# HEATING, AIR CONDITIONING, APPLIANCE TECH (HVAC)

## Courses

## HVAC-100 HVAC THEORY IA 3 Credits

This class provide apprentices an introduction to the basics of HVAC. Subject matter includes basic math; basic safety; hand tools; power tools; fuel gas piping and venting; Idaho code/administrative rules; International Mechanical Code; energy sources; basic systems; HVAC/R applied science; and customer service. See attached curriculum outline for specific details and objectives.

## HVAC-101 HVAC THEORY IB 3 Credits

This class (continued from semester one) provide apprentices an introduction to the basics of HVAC. Pre-requisite: HVAC 100.

#### HVAC-102 HVAC THEORY IIA 3 Credits

Year two subject matter includes appliance installation; blueprints/specifications; basic electricity; indoor air quality; and residential load calculation.

## HVAC-103 HVAC THEORY IIB 3 Credits

This class is a continuation from HVAC-102 Theory IIA. Pre-requisite: HVAC-102.

#### HVAC-104 HVAC YEAR I 10 Credits

This practicum consists of 2000 hours of on the job training with an HVAC journeyman. Students take the knowledge learned in the didactic content, and apply it through actual field experience(s).

## HVAC-105 HVAC YEAR II 10 Credits

This practicum consists of 2000 hours of on the job training with an HVAC journeyman. Students take the knowledge learned in the didactic content from Years 1 - 2, and apply it through actual field experience(s).

## HVAC-200 HVAC THEORY IIIA 3 Credits

Year three subject matter includes basic controls; system air flow and duct sizing; basic air conditioning and refrigeration; introduction to Hydronics; basic sheet metal; and introduction to service.

#### HVAC-201 HVAC THEORY IIIB 3 Credits

This class is a continuation from HVAC-200 Theory IIIA. Pre-requisite: HVAC-200.

## HVAC-202 HVAC THEORY IVA 3 Credits

Year four subject matter includes introduction to testing and balancing; introduction to HVAC control strategies; advanced air conditioning and heat pump systems; advanced service; system integration and design; International Fuel Gas Code; International Mechanical Code; National Electrical Code; and project management. See attached curriculum outline for specific details and objectives.

## HVAC-203 HVAC THEORY IVB 3 Credits

This class is a continuation from HVAC 202 Theory IVA. pre-requisite: HVAC-202.

## HVAC-204 HVAC YEAR III 10 Credits

This practicum consists of 2000 hours of on the job training with an HVAC journeyman. Students take the knowledge learned in the didactic content from Years 1 - 3, and apply it through actual field experience(s).

## HVAC-205 HVAC YEAR IV 10 Credits

This practicum consists of 2000 hours of on the job training with an HVAC journeyman. Students take the knowledge learned in the didactic content from Years 1 - 4, and apply it through actual field experience(s).