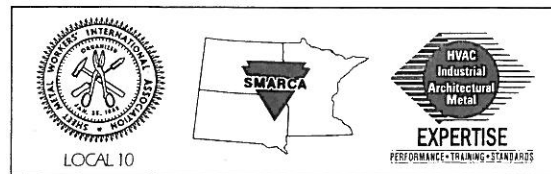
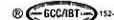




# Metro Area Sheet Metal Journeyman & Apprentice Training Trust Fund



3554 White Bear Ave. N. · White Bear Lake, MN 55110  
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## JourneyLevel Classes 2015-2016

All classes in this brochure are set through the Training Center. Members are encouraged to sign up for classes at any time. Class schedule and other information will be posted on our blog: <http://j-levelclassesnow.blogspot.com/> as it becomes available. **Registration is on a first come, first served basis until the class is full.** The International Training Institute's Scholarship Loan Agreement must be signed on the first session of class. **You will receive a completion certificate**

**if you successfully complete the class. We have hundreds of members signing up for these classes, so... if you sign up, please show up!** If you want to take a class elsewhere (not listed in this brochure), please check with the Training Center **before** taking the class to find out if it is one for which the Committee will refund tuition. You will then be responsible for providing proof of completion and tuition paid.

### ◆ Architectural Sheet Metal

This 32-hour class is designed to teach you some basics of fabricating and installing Architectural Sheet Metal. The primary focus of this class will be on installation skills with plenty of

hands on applications. Getting a completion certificate for this class will certainly help make you more employable with roofing and architectural firms. Don't limit your options to ductwork!

Class Code	Dates	Time
ARCH-1	TBD	TBD

Day	Location
TBD	Local #10 Metro Area Training Center

### ◆ Architectural Soldering

In this 12-hour class you will gain some basic skills in soldering galvanized iron, stainless steel and copper.

Lab time will be spent soldering in horizontal, angled and vertical positions. Materials and equipment used will reflect both shop and field conditions.

Class Code	Dates	Time
SODR-1	TBD	TBD

Day	Location
TBD	Local #10 Metro Area Training Center

### ◆ AutoCAD, Introduction to

AutoCAD is a Computer Aided Design program used to create drawings. This 48-hour class is designed to teach you the basics of creating and working with CAD drawings. You will learn how to draw on the computer and plot out the finished drawing

on a plotter. This is an excellent preparatory class for someone interested in doing detailing and planning work. Good detailers are in demand!

Class Code	Dates	Time
CAD-1	TBD	TBD

Day	Location
TBD	Local #10 Metro Area Training Center

### ◆ Autodesk BIM 360

Building Information Modeling (BIM) is changing how buildings are planned, designed, built and managed. The BIM process involves the generation and management of digital representations of physical and functional characteristics of

places. This 8-hour class will cover the use of Autodesk's BIM 360 Field/Glue software, introducing you to the user interface and navigating through the functionality of this software.

Class Code	Dates	Time
BIM-1	TBD	TBD

Day	Location
TBD	Local #10 Metro Area Training Center

## ◆ Autodesk Revit

Revit building design software is specifically built for Building Information Modeling (BIM). This product includes features for architectural design, mechanical/ electrical/piping (MEP), structural engineering, and construction. This 32-hour class will

**Class Code**  
REV-1

**Dates**  
TBD

**Time**  
TBD

**Day**  
TBD

**Location**  
Local #10 Metro Area Training Center

## ◆ Benchmark Certification – Draft

In this 40-hour class the student will learn how to use the ITI's Benchmark software to create 3D models in AutoCAD. These models are saved to a company database creating a Building

**Class Code**  
DRFT-1

**Dates**  
TBD

**Time**  
TBD

**Day**  
TBD

**Location**  
Local #10 Metro Area Training Center

## ◆ Benchmark Certification – Estimation

In this 48-hour class the student will learn how to use the ITI's Benchmark software to create estimation standards used by his/her company as well as to create new projects and drawings

**Class Code**  
ESTI-1

**Dates**  
TBD

**Time**  
TBD

**Day**  
TBD

**Location**  
Local #10 Metro Area Training Center

## ◆ Benchmark Certification – Fabrication

In this 32-hour class the student will learn how to use the ITI's Benchmark software to set up his/her company's plasma table, manage how patterns are nested on sheets, manage and print

**Class Code**  
FAB-1

**Dates**  
TBD

**Time**  
TBD

**Day**  
TBD

**Location**  
Local #10 Metro Area Training Center

## ◆ Benchmark Certification – Field Install/Total Station

In this 32-hour class the student will learn how to use the ITI's Benchmark software and the Sokkia Total Station to manage project schedules, update BIM models, track the status of

**Class Code**  
FITS-1

**Dates**  
TBD

**Time**  
TBD

**Day**  
TBD

**Location**  
Local #10 Metro Area Training Center

## ◆ CAD, Introduction to MAP 3D CAD/CAM Software

MAP CAD is a Computer Aided Design program used to create HVAC shop drawings. This 40-hour class is designed to teach you the basics of creating and working with MAP Duct and

**Class Code**  
MAP-1

**Dates**  
TBD

**Time**  
TBD

**Day**  
TBD

**Location**  
Local #10 Metro Area Training Center

## ◆ Commissioning & Retro-Commissioning

Building Commissioning provides documented confirmation that building systems are functioning according to criteria outlined in the project documents. Retro-Commissioning (commissioning of existing buildings) is a systematic process for investigating, analyzing, and optimizing the performance of building systems by improving their operation and maintenance to ensure their continued performance over time. You'll

**Class Code**  
COMM-1

**Dates**  
TBD

**Time**  
TBD

**Day**  
TBD

**Location**  
Local #10 Metro Area Training Center

introduce the experienced Detailer to the use of this software. You will create a model, add components to it, set up levels and grids, annotate and detail sheets, and create HVAC, hydronics, plumbing, lighting and power systems.

Information Modeling (BIM) model. The AutoCAD drawing is downloaded and used for fabrication of the sheet metal parts. Proficiency in AutoCAD is a must for this class.

for takeoffs. Substantial class time will also be spent on creating estimation templates and creating estimates from takeoffs. Proficiency in AutoCAD is a must for this class.

labels for fabrication, process downloads from the detailer and update batch status in the Building Information Model. Proficiency in AutoCAD is a must for this class.

materials and parts, create and manage Total Station surveys and place hangers, inserts and hole openings using the TopCon Sokkia Total Station

MAP Mech CAD drawings. You will learn how to draw on the computer and plot out the finished drawing on a plotter. This class is limited to six students.

gain extensive knowledge regarding the commissioning process in this class. Commissioning professionals will be needed in increasing numbers in coming years, this is a fast growing area of the industry! Only 2% of all construction projects are new construction. This 48-hour class is limited to members with substantial TAB experience and/or training.

## ◆ Computers, Basics and Use of the Internet

This 24-hour class is designed to introduce you to basic computer use starting from turning on the power to surfing the Internet. This class is ideal for members who haven't yet gotten around to learning how to use computers. We'll help take a little of the mystery away regarding emailing, working with

spreadsheets, typing Word documents, etc. This can become a great new tool or hobby, especially for retirees with lots of leisure time and loved ones to correspond with. This class is open to all members and your significant others. Let's make it a family thing!

Class Code	Dates	Time	Day	Location
COMP-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Controls, Direct Digital

This 20-hour class is a basic overview of Direct Digital Controls (DDC). This class is designed for Service, TAB, and Power Limited Technician oriented individuals. The Fundamentals of

Controls class or equivalent experience is a prerequisite for this class.

Class Code	Dates	Time	Day	Location
DDC-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Controls, Fundamentals of

This 24-hour class is a basic overview of controls designed for Service, TAB, and Power Limited Tech oriented individuals. Course content will include mechanical equipment, components and variables, terminology, control types,

sequences of operation, specifications, sensors, valves and dampers, and safety. This class or equivalent experience will be a prerequisite for future classes we will be offering on pneumatic, electro-mechanical, and electronic controls.

Class Code	Dates	Time	Day	Location
CTRL-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Design/Build HVAC Systems

So much of the work we install these days has been designed by the knowledgeable people employed by the shops we work for. This 32-hour class will provide you with the core knowledge necessary to competently design some basic HVAC systems for

various types of building construction and occupancies. Upon completion of this class, you will have run heat load calculations, selected equipment, and designed at least 2 or 3 complete systems.

Class Code	Dates	Time	Day	Location
DB-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Duct Construction Standards/HVAC-SMACNA

This 12-hour class will focus on the use of the SMACNA HVAC Duct Construction Standards Manual. Specifically, students will review sample plans and specifications, learn how to determine pressure classifications for duct systems, and reference the

rectangular duct construction schedules to determine adequate gauges, transverse joints, and intermediate reinforcement requirements. Becoming comfortable with the use of these schedules is the primary intent of this class.

Class Code	Dates	Time	Day	Location
DCS-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Duct Leakage Testing

This 12-hour class is intended primarily for foremen, supervisors, TAB techs, and project manager types. Class time will be spent on setting up the test apparatus and testing two different types of duct systems. Time will be split between a low/medium

pressure supply duct system and a welded grease duct system. Knowledge gained in this class will prove very useful regarding proper installation and sealing requirements of these duct systems.

Class Code	Dates	Time	Day	Location
DLT-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Duct Sizing Calculator Use

This 8-hour class will focus on the use of the SMWIA/Trane Ductulator, the industry standard in circular slide rule airflow calculations. The Ductulator aids in laying out air handling duct systems and determining proper duct sizes. We'll be using

the ITI version of the Ductulator and some class time will be spent on aspect ratio, friction loss, duct sizing, and some of the formulas and other useful design information printed on the back side of the Ductulator.

Class Code	Dates	Time	Day	Location
DSC-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Energy Star Program

Green Starts With Energy! Energy Star is a joint program of the U.S. Environmental Protection Agency (EPA) and the Dept. of Energy. This program delivers the technical information and tools that organizations need to choose energy efficient solutions and management practices. Most of the time in this

8-hour class will be spent on the [www.energystar.gov](http://www.energystar.gov) website, becoming familiar with and navigating the various areas of this busy site, as well as using some of the interactive energy loss/savings calculators on it.

Class Code	Dates	Time	Day	Location
ENRG-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Estimating (HVAC)

This 32-hour class is designed as an introduction to estimating HVAC type work. Course content will include instruction on preparing estimates, job "takeoff" accuracy, estimating labor and

material costs, productivity variables, labor factors for different building types, overhead and markup, etc.

Class Code	Dates	Time	Day	Location
EST-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Field Measuring

In this 24-hour class you will learn how to measure sheet metal items on the job and provide proper instructions to the shop so that the items fit and can be correctly installed. Course content

includes accuracy in taking field measurements, clearances, math shortcuts for measuring, sketching fittings and shop drawings, etc.

Class Code	Dates	Time	Day	Location
FM-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Fire Life Safety Level One

Building Codes require the design of an integrated system of building features to protect occupants from fire and smoke. This 16-hour class will ensure that you have the core knowledge necessary to competently install, inspect, and maintain the fire, smoke, ceiling and combination fire/smoke dampers in the HVAC portion of these systems. Successful completion of this

class and the included exam will certify you as a National Energy Management Institute (NEMI) Life Safety Systems Level One Technician. This certification is a prerequisite to the Level Two (testing, balancing and smoke management) and the Supervisor Level certification.

Class Code	Dates	Time	Day	Location
FLS-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Fire Life Safety Level Two

Successful completion of this 28-hour class and the included exam will certify you as a National Energy Management Institute (NEMI) Fire Life Safety Systems Level Two Technician. This class is intended for TAB professionals who are proficient in controls,

smoke management systems and stairway pressurization. In order to qualify to sit for the exam, you must have the FLS Level One Technician certification and also be TABB Certified.

Class Code	Dates	Time	Day	Location
FLS-2	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Fittings, Good Choices When Measuring

This 8-hour class is designed to better educate anyone who is responsible for measuring duct runs, connections to furnaces or air handling units, and/or detailing same. Course content will include using the Fitting Loss Coefficient Tables in the SMACNA

Duct Design manual as well as other reference materials regarding system effect on fans due to poor inlet and outlet connections, and the damage double elbows, "beam dodgers", radical transitions, etc., can do to a duct system.

Class Code	Dates	Time	Day	Location
FIT-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Foreman Training

This 16-hour class is designed to introduce you to some of the basic skills required to be a good foreman. Course content includes responsibilities of the foreman, human relations,

problem solving, communication, planning and organizing, leadership, personnel actions, safety, legal aspects, etc.

Class Code	Dates	Time	Day	Location
FORE-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Forklift Operator Certification

This 4-hour class will contain some classroom training and some time operating the forklift. Upon successful completion

of this class, you will receive a certification that is good for three years.

Class Code	Dates	Time	Day	Location
FORK-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Fume Hood Performance Testing

This 12-hour class provides knowledge essential to understanding the effective operation of laboratory fume hoods and the means for measuring their performance according to ANSI/

ASHRAE Standard 110-1995. Members who wish to register and sit for the NEMI Fume Hood Performance Testing Technician exam will be given assistance in that process as well.

Class Code	Dates	Time	Day	Location
FUME-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Furnace System Installation

Our commercial apprentice curriculum now contains training on residential HVAC design and installation so that our members

can feel confident in doing their own work when they build that dream home. Take this 24-hour class and get the same training!

Class Code	Dates	Time	Day	Location
FURN-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Gas Burner Code Review

This is a basic course that will help you to better understand the gas safety controls of a residential furnace and their operation.

This 16-hour class will also cover proper gas piping procedures,

pipe sizing, clocking, meter and gas troubleshooting, and combustion analysis (Orsat tests).

Class Code	Dates	Time	Day	Location
GAS-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Gas Piping (Flexible) Installation

This 12-hour class will include the Gastite®, TracPipe®, and Wardflex® training programs as put on by the manufacturer's representatives. These three brands of corrugated stainless steel tubing (CSST) are the most prevalent in use in this part of the country for flexible fuel gas piping systems. This class will

include hands on installation of tubing with black pipe fittings on a furnace and a pressure test. Please note that installers of gas piping must meet all state and local regulations and code requirements.

Class Code	Dates	Time	Day	Location
GPF-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Gas Venting

This 8-hour class covers the fundamentals of gas venting. The curriculum consists of the proper use of vent tables and the rules

to safely vent forced air furnaces, water heaters, central boilers and unit heaters for residential and commercial applications.

Class Code	Dates	Time	Day	Location
GV-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Geothermal, Fundamentals & Operations

This 8-hour class will focus on choosing the proper geothermal systems for a given type project and learning the various options for installations. Topics covered will include design, tools

needed for the project, and various types of equipment choices available. Three different types of closed loop applications will also be covered.

Class Code	Dates	Time	Day	Location
GEO-1	TBD	TBD	TBD	Local #10 Metro Area Training Center



## ◆ HRV/ERV Install & Balance

This 12-hour class is designed to better educate the installer of Heat Recovery and Energy Recovery Ventilation units (HRV's & ERV's). You will be instructed how to properly install, startup,

Class Code	Dates	Time
HERV-1	TBD	TBD

test and balance these residential style units. Training will also include some troubleshooting. You will receive a certificate and wallet sized card upon successful completion of this class.

Day	Location
TBD	Local #10 Metro Area Training Center

## ◆ HVAC Retrofit Wiring

Passage of the "Limited Energy" bill in the State House and Senate allows our qualified members to do certain electrical

Class Code	Dates	Time
WIRE-1	TBD	TBD

work when replacing HVAC equipment. This 16-hour class is designed to prepare you to do this work safely.

Day	Location
TBD	Local #10 Metro Area Training Center

## ◆ Hydronic Heating Systems Code Review

This 12-hour class is designed to provide you with a more in depth knowledge of this portion of the International Mechanical Code. Some class time will be spent on areas of the code that

Class Code	Dates	Time
HHS-1	TBD	TBD

pertain to in-floor radiant heating and geothermal heat pump systems.

Day	Location
TBD	Local #10 Metro Area Training Center

## ◆ Isometric Sketching

This 12-hour class was designed with lead persons in mind. Sometimes an isometric sketch is the most efficient way to convey critical information to the shop for fabrication of a

Class Code	Dates	Time
ISO-1	TBD	TBD

special project. Once the basics are covered in this class, time will be spent creating sketches and using templates to aid in sketching efficiency.

Day	Location
TBD	Local #10 Metro Area Training Center

## ◆ Koolduct Fabrication and Installation

This 16-hour class will get you trained in the fabrication and installation of ductwork and fittings made out of this phenolic

Class Code	Dates	Time
KOOL-1	TBD	TBD

board product. Successful completion of this class will earn you the designation of: Certified Fabricator/Installer.

Day	Location
TBD	Local #10 Metro Area Training Center

## ◆ Lagging

Lagging is the process of covering and protecting insulation with sheet metal, plastic, and other materials. This 40-hour class will provide you with some much needed basic skills in this aspect of our trade. There is a tremendous amount of power plant,

Class Code	Dates	Time
LAG-1	TBD	TBD

refinery, and other industrial type work that is in the works within Local 10 and also nationwide. These types of projects typically require a lot of lagging fabrication and installation.

Day	Location
TBD	Local #10 Metro Area Training Center

## ◆ Lead-Safe EPA Certification Program

**As of April 22, 2010, federal law requires:** "contractors performing renovation, repair and painting projects that disturb lead-based paint in homes, child care facilities, and schools built before 1978 must be certified and must follow specific work practices to prevent lead contamination"

Class Code	Dates	Time
EPA-1	TBD	TBD

and "that they use certified renovators". This 8-hour class was developed by the U.S. Environmental Protection Agency (EPA) and is a required course in order to become a "certified renovator". Follow up refresher training is four hours and will be required once within each five-year recertification cycle.

Day	Location
TBD	Local #10 Metro Area Training Center

## ◆ LEED Professional Accreditation

Leadership in Energy and Environmental Design (LEED), developed and administered by the U.S. Green Building Council, is the most widely recognized and respected third party certification program for "Green" buildings. This 24-hour class is an introduction to some of the specifics of sustainability

Class Code	Dates	Time
LEED-1	TBD	TBD

and building Green, the LEED rating system, and how to start the process to become a LEED Green Associate and on to the Accredited Professional status if desired. Sign up now and get started on the path to become a LEED GA!

Day	Location
TBD	Local #10 Metro Area Training Center

## ◆ Load Calculations & Duct Design

This 16-hour class will focus on the proper method to calculate heat loss for a residential home using a Manual J workbook and spreadsheet. Information from the spreadsheet will be used to calculate the heat loss for each room, and the entire house.

**Class Code**  
LOAD-1

**Dates**  
TBD

**Time**  
TBD

**Day**  
TBD

**Location**  
Local #10 Metro Area Training Center

## ◆ Mechanical Code Class

This 32-hour class is based on the 2015 Minnesota Mechanical and Fuel Gas Code. This class will also help prepare you for the Twin Cities Warm Air & Ventilation Competency Exam. It's also very helpful for foremen and superintendents as well as detailers

**Class Code**  
MC-1

**Dates**  
TBD

**Time**  
TBD

**Day**  
TBD

**Location**  
Local #10 Metro Area Training Center

## ◆ Mechanical Code Update Class

This 8-hour class is designed to inform you on the changes between the old Minnesota Mechanical Code and the 2015

**Class Code**  
MCU-1

**Dates**  
TBD

**Time**  
TBD

**Day**  
TBD

**Location**  
Local #10 Metro Area Training Center

## ◆ Microsoft Excel

Excel is a computer spreadsheet program you can use to organize, analyze, and present data such as a budget, estimate, or report. This 8-hour class is designed to give you an introduction to the basics of creating and working with

**Class Code**  
XL-1

**Dates**  
TBD

**Time**  
TBD

**Day**  
TBD

**Location**  
Local #10 Metro Area Training Center

## ◆ Microsoft Word

Word is a computer word-processing program. In this 8-hour introductory class you will create and edit professional looking

**Class Code**  
WORD-1

**Dates**  
TBD

**Time**  
TBD

**Day**  
TBD

**Location**  
Local #10 Metro Area Training Center

## ◆ MSHA Certification

This is a 24-hour Mine Safety & Health Administration class. You will receive the MSHA-24 certification card upon successful completion of the class. This MSHA card is required for a lot of project sites up on the Iron Range and elsewhere. Increase your options for work and get this card! Please note that most MSHA

**Class Code**  
MSHA-1

**Dates**  
TBD

**Time**  
TBD

**Day**  
TBD

**Location**  
Local #10 Metro Area Training Center

## ◆ MSHA Refresher Training

This is the 8-hour Mine Safety & Health Administration refresher training class referenced in the MSHA Certification class description above. If you have the MSHA-24 card, you need this

**Class Code**  
MSHR-1A  
MSHR-1B

**Dates**  
09/21/15-09/23/15  
04/04/16-04/07/16

**Time**  
4:30pm-8:30pm  
4:30pm-8:30pm

**Day**  
Mon-Wed  
Mon-Thur

**Location**  
Local #10 Metro Area Training Center  
Local #10 Metro Area Training Center

Duct design will incorporate information from the heat loss spreadsheet to design a duct system to distribute the correct amount of air to each room to satisfy the load. **This class qualifies for NATE Continuing Education Hours.**

and estimators. Participants in this class are required to provide their own codebook. For your convenience, codebooks will be available (at our cost) at the Training Center.

Mechanical and Fuel Gas Code recently adopted by the state of Minnesota.

spreadsheets. Learn to build and edit worksheets, format a worksheet, work with charts, and work with formulas and functions.

documents, format text and paragraphs, and create and format tables.

jobsites within Local 10's jurisdiction require eight hours of refresher training within the past year in order for you to qualify to get hired and be on that jobsite. If you are interested, contact the Training Center to get your name on the list for this class.

training annually for realistic hopes to work on MSHA jobsites in Local 10's jurisdiction! We offer this class two times a year, see below for this school year's dates.

## ◆ N.A.T.E. Exam Prep

North American Technician Excellence (NATE) certifications are widely recognized as the industry standard of excellence. If you are installing or servicing residential HVAC systems in particular, or commercially, these NATE patches tell the customer you are the best of the best. This 8-hour class is intended for individuals who are currently working in the Service

or TAB side of our industry, or have some extensive training in the servicing of HVAC systems. NATE certifications generate more work hours for us and more profits for our contractors. The exams will be scheduled for a date after the conclusion of this class.

Class Code	Dates	Time	Day	Location
NATE-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ OSHA 30 Certification

This is a 32-hour safety awareness class. You will receive the OSHA-30 certification card upon successful completion of the class. More and more job specifications are requiring that at least one person per crew on the jobsite carry this certification.

Labor Coordinators are now asking for members with OSHA-30 cards when they call the hall for manpower. Put yourself in a good situation and get this card! If you are interested, contact the Training Center to get your name on the list for this class.

Class Code	Dates	Time	Day	Location
OSHA-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Plasma Table Operation

This 16-hour class is designed to teach you how to run a plasma table. You will learn how to draw a custom part on a computer, load it into the plasma table, and cut it. You will then learn to enter some stock HVAC type fittings and cut and label them.

Some time will be spent learning how to read labels for forming as well so you learn all aspects of the table use, from data entry to forming up.

Class Code	Dates	Time	Day	Location
PT-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Power Limited Technician Upgrade Class

If you hold the Minnesota Power Limited Technician license, you are required to earn 16 hours of continued education for renewal of the license. Don't let your license lapse, it costs more money to renew if you do! This 16-hour class will give

you the needed hours of upgrade training to maintain your license. **There is a registration deadline of a minimum of two weeks prior to the scheduled start date of the class. Register early!**

Class Code	Dates	Time	Day	Location
PLTU-1A	10/05/15-10/26/15	4:30pm-8:30pm	Mon	Local #10 Metro Area Training Center
PLTU-1B	04/04/16-04/25/16	4:30pm-8:30pm	Mon	Local #10 Metro Area Training Center

## ◆ Project Management

This 24-hour class is designed to be an introduction to developing basic project management skills. Becoming a successful project manager takes plenty of on the job experience. Course content includes management and

communications, construction documents, controlling costs, scheduling, productivity, legal considerations, budget estimating, project completion, etc.

Class Code	Dates	Time	Day	Location
PM-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ PRO-10 Certification

This is a 12-hour professional skills training class that goes beyond technical training. A few of the core topics covered are: Professionalism, Safety, Communication, Mutual Respect and Changing Perceptions. You will receive the PRO-10 certification card upon successful completion of this class. Some Metro Area jobsites are now requiring you to have this card in order to work

on that site, just like the requirement for an OSHA-30 card. All Metro Area apprentices currently in school are receiving this training and getting their cards. Don't limit your options for work, we highly recommend you take this class now!

Class Code	Dates	Time	Day	Location
PT-1	TBD	TBD	TBD	Local #10 Metro Area Training Center



## ◆ PVC Welding

This 16-hour class is designed to teach you basic PVC welding, forming, and "fitting up" skills. Some time will be spent learning

how to properly do the various types of fillet, corner, butt, and lap welds as pertains to PVC fabricated ducts and projects.

Class Code	Dates	Time	Day	Location
PVC-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Reading Plans and Specifications

This 24-hour class is designed to enhance your reading plans and specifications skills. The primary focus will be on

interpreting mechanical, structural, and architectural drawings and related specifications.

Class Code	Dates	Time	Day	Location
PLAN-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Reading Plans and Specifications - Structural

This 12-hour class will focus specifically on structural plans and specifications. A variety of building types and plans will be used so as to provide diversity of training. This class is intended

primarily for foremen, supervisors and those of you who have targeted detailing as a career path.

Class Code	Dates	Time	Day	Location
SRUC-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Refrigerant Handling – CFC Certification

This is a 12-hour class with the test for certification on the last night. It is a difficult test and should not be taken without the course instruction first. This is not a "hands on" class, the material covered is all in the classroom. If you pass the test, you will hold the card that is the Environmental Protection Agency's certification to purchase and handle refrigerants as outlined

in Section 608 of the Clean Air Act. The fine for improperly handling refrigerants can be up to \$10,000. We need to order tests for this class so... **there is a registration deadline of a minimum of two weeks prior to the scheduled start date of the class. Register early!**

Class Code	Dates	Time	Day	Location
CFC-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Refrigerant Handling – Hands On

Now that you are EPA certified, the next step is to get some hands on experience. In this 16-hour class, you will install, charge, reclaim, and recover refrigerant in a split system. Component identification and review of the refrigerant cycle is

also covered. You must have the CFC card in order to take this class. **This class qualifies for NATE Continuing Education Hours.**

Class Code	Dates	Time	Day	Location
CFC-2	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Refrigeration Code Review

This is a 12-hour class that is designed to provide you with a more in depth knowledge of the refrigeration portion of the International Mechanical Code. This chapter in the code covers

the design, installation, and construction of refrigeration systems that vaporize and liquefy a fluid during the refrigeration cycle.

Class Code	Dates	Time	Day	Location
REF-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Rigging & Signal Person

OSHA requires that any person involved with the rigging and/or signaling of cranes be a Qualified Rigger or Qualified Signal Person. This four-hour class is designed to augment your existing skills in this area and includes an exam for each

qualification. Passing the exams ensures that you have the skills and knowledge required to be a Qualified Rigger and Qualified Signal Person.

Class Code	Dates	Time	Day	Location
RIG-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Scaffold Competent Person

This four-hour scaffold safety training class follows the regulations set forth in OSHA 29 CFR Part 1926 Subpart L Scaffolds. Topics covered include: competent person

Class Code	Dates	Time
SCAF-1	TBD	TBD

responsibilities, hazard recognition, safe practices, scaffold platform construction, performing inspections, etc. This class is primarily classroom with some hands-on scaffold displays.

Day	Location
TBD	Local #10 Metro Area Training Center

## ◆ Service

This course is a daytime combined version of the SES I, II, and III classes (listed below), with added hours for more hands on work on an even wider variety of equipment. This rolling three-

year course is 192 hours per year and runs on select weekends, commencing as shown below. Some service work experience or schooling is a prerequisite for entry into this course.

Class Code	Dates	Time
SERV-1	starts Sept 25	7:00am-3:30pm

Day	Location
Fri-Sat	Local #10 Metro Area Training Center

## ◆ Service Manager

This is a five-day, 40-hour class that will be taught by an instructor from ITI. This class covers everything from creating a business name to hiring personnel. It is designed to help our members gain needed confidence to start their own

service business or to help start a service department for an existing contractor. Service work happens no matter what the construction economy is doing, and you don't wait 120 days to get your money!

Class Code	Dates	Time
SMGR-1	TBD	7:00am-3:30pm

Day	Location
Weeklong	Local #10 Metro Area Training Center

## ◆ Servicing Environmental Systems I

SES I will focus on the core knowledge required for servicing HVAC systems. We'll cover the basics of refrigeration systems, systems design, pressure/temperature relationships, electricity

fundamentals, and controls. This 88-hour class or the equivalent in experience is a prerequisite for SES-II.

Class Code	Dates	Time
SES I	TBD	TBD

Day	Location
TBD	Local #10 Metro Area Training Center

## ◆ Servicing Environmental Systems II

SES II picks up where SES-I leaves off, going more in depth in all the fundamental areas of HVAC service, such as gas heating, air conditioning, and air distribution. Plenty of time will be spent on wiring diagrams, troubleshooting, and hands on work

in this 88-hour class. North American Technician Excellence (N.A.T.E.) and Industry Competency Exam (I.C.E.) certifications will be attainable at the conclusion of this class.

Class Code	Dates	Time
SES II	TBD	TBD

Day	Location
TBD	Local #10 Metro Area Training Center

## ◆ Servicing Environmental Systems III

SES III is a 40-hour class that will focus exclusively on commercial hands on service. Lab time will be spent on some of the newer components and systems that are out there today.

Prerequisites are SES I and SES II or the equivalent in service work experience.

Class Code	Dates	Time
SES III	TBD	TBD

Day	Location
TBD	Local #10 Metro Area Training Center

## ◆ Servicing Residential Air Conditioning Systems

This 40-hour class is designed to give you some basic diagnostic and repair skills. We'll be covering service calls and

safety procedures, wiring diagrams, superheat & sub-cooling and A/C diagnosing, and troubleshooting electric and gas.

Class Code	Dates	Time
SRAC-1	TBD	TBD

Day	Location
TBD	Local #10 Metro Area Training Center

## ◆ Servicing Residential Furnace Systems

This 40-hour class is designed to give you some basic diagnostic and repair skills. We'll be covering service calls and

safety procedures, wiring diagrams, furnace system diagnosing and troubleshooting electric and gas.

Class Code	Dates	Time
SRF-1	TBD	TBD

Day	Location
TBD	Local #10 Metro Area Training Center

## ◆ Testing, Adjusting, and Balancing Air Systems (Basic)

This 72-hour class is designed to introduce the basics of TAB work to an individual, with lots of hands on applications. You will learn how to set up and use flow hoods, manometers, and many other testing instruments used daily by TAB technicians. In

addition, you will learn how to test and balance various types of mechanical equipment along with their related duct systems. This is an excellent class for people who want to learn how to do TAB work, as well as for those people currently doing it.

Class Code	Dates	Time	Day	Location
TAB-1A	TBD	5:00 pm - 9:00 pm	Mon-Wed	Local #10 Metro Area Training Center
TAB-1B	TBD	7:00 am - 4:30 pm	Fri-Sat	Local #10 Metro Area Training Center

## ◆ Testing, Adjusting, and Balancing Air Systems (Advanced)

This 56-hour class is designed to teach advanced TAB balancing skills and procedures to technicians with some balancing

experience. Prerequisites for this class are our TAB-1 class or equivalent experience.

Class Code	Dates	Time	Day	Location
TAB-2A	TBD	5:00 pm - 9:00 pm	Mon-Wed	Local #10 Metro Area Training Center
TAB-2B	TBD	7:00 am - 4:30 pm	Fri-Sat	Local #10 Metro Area Training Center

## ◆ Testing, Adjusting, and Balancing Hydronic Systems

This 40-hour class is designed to teach hydronics (the water side of TAB) balancing skills and procedures to technicians with some balancing experience. Prerequisites for this class

are our TAB-1 class or equivalent experience. You do not need hydronics balancing experience to take this class.

Class Code	Dates	Time	Day	Location
TAB-3	TBD	5:00 pm - 9:00 pm	Mon-Wed	Local #10 Metro Area Training Center
TAB-3B	TBD	7:00 am - 4:30 pm	Fri-Sat	Local #10 Metro Area Training Center

## ◆ Tab Technician Test Prep

This 16-hour class is designed to prepare people to take the ITI Certified TAB Technician written exams for air and hydronics. The exams will be scheduled for a date after the conclusion of this

class. Prerequisites for this class are completion of the TAB-1 class above or equivalent field experience in testing and balancing.

Class Code	Dates	Time	Day	Location
TABP-1	TBD	5:00pm - 9:00pm	Mon-Wed	Local #10 Metro Area Training Center

## ◆ Total Station Jobsite Layout

This eight-hour class will provide you with hands-on instruction in the use of the Sokkia Total Station equipment. Drawing information provided by the CAD detailer allows the Total Station

operator to locate hanger points, inserts, wall and floor openings, etc., with speed and accuracy. This programmed equipment has built-in checks that help avoid costly measuring errors.

Class Code	Dates	Time	Day	Location
TS-1	TBD	TBD	TBD	Local #10 Metro Area Training Center

## ◆ Welding-General

This class is open to all members wishing to learn new weld skills or enhance existing ones, whether it be oxy-fuel, stick, wire, or heliarc welding. Various certifications will be attainable within this class for those wishing to certify, including structural

and lagging weld certs. This is an open-entry, open-exit class. You may want to come in for one night only to re-certify in a given process, the next person may spend a dozen nights practicing for the D1.1 Structural certification.

Class Code	Dates	Time	Day	Location
WELD-1	09/30/15 thru May, 2016	4:30 pm - 8:30 pm	Wed	Local #10 Metro Area Training Center

**Sheet Metal Workers Local #10  
Metro Area Sheet Metal JATC**

3554 White Bear Ave North  
White Bear Lake, MN 55110

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TWIN CITIES, MN

**JourneyLevel Classes**

**• Registration Information •**

Registration is easy! Simply **email** your choice of classes to:  
[kagness@metrojatc.org](mailto:kagness@metrojatc.org) (you will receive email confirmation back), or  
**mail** to:

SMW 10 Metro Area Training Center  
3554 White Bear Avenue North  
White Bear Lake, MN 55110

**(TBD = To Be Determined)**

Class dates are scheduled when enough members have signed up.  
You will be notified by mail and email about 2 weeks before your class  
start date.

Class schedule and other information will be posted on our blog:  
<http://j-levelclassesnow.blogspot.com/> as it becomes available.

JourneyLevel members may also enroll in apprenticeship classes  
if interested.

Members: Did you not find the  
class you want? Call us at the Training  
Center; we would like to offer  
any class that our members  
have an interest in!  
**651-779-6264**

Name \_\_\_\_\_ Phone Number \_\_\_\_\_

Address \_\_\_\_\_ Membership # \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_ Class Code \_\_\_\_\_

EMAIL \_\_\_\_\_

**Please put my name on your list for the following classes:**

Class Code \_\_\_\_\_

Class Code \_\_\_\_\_

Class Code \_\_\_\_\_

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