prior to attending Daikin Applied equipment training.





Daikin Learning Institute Training Staff

Director, Daikin Learning Institute

Thomas E. Watson, P.E. Fellow ASHRAE

Director, Daikin Learning Institute

Tom is the Director of the Daikin Learning Institute, which includes both sales and service training. He has been employed in engineering, marketing, and quality assurance during his 44 years with the Staunton facility. During this time, he has worked on air-cooled and water-cooled products utilizing reciprocating, scroll, screw and centrifugal compressors. His most recent role was Chief Development Engineer working on advance centrifugal products. He is the holder of five patents on compressor and chiller technology. Tom is a licensed professional engineer in the Commonwealth of Virginia.

Tom has been very active in ASHRAE and served as President in 2012-2013.

He has also:

Received the *R.C. Schulze Distinguished Service Award* for 2000 from AHRI

Received *ASHRAE Standards Achievement Award* - 2004

ASHRAE Fellow - 2008

Received *ASHRAE Exceptional Service Award* - 2010

Daikin Learning Institute Mission Statement

The mission of Daikin Learning Institute is to offer the best training in the industry with quality training programs designed to provide the tools and resources needed for the customers to be successful.

HVAC Theory & Design Training

Daikin Learning Institute HVAC Theory & Design Training Staff

Manager, Professional Development Training

Robin Breth

Daikin Learning Institute - Plymouth

Robin has over 35 years of experience with Daikin Applied and the last 4 years with Daikin Learning Institute. Robin has developed in-depth knowledge and understanding of multiple generations of our products, provided solid leadership skills in the areas of business planning/execution, team management, project management and training development. In addition, Robin has developed strong business relationships with our internal and external Sales Force. Please contact Robin with any questions or concerns about the “Principles of...” training sessions or how to register, robinm.breth@daikinapplied.com

Education:

Robin holds a B.A. in Business Management from Augsburg College and a M.A. in Human Resource Management from Concordia University – Saint Paul.

Graduate Engineer Trainer and Application Engineer

Jeff L. Johnson

Daikin Learning Institute - Plymouth

- Jeff has been an Engineer Trainer with Daikin Learning Institute since 2014. He has been in the Heating, Ventilation and Air Conditioning industry for over 30 years with the last 7 of those years as a trainer.
- He creates animated PowerPoint presentations to make for an interactive training session.
- Jeff teaches Psychrometrics, Thermodynamics and many other classes with an intuitive and hands-on approach. He has created videos for short informational training sessions as well.
- He creates workshops that generate student involvement in facility tours and he is involved in textbook corrections and development.
- Jeff is a certified International Ground Source Heat Pump trainer.
- Active ASHRAE member.



HVAC Theory & Design Training

Training Administrator, Professional Development Training

Kim Benson

Daikin Learning Institute - Plymouth

Kim is a Training Administrator at the Daikin Learning Institute for Sales Rep Training. Prior to joining Daikin Applied in 2013, Kim worked in hospitality and as an event manager where she gained valuable experiences in customer service and planning.

Kim has enjoyed learning about the HVAC industry and facilitating various training sessions.

Kim received a Bachelor of Science degree from North Dakota State University (Go Bison!) in Fargo, North Dakota.

In her personal time, Kim enjoys grilling and spending time with her husband, family, and her cat.



HVAC Theory & Design Training



Enrollment

To obtain the most effective training, carefully match your student(s) with the appropriate courses by evaluating the course content and objectives with them. Class size is limited and is offered on a first-registered, first-attend basis. Confirmation of enrollment along with hotel and travel information will be sent to the student within five working days after receipt of your paid application. Upon receipt of your confirmation, check it carefully and contact the Training Administrator immediately at 763-553-5324 if you find any discrepancies. An application received without full tuition payment does not reserve a space. If a class is full, we will contact the enrollee for standby or an alternate class date. Please verify your enrollment. If you do not receive an enrollment confirmation letter two weeks prior to the start of class, contact the Training Administrator, as we may not have received your application.

CEU's (Continuing Education Units)

At the conclusion of the course that is awarding CEU's, the student will review, discuss and be assessed with a test on the learning outcomes of the course. The test will be graded based on the percentage of questions to determine the students' learning outcome. A score of 70% will be required for successful completion of the course and to be awarded CEU's (continuing education units).

Registration

To attend an HVAC Theory & Design course listed in this training catalog, there are two ways to enroll.

1. Complete the attached enrollment form and e-mail or mail to:
Daikin Applied
Attn: Kim Benson, Daikin Learning Institute
13600 Industrial Park Blvd.
Plymouth, MN 55441
PH: 763-553-53246
E-mail: kimberly.benson@daikinapplied.com
2. Complete the enrollment form on www.daikinapplied.com/training and submit electronically.

HVAC Theory & Design Training

Payment

Payment must be received in advance of the training course. If payment has not been made prior to the start of class, the student(s) will not be admitted. Indicate your payment method on the registration form. Payment can be made by:

- Major Credit Card. Complete the credit card information on the registration form.

Course Scheduling

Classes begin at 8 a.m. and end at 5:00 p.m. (unless noted otherwise). Half days that are noted on the schedules are completed by noon of the last class date shown on the calendar. All other classes end by 5:00 p.m. Travel arrangements should be made to accommodate this schedule.

Cancellation Policy

Registrations cancelled within 10 working days prior to the course start date will be charged the full course fee. Cancellations made less than four weeks prior to the course start date will be charged 50% of the course fee. An alternate person may use a confirmed space without penalty and substitutions may be made up until the start of class. It is the student's responsibility to cancel hotel reservations.

Daikin Learning Institute reserves the right to make changes or alterations to the course content or schedule. Daikin Learning Institute is not responsible for airline fees associated with changing dates or cancellation of classes. In the unlikely event of a schedule change or cancellation, every effort will be made to notify all registrants in a timely manner.

Hotel Information

A recommended hotel, with Daikin Applied preferred rates, will be provided with the class registration confirmation. Students are responsible for making their own hotel arrangements.

Transportation

Students are responsible for their own transportation to and from the training center. Hotels may not provide shuttle service, so check with them when making your reservations.

Factory Tours

The appropriate personal protection equipment will be provided if your course includes a facility tour.



HVAC Theory & Design Training

Dress Code

Our dress code is business casual. No open toe shoes or shorts please.

Training Materials

Training materials are included in the price of the course and may include, but is not limited to, books, printed Power-Points, flash drives and other resources. Please plan accordingly for transporting materials back to your location.

Visit Us Online

For additional information or the most current course schedules, please visit our web page to learn more about Daikin products, services and training. Our Internet address is: [HTTP://WWW.DAIKIN.APPLIED.COM](http://www.DAIKIN.APPLIED.COM).

HVAC Theory & Design Training Schedule

Course Title	Location	Tuition	Length	2017 Dates
Principles of HVAC	Staunton, VA Plymouth, MN	\$1,900	4.5 days	Mar 27 - 31 - Staunton Nov 6 - 10 - Plymouth
Principles of Refrigeration	Plymouth, MN	\$1,275	3 days	Feb 21 - 23
Principles of Chiller Plant Design	Plymouth, MN	\$2,125	5 days	Dec 4 - 8
Principles of Air System Design	Plymouth, MN	\$1,700	4 days	Mar 13 - 16

HVAC Theory & Design Training

Principles of Refrigeration

Course Description: This course will provide the sales person, technician or engineer with a strong foundation and a thorough understanding of the refrigeration circuit, the heart of the HVAC system. This is essential to be successful in the HVAC industry. The student will learn the fundamentals of thermodynamics and heat transfer, PH diagrams, ideal refrigeration circuits, heat exchanger and compressor design, refrigerants and refrigerant piping. Hands-on application and homework assignments will let the student practice what they learn in class.

Course Level: Beginner

Who Should Attend: Sales and application engineers and technicians who work with HVAC equipment.

Prerequisite Courses or Skills: Engineering degree or strong technical background with 0-5 years field experience.

Learning Outcomes:

Upon successful completion of this course, attendees will be able to:

- Understand refrigeration system design including single and multi-stage systems
- Assess refrigeration modification including sub-cooling, hot-gas reheat and hot-gas bypass
- Distinguish the strengths and weaknesses of different compressor types as well as appropriate situations to apply them
- Analyze how refrigeration systems should be applied to deliver efficient and reliable performance
- Identify advanced technology, such as magnetic bearing compressors, and how it benefits building owners and other customers
- Define current types, policies and environmental issues surrounding refrigerants

Course Location

Daikin Applied
13600 Industrial Park Blvd.
Plymouth, MN 55441
PH: 763-553-5324

Course Fee

\$1,275

Course Length

3 days

CEU's Offered - 2.0

Yes No

Testing Required

Yes No

2017 Course Schedule

Feb 21 - 23

Registration Deadline

Feb 6

The training fee is 10% higher for registrations received after the deadline.

Daikin Learning Institute will provide

Instruction Materials
Coffee Breaks
Lunch
Group Dinner

HVAC Theory & Design Training

Course Location

Daikin Applied
13600 Industrial Park Blvd.
Plymouth, MN 55441
PH: 763-553-5324

Course Fee

\$1,700

Course Length

4 days

CEU's Offered - 3.0

Yes No

Testing Required

Yes No

2017 Course Schedule

Mar 13 - 16

Registration Deadline

Feb 24

The training fee is 10% higher for registrations received after the deadline.

Daikin Learning Institute will provide

Instruction Materials
Coffee Breaks
Lunch
Group Dinner

Principles of Air System Design

Course Description: This course covers a full range of instruction from basic theory and fundamentals of heat transfer, fluid dynamics and psychrometrics to air-side application theory, fan and coil selection, duct design, and air-side controls. Several building types will be used in simulated interactions between design engineers and sales engineers regarding hypothetical new construction and renovation projects.

Course Level: Beginner

Who Should Attend: Sales and application engineers and technicians who are looking for an introduction to Air System Design

Prerequisite Courses or Skills: Mechanical engineering degree or other engineering discipline with experience in building systems. Completion of Principles of HVAC strongly recommended.

Learning Outcomes:

Upon successful completion of this course, attendees will be able to:

- Define air distribution methods and their pros and cons
- Analyze psychrometrics and its use in HVAC design
- Identify heating and cooling coil design and application
- Assess fan types and their use in various applications
- Distinguish the two most common methods of duct design
- Learn fundamental acoustics in air-side systems
- Understand DOAS and heat recovery system
- Differentiate options for air-side design in various building types
- Distinguish common codes and standards used in air-side design

HVAC Theory & Design Training

Principles of HVAC

Course Description: This course will provide the salesperson, engineer or technician with a strong foundation and a thorough understanding of the principles of heating, ventilating and air conditioning. The student will be introduced to thermodynamics and psychrometrics, plans and specs, space and building loads, controls theory, acoustics, energy modeling, electrical components, motors and VFDs. Workshops and homework assignments will let the student practice the skills they learn in class.

Course Level: Beginner

Who Should Attend: Sales and application engineers and technicians who are looking for an introduction or refresher course on all components of HVAC systems.

Prerequisite Courses or Skills: Engineering degree or strong technical background with 0-5 years field experience.

Learning Outcomes:

Upon successful completion of this course, attendees will be able to:

- Interpret the construction industry, the design process, and plans and specs
- Learn thermodynamics, psychrometrics, thermal comfort
- Analyze controls theory and basic control components
- Understand acoustics and how to model acoustics for HVAC equipment
- Define controls integration and electrical power distribution
- Assess motor and variable frequency drive operation and theory

Staunton Course Location

Daikin Applied
207 Laurel Hill Road
Verona, VA 24482

Plymouth Course Location

Daikin Applied
13600 Industrial Park Blvd.
Plymouth, MN 55441
PH: 763-553-5324

Course Fee

\$1,900

Course Length

4.5 days

CEU's Offered - 3.0

Yes No
Testing Required
 Yes No

2017 Course Schedule

Mar 27 - 31 - Staunton, VA
Nov 6 - 10 - Plymouth, MN

Registration Deadline

Mar 10
Oct 20

The training fee is 10% higher for registrations received after the deadline.

Daikin Learning Institute will provide

Instruction Materials
Coffee Breaks
Lunch
Group Dinner

HVAC Theory & Design Training

Course Location

Daikin Applied
13600 Industrial Park Blvd.
Plymouth, MN 55441
PH: 763-553-5324

Course Fee

\$2,125

Course Length

5 days

CEU's Offered - 3.5

Yes No
Testing Required
 Yes No

2017 Course Schedule

Dec 4 - 8

Registration Deadline

Nov 17

The training fee is 10% higher for registrations received after the deadline.

Daikin Learning Institute will provide

Instruction Materials
Coffee Breaks
Lunch
Group Dinner

Principles of Chiller Plant Design

Course Description: This course is intended to give the sales engineer and technician a thorough understanding of chiller plant design. The attendee will learn hydronics, pump design, condenser water systems, building loads and diversity, terminal devices, constant and variable flow systems, chiller plant variations and optimization, energy recovery, water-side free cooling, thermal storage, process applications, district cooling and mechanical room safety. Attendees will mix in class instruction with hands-on work experiences in the ADC. Real world examples using plans and specs will be used as homework assignments.

Course Level: Beginner

Who Should Attend: Sales and application engineers and technicians who will be involved with chiller sales and owner direct sales.

Prerequisite Courses or Skills: Engineering degree or strong technical background. Completion of the Principles of Refrigeration is strongly recommended.

Learning Outcomes:

Upon successful completion of this course, attendees will be able to:

- Understand hydronics design and pump selection
- Assess how building load profiles affect chiller plant design
- Learn all forms of chiller plant design including constant and variable flow systems, how they work and how they are controlled
- Identify low delta T issues and how to resolve them
- Analyze chiller plant optimization for energy efficiency
- Distinguish what systems work best within different applications

HVAC Theory & Design Training

HVAC Theory & Design Training Registration Form

Course Title: _____

Dates: _____

Course Location: _____

Company Name: _____

Mailing Address: _____

City, State, Zip: _____

Student Name: _____ Email: _____

Phone Number: _____ Fax Number: _____

Submitted By: _____ Email: _____

Phone Number: _____ Fax Number: _____

Please Specify Payment Option Below And Complete All Information.

Company Name: _____

Billing Address: _____

Contact: _____

City, State, Zip: _____

Phone Number: _____ Fax Number: _____

CREDIT CARD: Master Card VISA American Express Discover (Novus)

Card Number: _____ Expiration Date: ____ / ____ / ____

Cardholder Printed Name: _____

Payment is due in advance or student(s) will not be admitted.

Mail copy of application form to:
 Daikin Applied/ Attn: Daikin Learning Institute
 13600 Industrial Park Blvd.
 Plymouth, MN 55441
 763-553-5324

E-mail copy of application to:
training.reg@daikinapplied.com

Daikin Learning Institute reserves the right to make changes or alternations to the course content or schedule, and is not responsible for fees associated with changing dates or cancellation of classes. In the unlikely event of a schedule change or cancellation, our best effort will be made to notify all registrants in a timely manner.

Technical Service Training

Daikin Learning Institute Service Training Staff

Training Administrator, Service Training

Linda Custer

Daikin Learning Institute - Staunton

Linda has over 24 years of service working in various capacities with McQuay and now Daikin Applied with 17 years in the service training department. To obtain the most effective training, she advises that you carefully match your student(s) with the appropriate courses by evaluating the course content and learning objectives with them. Class size is limited and is offered on a first-registered, first-attend basis.

Confirmation of enrollment along with hotel and travel information will be sent to the student within five working days after receipt of your paid application. Upon receipt of your confirmation, check it carefully and contact Daikin Learning Institute immediately if you find any discrepancies.

An application received without full tuition payment does not reserve a space. If a class is full, we will contact the enrollee for standby or to offer an alternate class date. Please verify your enrollment. If you do not receive an enrollment confirmation letter two weeks prior to the start of class, contact Daikin Learning Institute, as we may not have received your application. You may contact Linda at linda.custer@daikinapplied.com.

Technical Service Writer

Perry Thompson

Daikin Learning Institute - Staunton

Perry is the technical service writer for Daikin Learning Institute. He has been with Daikin for 3 years, and has over 20 years of experience in CAD design and custom software development for multiple industries. He enjoys creating and improving learning materials of all kinds, including technical manuals, PowerPoint presentations, and other training media.

As Daikin Learning Institute continues to strive for excellence and industry-leading training techniques, you can expect to see many exciting enhancements to our course materials and online resources.

Perry is eager to assist you in finding manuals, or correcting errors and omissions that you may come across as you review our literature items. You may contact Perry at ralph.thompson@daikinapplied.com.



Technical Service Training



Technical Service Instructors - Chillers

Robert Hollembeak

Daikin Learning Institute - Staunton

- Certified Centrifugal, Rotary screw, Reciprocating, Scroll and Micro-Tech® chiller control instructor for Daikin Learning Institute
- 44 years experience in commercial and industrial HVACR in service, management, training, consulting and sales working for various manufacturers, public schools and as an independent contractor.
- Unlimited licensed HVAC & R contractor in GA & NC
- ACCA registered Refrigerant Transition & Recovery Proctor
- Reviews and composes service literature and procedures
- Participated in ASHRAE handbook review workshops
- Develops training programs and presentations
- Provides remote on-site customer training & global technical support
- Experience includes commissioning, servicing, analyzing and maintaining centrifugal, rotary screw, scroll and reciprocating chillers, air handling equipment, pumps, cooling towers, pneumatic and DDC controls systems

Steven Selgestad

Daikin Learning Institute - Staunton

- Joined Daikin Learning Institute after having the position of Western Regional Trainer for Daikin Applied and as such, has worked extensively training technicians in the field and in classroom settings
- 39 years of HVAC experience as technician, service manager and trainer. 23 years with McQuay and now Daikin Applied as a remote factory service technician and Regional Trainer
- Certified instructor for Daikin Screw, Centrifugal, and WMC chillers
- Associates Degree in HVAC and Bachelors of Science in Technology from University of South Dakota, Springfield
- Worked with Daikin Applied Technical Response Center to develop software manuals for Daikin WMC product
- Recently relocated to Staunton, Va from Phoenix, AZ



Technical Service Training

Technical Service Instructors - Chillers (continued)

Anthony (Tony) Blake

Daikin Learning Institute - Staunton

- Joined Daikin Learning Institute from the Daikin Applied Richmond Service office where he worked as a senior HVAC field service technician
- 21 years experience with McQuay and Daikin
- Previously worked as a Senior Technical Support Specialist in the Chiller Technical Response Center
- Chiller engineering lab and production associate
- Technical experience with chillers and practical experience in field service and customer relations
- Provides off campus customer training
- Develops training programs, presentations to provide chiller training in Spanish for Latin America
- Experience includes commissioning, servicing, analyzing and maintaining Daikin chillers



Charles (Christy) Jones

Daikin Learning Institute - Staunton

- Retired, working part-time basis
- Served as Southeast Regional Service Trainer prior to joining the Daikin Learning Institute as a technical service trainer
- 50 years experience in the HVAC industry with HVAC technician degree having worked for several major HVAC manufacturers providing factory service and repair on their product.
- 25 years with McQuay Factory Service & Daikin Applied in various capacities including service tech, Regional trainer, remote instructor. As a technician, Christy provided service and repair on all types of HVAC systems.
- Certified instructor of Daikin Centrifugal, Reciprocating, Screw, and Scroll chillers
- Develops training programs, presentations
- Has worked extensively training and assessing technicians in the field and provided job-site training
- Provides off campus customer training and global technical support
- Served four years in US Navy in the Seabees.



Technical Service Training



Technical Service Instructor - Rooftop, Rebel, SWP & WSHP

Larry Heyer

Daikin Learning Institute - Staunton

- Joined Daikin Learning Institute after having the position of Southeast Regional Service Trainer for Daikin Applied and is focused on Applied Air and WSHP training and has been employed with Daikin over three years
- Has over 25 years of experience in HVAC and mechanical plant operation, maintenance and training
- Previously served with US Navy in the Submarine Force
- Has years of experience in service operations, supervision, nuclear power operation and formal technical training as Naval Instructor
- Develops training programs and presentations
- Provides remote off-campus technical training
- Brings a diverse background and high degree of commitment and excellence to Daikin Learning Institute training capabilities



Technical Service Instructor - Rooftop, Rebel & SWP

James Koska

Part-Time Technical Service Training Instructor/Consultant

Daikin Learning Institute - Plymouth

- Has over 20 years experience in the commercial and industrial HVAC industry
- Experience includes design, selection, installation, commissioning, and servicing of commercial and industrial HVAC equipment
- Develops training programs and presentations
- Provides remote off-campus technical training
- Certification in Refrigeration, Rooftop, Self-Contained, and Rebel MicroTech® controls

Technical Service Training



Enrollment

To obtain the most effective training, carefully match your student(s) with the appropriate courses by evaluating the course content and objectives with them. Class size is limited and is offered on a first-registered, first-attend basis. Confirmation of enrollment along with hotel and travel information will be sent to the student within five working days after receipt of your paid application. Upon receipt of your confirmation, check it carefully and contact the Training Administrator immediately at 540-248-9646 if you find any discrepancies. An application received without full tuition payment does not reserve a space. If a class is full, we will contact the enrollee for standby or an alternate class date. Please verify your enrollment. If you do not receive an enrollment confirmation letter two weeks prior to the start of class, contact the Training Administrator, as we may not have received your application.

CEU's (Continuing Education Units)

At the conclusion of the course that is awarding CEU's, the student will review, discuss and be assessed with a test on the learning outcomes of the course. The test will be graded based on the percentage of questions to determine the students' learning outcome. A score of 70% will be required for successful completion of the course and to be awarded CEU's (continuing education units).

Registration

To attend a Technical Service Training course listed in this training catalog, there are two ways to enroll.

1. Complete the attached enrollment form and e-mail, mail, or fax to:
Daikin Applied
Attn: Linda Custer, Daikin Learning Institute
PO Box 2510
Staunton, VA 24402-2510
PH: 540.248.9646
Fax: 763-509-7663
E-mail: linda.custer@daikinapplied.com
2. Complete the enrollment form on www.daikinapplied.com/training and submit electronically.

Technical Service Training



Payment

Payment must be received in advance of the training course. If payment has not been made prior to the start of class, the student(s) will not be admitted. Indicate your payment method on the registration form. Payment can be made by:

- Major Credit Card. Complete the credit card information on the registration form
- Check made out to Daikin Applied
- Purchase orders are accepted to hold an enrollment, but payment is due prior to the start of class.

Course Scheduling

Classes begin at 8 a.m. and end at 5:00 p.m. (unless noted otherwise). Half days that are noted on the schedules are completed by noon of the last class date shown on the calendar. All other classes end by 5:00 p.m. Travel arrangements should be made to accommodate this schedule.

Cancellation Policy

Registrations cancelled within 10 working days prior to course start date will be charged the full course fee. Cancellations made less than four weeks prior to the course start date will be charged 50% of the course fee. An alternate person may use a confirmed space without penalty and substitutions may be made up until the start of class. It is the student's responsibility to cancel hotel reservations.

Daikin Learning Institute reserves the right to make changes or alterations to the course content or schedule. Daikin Learning Institute is not responsible for airline fees associated with changing dates or cancellation of classes. In the unlikely event of a schedule change or cancellation, every effort will be made to notify all registrants in a timely manner.

Hotel Information

A list of area hotels, with Daikin Applied preferred rates, will be provided with the class registration confirmation. Students are responsible for making their own hotel arrangements. Hotels require a major credit card to guarantee room availability.

Transportation

Students are responsible for their own transportation to and from the training center. Hotels may not provide shuttle service, so check with them when making your reservations.

Factory Tours

Students are required to wear steel toe shoes during the plant tour, at all times when passing through the production areas, to and from the cafeteria through the plant and when participating in the hands-on teardown and assembly of the compressors. Safety glasses will be available for plant tours. Safety shoes are mandatory during compressor service courses.

Technical Service Training

Dress Code

Our dress code is business casual. No open toe shoes or shorts please. Safety shoes are required when entering the production facility.

Training Materials

Training materials are included in the price of the course and may include, but is not limited to, books, printed PowerPoint, flash drives and other resources. Please plan accordingly for transporting materials back to your location.

Visit Us Online

For additional information or the most current course schedules, please visit our web page to learn more about Daikin products, services and training. Our Internet address is: [HTTP://WWW.DAIKIN APPLIED.COM](http://www.DAIKIN APPLIED.COM).



Technical Service Training

2017 Daikin Learning Institute Service Training Schedule

Course Title	Models	Location	Tuition	Length	2017 Dates
Scroll Compressor Chiller <i>Maintenance, Operation & Service</i>	AGZ, WGZ (ALR, WLR)	Staunton, VA	\$1750	4.5 days	March 20 - 24 August 14 - 18
Centrifugal Compressor Chiller <i>Maintenance & Operation</i>	WSC, WDC, WCC (PFH, PEH)	Staunton, VA	\$1600	3.5 days	August 28 - 31
Centrifugal Compressor Chiller <i>Service & Compressor Repair</i>	WSC, WDC, WCC (PFH, PEH)	Staunton, VA	\$4800	2 weeks	May 1 - 12 December 4 - 15
Air & Water Cooled Screw Compressor Chiller <i>Maintenance, Operation, & Service</i>	AGS, AWS, WGS, AWV	Staunton, VA	\$1750	4.5 days	May 15 - 19 August 21 - 25
Magnitude® WMC Magnetic Bearing Compressor Chiller Maintenance & Op	WMC	Staunton, VA	\$1600	3.5 days	April 10 - 13 September 26 - 29
Magnitude® WMC Magnetic Bearing Compressor Chiller <i>Service & Repair</i>	WMC	Staunton, VA	\$2600	4.5 days	January 30 - February 3 February 27 - March 3 September 11 - 15 November 13 - 16
Magnitude® WME Magnetic Bearing Compressor Chiller Maintenance & Op	WME	Staunton, VA	\$1600	3 full days	March 14 - 16
Magnitude® WME Magnetic Bearing Compressor Chiller <i>Service & Repair</i>	WME	Staunton, VA	\$2600	4.5 days	April 24 - 28 November 27 - December 1
MicroTech® III Service - Applied Air <i>Prerequisite for Rooftop, Rebel & Self-Contained Courses</i>	MT III	Irvine, CA Plymouth, MN Plymouth, MN Plymouth, MN Marietta, GA Plymouth, MN Marietta, GA Plymouth, MN Plymouth, MN Plymouth, MN Irvine, CA Davie, FL	\$550	2 full days	March 6 - 7 March 20 - 21 April 3 - 4 April 24 - 25 May 8 - 9 June 5 - 6 August 14 - 15 September 11 - 12 October 9 - 10 October 30 - 31 November 13 - 14
Rooftop Service MicroTech® III Service (prerequisite)	Maverick® RoofPak®	Plymouth, MN Marietta, GA Plymouth, MN	\$550	2 full days	April 5 - 6 May 10 - 11 October 10 - 11
Rebel® Rooftop Service MicroTech® III Service (prerequisite)	DPS	Irvine, CA Plymouth, MN Plymouth, MN Irvine, CA Davie, FL	\$550	2 full days	March 8 - 9 April 26 - 27 September 13 - 14 November 1 - 2 November 15 - 16
Self-Contained Service MicroTech® III Service (prerequisite)	SWP, SWT	Plymouth, MN Marietta, GA	\$550	2 full days	March 22 - 23 August 16 - 17
Water Source Heat Pumps	WSHP Enfinity, Console, Vertical, Horizontal	Plymouth, MN	\$550	2 full days	March 15 - 16 September 19 - 20

Technical Service Training

Course Location

Daikin Applied
207 Laurel Hill Rd
Verona, VA 24482

Course Fee

\$1,750

Course Length

4.5 days

CEU's Offered - 3.0

Yes No

Testing Required

Yes No

2017 Course Schedule

Mar 20 - 24
Aug 14 - 18

Registration Deadline

Mar 10
Aug 4

The training fee is 10% higher for registrations received after the deadline.

Daikin Learning Institute to Provide

Instruction Materials
Coffee Breaks
Lunch
Group Dinner on first night

Scroll Chiller Maintenance, Operation & Service Course

The Commercial Scroll Compressor Chiller Maintenance, Operation and Service Course is structured to provide basic classroom instruction, demonstrations, and "hands-on" exercises designed to familiarize the student with the AGZ and WGZ product features, installation requirements, and service procedures for Daikin commercial Recip & Scroll compressor products. The standard program for this seminar is 4 1/2 days of intensive training.

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Define and analyze AGZ & WGZ unit components and chiller cycle review
- Analyze chilled-water systems
- Identify different types of chillers and their manufacturing processes during a plant tour and product review
- Interpret wiring diagrams, legends, symbols and notes
- Evaluate split systems and field piping
- Troubleshoot motor protection for semi-hermetic & scroll compressors
- Operate and program MicroTech® chiller controllers and capacity control systems
- Describe operation and design of Scroll compressors
- Perform general maintenance & service
- Analyze operational data using log sheets and fault history
- Operate MicroTech® controls using hands-on lab sessions
- Describe refrigerant safety practices

Upon completion of this training course, students will be provided access to the Daikin Applied Technical Response Center for technical assistance on Daikin Scroll products.



Technical Service Training

Centrifugal Chiller Maintenance & Operation

This brochure lists the dates for the continuation of the highly successful Centrifugal Chiller Maintenance and Operation training program. This training course is designed to teach the maintenance technician and building engineer how to maintain, operate, troubleshoot, and analyze performance of standard, non-magnetic Daikin Centrifugal chillers.

To maximize the benefit of the course, the student should have a basic understanding of refrigeration and air-conditioning systems.

The standard program for centrifugal chiller maintenance and operation is three and one-half days of intensive training.

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Define and analyze the basic cycle of water-cooled chillers
- Identify Centrifugal compressor components and describe operation
- Identify different types of chillers and their manufacturing processes during a plant tour and product review
- Troubleshoot compressor lubrication circuit
- Troubleshoot and adjust inlet guide vane control system
- Describe MicroTech 200 control system components and function and interpret wiring diagrams, legends, symbols and notes
- Describe MicroTech II control system components and function and interpret wiring diagrams, legends, symbols and notes
- Analyze flooded evaporator with electronic expansion valve control
- Operate MicroTech® controls during hands-on lab sessions
- Identify components and describe function of Wye-Delta and Solid-State compressor starters
- Identify components and describe function of compressor VFD starters
- Optimize performance with compressor VFD controls
- Interpret and analyze operational data using MT II trends and log sheets
- Perform Centrifugal chiller maintenance

Upon completion of this training course, students will be provided access to the Daikin Applied Technical Response Center for technical assistance on Daikin Centrifugal products.



Course Location

Daikin Applied
207 Laurel Hill Rd
Verona, VA 24482

Course Fee

\$1,600

Course Length

3.5 days

CEU's Offered - 2.5

Yes No

Testing Required

Yes No

2017 Course Schedule

Aug 28 - 31

Registration Deadline

Aug 11

The training fee is 10% higher for registrations received after the deadline.

Daikin Learning Institute to Provide

Instruction Materials
Coffee Breaks
Lunch
Group Dinner on first night

Technical Service Training

Course Location

Daikin Applied
207 Laurel Hill Rd
Verona, VA 24482

Course Fee

\$1,600 - week 1 (Service)

\$3,200 - week 2 (Repair)

Course Length

4.5 days (each week)

CEU's Offered - 3.0

Yes No

Testing Required

Yes No

2017 Course Schedule

May 1 - 5

Dec 4 - 8

Registration Deadline

Apr 14

Nov 17

The training fee is 10% higher for registrations received after the deadline.

Daikin Learning Institute to Provide

Instruction Materials

Coffee Breaks

Lunch

Group Dinner on first night

Centrifugal Chiller Service Course

This four and one-half day course is designed to teach the service technician how to troubleshoot and service the Daikin Centrifugal chiller. This course is the required prerequisite for the Centrifugal Chiller Repair Course and is scheduled in the preceding week to accommodate those students who will attend both courses. Students may attend both weeks of the Service & Repair Course. The technician must have attended the service course prior to attending the repair course and may attend the repair course within a year.

Who May Attend:

The student should have a minimum of 5 years experience with Centrifugal chillers to maximize the benefit of this course. A mechanical contractor doing installation, maintenance and repairs of centrifugal chillers is eligible to send qualified technicians to this course. The technician should have a good working knowledge of the refrigerant cycle, power and control circuitry, and be skilled in the use of standard service tools and electrical meters.

Learning Outcomes:

Upon successful completion of the week 1 course, students will be able:

- Define and analyze the basic cycle of water-cooled chillers
- Identify Centrifugal compressor components and describe operation
- Identify different types of chillers and their manufacturing processes during a plant tour and product review
- Troubleshoot compressor lubrication circuit
- Troubleshoot and adjust inlet guide vane control system
- Describe MicroTech® 200 control system components and function and interpret wiring diagrams, legends, symbols and notes
- Describe MicroTech® II control system components and function and interpret wiring diagrams, legends, symbols and notes
- Analyze flooded evaporator with electronic expansion valve control
- Operate MicroTech® controls during hands-on lab sessions
- Describe MicroTech® system software and operation
- Identify components of compressor starters and solid-state starters
- Optimize performance with compressor VFD controls
- Assess and operate cooling tower operation & maintenance
- Recognize various chilled-water and condenser-water systems
- Interpret and analyze operational data using MT II trends and log sheets
- Perform Centrifugal chiller maintenance

Upon completion of this training course, students will be provided access to the Daikin Applied Technical Response Center for technical assistance on Daikin Centrifugal products.

Technical Service Training

Centrifugal Chiller Service & Compressor Repair (continued)

This four and one-half day course is designed to teach the service technician how to disassemble and reassemble Daikin compressors, how to fit and adjust internal operation parts and to understand normal compressor functions so as to be able to diagnose the cause of deviations from the norm.

Learning Outcomes:

Upon successful completion of the week 2 course, students will be able to:

- Perform Centrifugal compressor repair procedures & processes
- Disassemble and reassemble compressors. The class rotates between the following 4 groups:
 - CE050 and Oil Pumps
 - CE063
 - CE079 and CE100
 - CE087 and CE126
- Troubleshoot & solve oil-loss issues

NOTE: SAFETY SHOES ARE REQUIRED FOR THE COMPRESSOR REPAIR COURSE

Upon completion of this training course, students will be provided access to the Daikin Applied Technical Response Center for technical assistance on Daikin Centrifugal products.



Course Location

Daikin Applied
207 Laurel Hill Rd
Verona, VA 24482

Course Fee

\$1,600 - week 1 (Service)
\$3,200 - week 2 (Repair)

Course Length

4.5 days
4.5 days (each week)

CEU's Offered - 3.0

Yes No

Testing Required

Yes No

2017 Course Schedule

May 8 - 12
Dec 11 - 15

Registration Deadline

Apr 14
Nov 17

The training fee is 10% higher for registrations received after the deadline.

Daikin Learning Institute to Provide

Instruction Materials
Coffee Breaks
Lunch
Group Dinner on first night

Technical Service Training

Course Location

Daikin Applied
207 Laurel Hill Rd
Verona, VA 24482

Course Fee

\$1,750

Course Length

4.5 days

CEU's Offered - 3.0

Yes No

Testing Required

Yes No

2017 Course Schedule

May 15 - 19
Aug 21 - 25

Registration Deadline

Apr 28
Aug 4

The training fee is 10% higher for registrations received after the deadline.

Daikin Learning Institute to Provide

Instruction Materials
Coffee Breaks
Lunch
Group Dinner on first night

Daikin Air & Water-Cooled Screw Chiller Maintenance, Operation & Service Course

The Air & Water-Cooled Screw Chiller Maintenance, Operation and Service Training Course is structured to provide basic classroom instruction, demonstrations, and "hands-on" exercises designed to familiarize the student with the product features, operation, maintenance and service requirements for Daikin Screw chiller products. The standard program for the maintenance, operation and service seminar is four and one-half days of intensive training.

The products covered in this seminar will be the AGS, AWS & AWW air-cooled Screw chillers and the WGS water-cooled chiller Screw chiller.

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Define and analyze the basic cycle of air and water-cooled chillers
- Distinguish the difference between DX and flooded evaporators
- Describe Screw compressor & chiller design & components
- Identify different types of chillers and their manufacturing processes during a plant tour and product review
- Interpret electric schematics
- Identify and operate MicroTech® Microprocessor controls for AGS, & AWS during hands-on lab sessions
- Assess Electronic Expansion Valve (EXV) operation
- Diagnose and maintain Solid-State, Wye Delta & VFD Starters
- Perform general maintenance and service, evacuation, refrigerant & oil-charging procedures
- Analyze operational data using log sheets and fault history
- Secure removal and replacement of compressors and compressor drives
- Distinguish between the different software versions for specific Daikin Applied products
- Identify chilled-water and condenser-water systems

Upon completion of this training course, students will be provided access to the Daikin Applied Technical Response Center for technical assistance on Daikin Screw chiller products.



Technical Service Training

Course Location

Daikin Applied
207 Laurel Hill Rd
Verona, VA 24482

Course Fee

\$1,600

Course Length

3.5 days

CEU's Offered - 2.5

Yes No

Testing Required

Yes No

2017 Course Schedule

Apr 10 - 13
Sep 26 - 29

Registration Deadline

Mar 24
Sep 8

The training fee is 10% higher for registrations received after the deadline.

Daikin Learning Institute to Provide

Instruction Materials
Coffee Breaks
Lunch
Group Dinner on first night

Magnitude® WMC Magnetic Bearing Chiller Maintenance & Operation Course

The Magnitude WMC Magnetic Bearing Chiller Course is designed to teach the maintenance technician and building engineer how to maintain, operate, troubleshoot, and analyze performance of Magnitude WMC magnetic bearing chillers. The standard program for the Magnitude WMC Magnetic Bearing Chiller Course is three and one-half days of intensive training.

Prerequisite:

The student should have a minimum of 5 years experience with Centrifugal chillers to maximize the benefit of this course. The Magnitude chiller uses a centrifugal compressor that has highly technical components.

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Define and analyze the basic refrigeration cycle of water chillers
- Distinguish the three different vintages of WMC chillers
- Identify different types of chillers and their manufacturing processes during a plant tour and product review
- Describe magnetic bearing with VFD compressor design, maintenance and operation
- Identify and describe MicroTech® II for Magnitude WMC software & sequence of operation
- Assess Electronic EXV Valve operation
- Describe the purpose and function of WMC part-load-balance valves
- Assess and operate cooling tower controls with Magnitude WMC Chillers
- Identify and describe various chilled and condenser water system designs
- Analyze operational data using trends and log sheets
- Operate MicroTech® II controls using hands-on lab sessions
- Perform WMC chiller maintenance

Upon completion of this training course, students will be provided access to the Daikin Applied Technical Response Center for technical assistance on Daikin Magnitude® WMC Centrifugal products.



Technical Service Training

Magnitude® WMC Magnetic Bearing Chiller Service & Repair Course

The Magnitude® WMC Magnetic Bearing Chiller Service & Repair course is designed to teach the maintenance and service technician how to maintain, operate, troubleshoot, and repair Daikin Magnitude WMC Magnetic Bearing Chillers. The standard program for the Magnitude WMC Magnetic Bearing Chiller Course is four and one-half days of intensive training.

Prerequisite:

The student should have a minimum of 5 years experience with Centrifugal chillers to maximize the benefit of this course. The Magnitude chiller uses a centrifugal compressor that has highly technical components.

Learning Outcomes:

Upon successful completion this course, students will be able to:

- Define and analyze the basic refrigeration cycle of water chillers
- Distinguish the three different vintages of WMC chillers
- Describe magnetic bearing with VFD compressor design and operation
- Identify different types of chillers and their manufacturing processes during a plant tour and product review
- Identify and describe the hardware & software of MicroTech® II for the WMC control system
- Operate compressor monitor software interface (computers recommended with Windows XP or later)
- Optimize Electronic Expansion Valve operation (EXV)
- Describe the purpose and function of WMC part-load-balance valves
- Analyze operational data using MT II trends and log sheets
- Perform compressor repair & diagnostics
- Operate MicroTech® II controls using hands-on lab sessions
- Utilize compressor test harness (provided) for safe testing
- Perform WMC chiller maintenance
- Upon completion, student may access the compressor support website

Upon completion of this training course, students will be provided access to the Daikin Applied Technical Response Center for technical assistance on Magnitude® WMC Centrifugal products.

Course Location

Daikin Applied
207 Laurel Hill Rd
Verona, VA 24482

Course Fee

\$2,600

Course Length

4.5 days

CEU's Offered - 3.0

Yes No

Testing Required

Yes No

2017 Course Schedule

Jan 30 - Feb 3
Feb 27 - Mar 3
Sep 11 - 15
Nov 13 - 16

Registration Deadline

Jan 20
Feb 17
Sep 1
Nov 3

The training fee is 10% higher for registrations received after the deadline.

Daikin Learning Institute to Provide

Instruction Materials
Coffee Breaks
Lunch
Group Dinner on first night

Technical Service Training

Course Location

Daikin Applied
207 Laurel Hill Rd
Verona, VA 24482

Course Fee

\$1,600

Course Length

3 full days

CEU's Offered - 2.3

Yes No

Testing Required

Yes No

2017 Course Schedule

Mar 14 - 16
(3 full days)

Registration Deadline

Mar 3

The training fee is 10% higher for registrations received after the deadline.

Daikin Learning Institute to Provide

Instruction Materials
Coffee Breaks
Lunch
Group Dinner on first night

Magnitude® WME Magnetic Bearing Chiller Maintenance & Operation Course

The Magnitude® WME Magnetic Bearing Chiller Course is designed to teach the maintenance and service technician how to maintain and operate the Magnitude WME magnetic bearing chillers. The standard program for the Magnitude WME Magnetic Bearing Chiller Maintenance & Operation is three days of intensive training.

Prerequisite:

The student should have a minimum of 5 years experience with Centrifugal chillers to maximize the benefit of this course. The Magnitude® WME magnetic bearing chiller uses a centrifugal compressor that has highly technical components.

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Define and analyze the basic refrigeration cycle of water chillers
- Describe magnetic bearing centrifugal chiller & compressor design & operation
- Identify different types of chillers and their manufacturing processes during a plant tour and product review
- Identify MicroTech E® control system components
- Navigate MicroTech E® for Magnitude WME software
- Describe Electronic Expansion Valve operation (EXV)
- Describe the purpose and function of WME REV-part-load-balance valves
- Describe variable speed drive components and operation
- Optimize operation of cooling tower controls with Magnitude WME chillers
- Use Trend analysis software
- Perform general maintenance procedures

Upon completion of this training course, students will be provided access to the Daikin Applied Technical Response Center for technical assistance on Daikin Magnitude® WME Centrifugal products.



Technical Service Training

Magnitude® WME Magnetic Bearing Centrifugal Chiller Service & Repair Course

The Magnitude® WME Magnetic Bearing Centrifugal Chiller Service and Repair Course is designed to teach the maintenance and service technician how to maintain, operate, troubleshoot, and repair the Magnitude WME magnetic bearing chillers. The standard program for the Magnitude WME Service and Repair Course is four and one-half days of intensive training.

Prerequisite:

The student should have a minimum of 5 years experience with Centrifugal chillers to maximize the benefit of this course. The Magnitude chiller uses a centrifugal compressor that has highly technical components.

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Define and analyze the basic refrigeration cycle of water chillers
- Describe magnetic bearing centrifugal compressor design & operation
- Identify different types of chillers and their manufacturing processes during a plant tour and product review
- Identify MicroTech® E control system components
- Navigate MicroTech® E for Magnitude WME software & settings
- Optimize Expansion Valve Operation (EXV)
- Describe Variable speed drive components and operation
- Assess and operate cooling tower controls with Magnitude WME Chillers
- Analyze MicroTech® E Trends information
- Evaluate system performance with condenser relief
- Diagnose and repair WME compressors
- Disassemble and reassemble WME VFD components in a hands-on lab
- Use Daikin Magnetic Bearing Tool software (computers recommended with Windows XP or later)
- Load software into unit/compressor controllers and VFD controller
- Perform general maintenance procedures

Upon completion of this training course, students will be provided access to the Daikin Applied Technical Response Center for technical assistance on Magnitude® WME Centrifugal products.

Course Location

Daikin Applied
207 Laurel Hill Rd
Verona, VA 24482

Course Fee

\$2,600

Course Length

4.5 days

CEU's Offered - 3.0

Yes No

Testing Required

Yes No

2017 Course Schedule

Apr 24 - 28
Nov 27 - Dec 1

Registration Deadline

Apr 7
Nov 11

The training fee is 10% higher for registrations received after the deadline.

Daikin Learning Institute to Provide

Instruction Materials
Coffee Breaks
Lunch
Group Dinner on first night

Technical Service Training

Course Locations

See schedule, page 21

Course Fee

\$550

Course Length

2.0 days

CEU's Offered - 1.3

Yes No

Testing Required

Yes No

2017 Course Schedule

See schedule, page 21

Registration Deadline

See schedule, page 21

The training fee is 10% higher for registrations received after the deadline.

Daikin Learning Institute to Provide

Instruction Materials

Coffee Breaks

Lunch

MicroTech® III Controls Course for Applied Air Products

The MicroTech® III Controls Course is structured to provide classroom instruction, demonstrations and exercises designed to familiarize the student with components, features, programming, set-up and service of Daikin MicroTech® III controllers. Includes hands-on training with MT III simulators.

To get the most from the course, the student should have an understanding of the refrigeration cycle, basic electronics and simple control circuits.

The program for MicroTech® III Controls training is two full days of intensive training.

MicroTech® III for Controls Course is the required prerequisite prior to attending the following courses:

Rooftop Service Course

Rebel® Rooftop Service Course

Self-Contained Service Course

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Identify MicroTech® III (MT III) controller and components and describe the purpose/function of each
- Navigate & modify common settings and parameters in MicroTech® III controller, and operate MT III per the Daikin Operations Manual
- Describe programming sequences of operation in all modes and states
- Adjust MT III settings, parameters and unit configuration to meet job requirements
- Install MT III software updates and optional accessories
- Utilize MT III controller as a diagnostics and troubleshooting tool
- Interpret MT III related wiring diagrams, legends, symbols, and notes

Technical Service Training

MicroTech® III Controls, Rooftop, Rebel & Self-Contained Service Course Schedule

Course Title	Tuition	Training Center	Course Length	Register by	2017 Dates
MicroTech® III Service - Applied Air <i>Prerequisite for Rooftop, Rebel & Self-Contained Courses</i> Training Locations: Daikin AC University - Irvine, CA Daikin Applied - Plymouth, MN Daikin Applied - Marietta, GA Daikin Applied - Davie, FL	\$550	Irvine, CA Plymouth, MN Plymouth, MN Plymouth, MN Marietta, GA Plymouth, MN Marietta, GA Plymouth, MN Plymouth, MN Irvine, CA Davie, FL	2 full days	Feb 24 Mar 10 Mar 24 Apr 14 Apr 28 May 19 Aug 4 Sep 1 Sep 29 Oct 20 Nov 3	March 6 - 7 March 20 - 21 April 3 - 4 April 24 - 25 May 8 - 9 June 5 - 6 August 14 - 15 September 11 - 12 October 9 - 10 October 30 - 31 November 13 - 14
Rooftop Service (Maverick® & Roofpack®) MicroTech® III Service (prerequisite)	\$550	Plymouth, MN Marietta, GA Plymouth, MN	2 full days	Mar 24 Apr 28 Sep 29	April 5 - 6 May 10 - 11 October 10 - 11
Rebel® Rooftop Service (DPS) MicroTech® III Service (prerequisite)	\$550	Irvine, CA Plymouth, MN Plymouth, MN Irvine, CA Davie, FL	2 full days	Feb 24 Apr 14 Sep 1 Oct 20 Nov 3	March 8 - 9 April 26 - 27 September 13 - 14 November 1 - 2 November 15 - 16
Self-Contained Service (SWP, SWT) MicroTech® III Service (prerequisite)	\$550	Plymouth, MN Marietta, GA	2 full days	Mar 10 Aug 4	March 22 - 23 August 16 - 17



Technical Service Training

Rooftop Service Course

The Rooftop Service Course is structured to provide classroom instruction, demonstrations and exercises designed to familiarize the student with the product features, installation requirements, operation, maintenance and service procedures for Daikin Applied Rooftops.

To get the most from the course, the student should have an understanding of the refrigeration cycle, basic electronics and simple control circuits. The course will use these basic concepts to develop an understanding of the Daikin Rooftop products.

The program for Rooftop Service training is two full days of intensive training.

Prerequisite: MicroTech® III Controls Course is required prior to attending the Rooftop Service Course (dates & locations below)

Apr 3 - 4 **Daikin Applied, Plymouth, MN**

May 8 - 9 **Daikin Applied, Marietta, GA**

Oct 9 - 10 **Daikin Applied, Plymouth, MN**

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Install and commission Daikin Rooftop units using standard methods
- Identify and distinguish the purpose and function of Rooftop components
- Describe unit sequence of operation in all modes and states
- Navigate and modify adjustment settings and parameters in MicroTech® III (MT III) controller, and operate MT III to meet job specifications
- Utilize electrical meters, wiring diagrams, and MT III controller for unit diagnostics and troubleshooting
- Demonstrate preparation, set-up, and operation for Daikin Rooftop gas, electric and hot-water heat
- Prepare and report accurate commissioning data on Daikin Warranty Registration Form
- Perform proper preventative maintenance per the Daikin Operations Manual



Course Locations

Daikin Applied
Plymouth, MN

Daikin Applied
Marietta, GA

Course Fee

\$550

Course Length

2 full days

CEU's Offered - 1.3

Yes No

Testing Required

Yes No

2017 Course Schedule

Apr 5 - 6 - Plymouth, MN

May 10 - 11 - Marietta, GA

Oct 10 - 11 - Plymouth, MN

Registration Deadline

Mar 24

Apr 28

Sep 29

The training fee is 10% higher for registrations received after the deadline.

Daikin Learning Institute to Provide

Instruction Materials

Coffee Breaks

Lunch

Technical Service Training

Course Location

Daikin Applied
Plymouth, MN

Daikin University
Irvine, CA

Daikin Applied
Davie, FL

Course Fee

\$550

Course Length

2 full days

CEU's Offered - 1.3

Yes No

Testing Required

Yes No

2017 Course Schedule

Mar 8 – 9 - Irvine, CA

Apr 26 - 27 - Plymouth, MN

Sep 13 - 14 - Plymouth, MN

Nov 1 - 2 - Irvine, CA

Nov 15 - 16 - Davie, FL

Registration Deadline

Feb 24

Apr 14

Sep 1

Oct 20

Nov 3

The training fee is 10% higher for registrations received after the deadline.

Daikin Learning Institute to Provide

Instruction Materials

Coffee Breaks

Lunch

Rebel® Rooftop Service Course

The Rebel® Rooftop Service Course is structured to provide classroom instruction, demonstration, and exercises designed to familiarize the student with the product features, installation requirements, and service procedures for the Daikin Rebel® Rooftop units including Rebel Inverter technology.

To get the most from the course, the student should have an understanding of the refrigeration cycle, basic electronics, and simple control circuits. The course will use these basic concepts to develop an understanding of the Daikin Rebel® Rooftop products.

The program for Rebel® Rooftop Service training is two full days of intensive training.

Prerequisite: MicroTech® III Controls Course is required prior to attending the Rebel® Rooftop Service Course (dates & locations below)

Mar 6 - 7	Daikin University, Irvine, CA
Apr 24 - 25	Daikin Applied, Plymouth, MN
Sep 11 -12	Daikin Applied, Plymouth, MN
Oct 30 - 31	Daikin University, Irvine, CA
Nov 13 - 14	Davie, FL

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Install and commission Daikin Rebel Rooftop units using standard methods
- Identify and distinguish the purpose and function of Rebel components
- Describe Rebel Inverter technology and explain unit sequence of operation in all modes and states
- Navigate & modify adjustment settings and parameters in MicroTech® III (MT III) controller and operate MT III to meet job specifications
- Utilize electrical meters, wiring diagrams, and MT III controller for unit diagnostics and troubleshooting
- Demonstrate preparation, set-up and operation for Daikin Rebel gas, electric, and hot-water heat
- Prepare and report accurate commissioning data on Daikin Warranty Registration Form
- Perform proper preventative maintenance per the Daikin Operations Manual



Technical Service Training

Self-Contained Service Course

The Self-Contained Service Course is structured to provide classroom instruction, demonstrations and exercises designed to familiarize the student with the product features, installation requirements and service procedures for Daikin Self-Contained units.

To get the most from the course, the student should have an understanding of the refrigeration cycle, basic electronics and simple control circuits. The course will use these basic concepts to develop an understanding of the Daikin Self-Contained product.

The program for Self-Contained service training is two full days of intensive training.

Prerequisite: MicroTech® III Controls Course is required prior to attending the Self-Contained Service Course (dates & locations below)

Mar 20 - 21 Daikin Applied, Plymouth, MN

Aug 14 - 15 Daikin Applied, Marietta, GA

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Install and commission Daikin Self-Contained (SWP & SWT) units using standard methods
- Identify and distinguish the purpose and function of Self-Contained components
- Describe unit sequence of operation in all modes and states
- Navigate & modify adjustment settings and parameters in MicroTech® III (MT III) controller, and operate MT III to meet job specifications
- Utilize electrical meters, wiring diagrams, and MT III controller for unit diagnostics and troubleshooting
- Demonstrate the preparation, set-up, and operation for Daikin Self-Contained gas, electric, and hot-water heat
- Prepare and report accurate commissioning data on Daikin Warranty Registration form
- Perform proper preventative maintenance per the Daikin operations manual



Course Location

Daikin Applied
Plymouth, MN

Daikin Applied
Marietta, GA

Course Fee

\$550

Course Length

2 full days

CEU's Offered - 1.3

Yes No

Testing Required

Yes No

2017 Course Schedule

Mar 22 - 23 - Plymouth, MN
Aug 16 - 17 - Marietta, GA

Registration Deadline

Mar 10
Aug 4

The training fee is 10% higher for registrations received after the deadline.

Daikin Learning Institute to Provide

Instruction Materials
Coffee Breaks
Lunch

Technical Service Training

Course Location

Daikin Applied
13600 Industrial Park Blvd
Minneapolis, MN 55441

Course Fee

\$550

Course Length

2 days

CEU's Offered - 1.3

Yes No

Testing Required

Yes No

2017 Course Schedule

March 15 - 16
Sep 19 - 20

Registration Deadline

Feb 24
Sep 1

The training fee is 10% higher for registrations received after the deadline.

Daikin Learning Institute to Provide

Instruction Materials
Coffee Breaks
Lunch

Water Source Heat Pump Course

Get all the information you need about Daikin's Water Source Heat Pumps, MicroTech® III and Mark IV controls. This course is two days of intensive training. This course is designed to teach the experienced service technician to commission, maintain, operate and troubleshoot Water Source Heat Pumps, MicroTech® III, and Mark IV controls.

This program is structured to provide basic classroom instruction to familiarize the student with the operation of the new Water Source Heat Pumps and the fundamentals of MicroTech III® controls. It is assumed that the student understands basic Water Source Heat Pump operation and HVAC systems.

Classroom sessions include hands-on exercises using controls simulators and actual operational units.

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Define and analyze basic unit design
- Identify SmartSource WSHP
- Identify Enfinity WSHP
- Identify Console WSHP
- Identify Vertical Stack WSHP
- Perform unit Installation
- Identify Horizontal WSHP
- Identify Vertical WSHP
- Identify Console WSHP
- Identify Vertical Stack WSHP
- Check Test and Start
- Navigate MicroTech® III
- Navigate Mark IV
- Assess ECM Motor Operation and Speed Settings Options
- Describe unit demo



Technical Service Training

Off-Campus Training in Your Area

Looking for Convenient, Professional Training on Your Daikin Commercial HVAC Equipment?

We Can Come to Your Location!

For your convenience, the Daikin Learning Institute offers commercial HVAC equipment operation and maintenance training programs at your location. Our most popular training courses are available in your facility, at flexible schedules based on instructor availability. Class fees are established based on the number of course attendees and travel required. Note that a minimum number of students is required.

- Centrifugal Maintenance & Operation Course
- Screw Chiller Maintenance & Operation Course
- Commercial Scroll Compressor Chiller Unit Maintenance & Operation Course
- Magnitude® WMC Magnetic Bearing Model Chiller Maintenance & Operation Course
- Magnitude® WME Magnetic Bearing Chiller Maintenance & Operation Course
- Rooftop Packaged Unit, Rebel and Self-Contained Unit Operation & Maintenance Courses
- MicroTech® II and MicroTech III Controls for Applied Air Systems

Contact the Daikin Learning Institute to schedule off-campus training at your location.

Daikin Applied
Daikin Learning Institute
P.O. Box 2510
Staunton, VA 24402-2510
Phone: 540.248.9646
Fax: 763.509.7663
email: service.training@daikinapplied.com

Visit the DaikinApplied website, www.DaikinApplied.com for current schedules.

Technical Service Training

Off Campus Training Terms & Conditions

Daikin Learning Institute will perform training at a customer's facility under the following terms and conditions.

Recording of Classes

Audio or video recording of Training sessions may be made only with Daikin's prior express written permission. Any permitted recordings are subject to these terms and conditions.

Content Rights

All materials relating to training remain Daikin's property. Copies or distribution of such material may be made only with Daikin's express prior written consent.

Payments

All training sessions will be billed upon order. Payments will be subject to Daikin's standard terms and conditions. If payment is past due at the scheduled start date of the training, the instructor will perform training at Daikin's sole discretion.

Responsibilities

The customer is responsible for facilities, meals and other logistics related to the training unless prior arrangements have been made with Daikin. Daikin assumes no responsibility for these items.

Daikin will provide training and materials for the number of registered participants. There will be an additional charge for additional students, based upon the original price per student.

Scheduling

Training is by appointment only. Availability of instructors is at Daikin's sole discretion.

Content

The purpose of training is to provide customers with information valuable to the operation or maintenance of their equipment. Daikin retains the right to determine appropriate content for the agreed-upon topic.

Warranty and Disclaimer

Training information will be materially similar to that used by Daikin Applied in training its own technicians. In the event it is not, Daikin will provide corrected, updated, or additional information, or, at its option, refund a pro rata portion of the price. THIS IS THE ONLY WARRANTY AND THE CUSTOMER'S ONLY REMEDY WITH REGARD TO TRAINING. THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED. WITHOUT LIMITING THE FOREGOING, THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. UNDER NO CIRCUMSTANCES WILL DAIKIN BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. Because of the variation among participants' experience, prior training, and learning abilities, Daikin does not warrant that any particular student will attain any particular level of expertise or competence, and does not warrant any particular results of the training. The customer must satisfy itself as to the applicability and sufficiency of the training for its facility and resources. The customer will defend, indemnify, and hold Daikin harmless against any claim arising out of or related to training, and will waive subrogation of any such claim. Daikin may modify these terms and conditions at any time, in its sole discretion, and such modifications shall be effective immediately upon posting.

Technical Service Training

Daikin Learning Institute Service Training Registration Form

Course Title: _____

Dates: _____

Course Location: _____

Company Name: _____

Mailing Address: _____

City, State, Zip: _____

Student Name: _____ Email: _____

Phone Number: _____ Fax Number: _____

Submitted By: _____ Email: _____

Phone Number: _____ Fax Number: _____

Please Specify Payment Option Below And Complete All Information.

Company Name: _____

Billing Address: _____

Contact: _____

City, State, Zip: _____

Phone Number: _____ Fax Number: _____

PURCHASE ORDER: (Purchase Order MUST accompany registration) CHECK (Due prior to start of class)

CREDIT CARD: Master Card VISA American Express Discover (Novus)

Card Number: _____ Expiration Date: ____ / ____ / ____

Cardholder Printed Name: _____

Payment is due in advance or student(s) will not be admitted.

Mail copy of application form and check to:
Daikin Applied/ Attn: Daikin Learning Institute
P.O. Box 2510
Staunton, VA 24402-2510

Fax application, copy of purchase order/check to:
Linda Custer at 763-509-7663
E-mail to:
linda.custer@daikinapplied.com

Daikin Learning Institute reserves the right to make changes or alternations to the course content or schedule, and is not responsible for fees associated with changing dates or cancellation of classes. In the unlikely event of a schedule change or cancellation, our best effort will be made to notify all registrants in a timely manner.

Notes:

