

**JOINT APPRENTICESHIP & TRAINING COMMITTEE**  
**OF**  
**SHEET METAL WORKERS' LOCAL 20, GARY AREA**  
**AND**  
**NORTHERN INDIANA SHEET METAL CONTRACTORS ASSOCIATION**

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PORTAGE, INDIANA 46368  
764-1900

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TO: All Local 20 Members

From: Gary Area Joint Apprenticeship & Training Committee

**Re: Continuing Education Classes**

The classes listed below are the Fall upgrade classes available starting around the end of October. The classes will be limited to fourteen (14) Participants.

_____ Service (Basic Heating)	5 Weeks
_____ CADmep (AutoCAD)	5 Weeks
_____ GTAW	5 Weeks
_____ Basic Layout	5 Weeks

There is a class description on the back of this page.

Please make your selections and return this form to [ssnapp@smw20training.com](mailto:ssnapp@smw20training.com) by **October 8<sup>th</sup>, 2021.**

If you have any questions, **call the Apprenticeship Office at 317-541-0050.**

NAME: \_\_\_\_\_ PHONE: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY/ STATE/ ZIP: \_\_\_\_\_

EMAIL: \_\_\_\_\_ SS# \_\_\_\_\_

JOURNEYMAN: \_\_\_ APPRENTICE: \_\_\_ PRE-APPRENTICE: \_\_\_ APPLICANT: \_\_\_ INDUSTRIAL: \_\_\_

**Service (Basic Heating):** Focus on the installation and replacement of a gas furnace. Included will be the fundamentals of basic electricity, line voltage, control wiring, gas piping as well as using multimeters & manometers. Upon completion, the participants should be able to completely replace a residential gas furnace including start-up and some basic troubleshooting.

**CADmep (AutoCAD):** You will learn the commands and fundamentals of 3D mechanical drawings. The basics of ductwork detailing in conjunction with Structural and Architectural drawings. You will produce shop drawings with duct elevations in different views. A basic understanding of AutoCAD is preferred. The progress of the class is subject to the ability of the students. Basic computers skills are a must.

**GTAW:** You will learn the fundamentals and a lot of hands-on training and practice in Gas Tungsten Arc Welding (TIG). Materials welded will begin with carbon steel but progress to Stainless and Aluminum. This class will allow the participants to practice at their own pace, going through a series of exercises depending on the student's progression.

**Basic Layout:** This class will cover basic layout techniques including triangulation, parallel line development, and radial line development. Students will also learn basic trigonometry to use in laying out duct offsets. The purchase of a Sheet Metal/HVAC Pro calculator or App would be preferred.