

# APPRENTICESHIP: PIPE TRADES, SHEET METAL, FIELD IRONWORKERS (APPR)

## APPR 140A • GOODWILL HUMAN & PROCESS DEVELOPMENT

**Units:** 4  
**Hours:** 48 lecture per quarter (48 total per quarter)  
**Prerequisite:** Per California Code of Regulations, this course is limited to students admitted to the Goodwill Customer Support Specialist Apprenticeship Program.

**Degree and Credit Status:** Degree-Applicable Credit Course

**Status:**

**Foothill GE:** Non-GE

**Transferable:** None

**Grade Type:** Letter Grade (Request for Pass/No Pass)

**Repeatability:** Not Repeatable

This course tracks the personal and professional growth of individual students. The course will follow the CDP steps over a three-part curriculum: Pre-Apprentice, Growth Mindset, and Quality & Process Improvement. The course introduces the retailer to professional attributes: problem solving, critical thinking, cultural awareness, professional collaboration, workplace communication, self-awareness, leadership, innovation and entrepreneurship, and professionalism. Strong emphasis on the Kaizen mentality and methods to solve problems within the organization and workplace. Focus on development of leadership, self-awareness, growth mindset, professionalism, and creative mindset.

## APPR 140B • RETAIL MARKETING, MERCHANDISING & CUSTOMER SERVICE

**Units:** 4  
**Hours:** 48 lecture per quarter (48 total per quarter)  
**Prerequisite:** Per California Code of Regulations, this course is limited to students admitted to the Goodwill Customer Support Specialist Apprenticeship Program.

**Degree and Credit Status:** Degree-Applicable Credit Course

**Status:**

**Foothill GE:** Non-GE

**Transferable:** None

**Grade Type:** Letter Grade (Request for Pass/No Pass)

**Repeatability:** Not Repeatable

Introduction to the world of retailing and merchandising from a customer service and marketing viewpoint. Students study the elements that comprise the retail mix, including types of retailers, multichannel retailing, consumer buying behavior, retail marketing strategies, selecting retail site locations, inventory management, merchandising, pricing, budget and revenue targets, store management, store security, and safety.

## APPR 160A • HVAC TECH, CUSTOMER SERVICE

**Units:** 5  
**Hours:** 37 lecture, 86 laboratory per quarter (123 total per quarter)  
**Prerequisite:** Per California Code of Regulations, this course is limited to students admitted to the Plumbing & Pipefitting Apprenticeship Program.

**Degree and Credit Status:** Degree-Applicable Credit Course

**Status:**

**Foothill GE:** Non-GE

**Transferable:** None

**Grade Type:** Letter Grade (Request for Pass/No Pass)

**Repeatability:** Not Repeatable

Third-year course of the Plumber, Pipefitter & Service Tech Apprenticeship Program regarding HVAC students; includes basic refrigeration, EPA 608 certification, safety and customer service.

## APPR 188A • ORIENTATION; SAFETY & BEGINNING RESIDENTIAL SHEET METAL INSTALLATION (SPECIALIST 1A)

**Units:** 1.5  
**Hours:** 6 lecture, 48 laboratory per quarter (54 total per quarter)  
**Prerequisite:** Per California Code of Regulations, this course is limited to students admitted to the Sheet Metal Specialist Apprenticeship Program.

**Degree and Credit Status:** Degree-Applicable Credit Course

**Status:**

**Foothill GE:** Non-GE

**Transferable:** None

**Grade Type:** Letter Grade Only

**Repeatability:** Not Repeatable

An introduction to residential and light commercial sheet metal installation, safety, tools, materials, equipment, and related industry practices. Emphasis on safety and soldering techniques.

## **APPR 188B • RESIDENTIAL COMPONENTS IDENTIFICATION & INSTALLATION (SPECIALIST 1B)**

**Units:** 1.5  
**Hours:** 6 lecture, 48 laboratory per quarter (54 total per quarter)  
**Prerequisite:** Per California Code of Regulations, this course is limited to students admitted to the Sheet Metal Specialist Apprenticeship Program.

**Degree and Credit Status:** Degree-Applicable Credit Course

**Foothill GE:** Non-GE  
**Transferable:** None  
**Grade Type:** Letter Grade Only  
**Repeatability:** Not Repeatable

Continued development of concepts and practices already introduced and used in residential and light commercial installations of sheet metal ductwork. Emphasis on materials information and skills development.

## **APPR 189A • RESIDENTIAL SYSTEMS; DUCT & HVAC SYSTEMS (SPECIALIST 2A)**

**Units:** 1.5  
**Hours:** 6 lecture, 48 laboratory per quarter (54 total per quarter)  
**Prerequisite:** Per California Code of Regulations, this course is limited to students admitted to the Sheet Metal Specialist Apprenticeship Program.

**Degree and Credit Status:** Degree-Applicable Credit Course

**Foothill GE:** Non-GE  
**Transferable:** None  
**Grade Type:** Letter Grade Only  
**Repeatability:** Not Repeatable

A study of typical residential sheet metal flashing, waterproofing, ventilation, and HVAC systems. Development of installation techniques.

## **APPR 189B • PLANS & ARCHITECTURAL APPLICATIONS FOR RESIDENTIAL SHEET METAL (SPECIALIST 2B)**

**Units:** 1.5  
**Hours:** 6 lecture, 48 laboratory per quarter (54 total per quarter)  
**Prerequisite:** Per California Code of Regulations, this course is limited to students admitted to the Sheet Metal Specialist Apprenticeship Program.

**Degree and Credit Status:** Degree-Applicable Credit Course

**Foothill GE:** Non-GE  
**Transferable:** None  
**Grade Type:** Letter Grade Only  
**Repeatability:** Not Repeatable

An advanced study of industry standards, values, and requirements in residential sheet metal work, including architectural applications of metal roofing, complex flashing, gutter, and downspouts. Use of plans for coordinating installations. Mathematics review and further development of soldering skills.