

APSM 125: SMQ-25 DETAILING

Foothill College Course Outline of Record

Heading	Value
Effective Term:	Summer 2021
Units:	3
Hours:	36 lecture, 4 laboratory per quarter (40 total per quarter)
Prerequisite:	Per California Code of Regulations, this course is limited to students admitted to the Sheet Metal Apprenticeship Program.
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	None
Grade Type:	Letter Grade (Request for Pass/No Pass)
Repeatability:	Not Repeatable

Student Learning Outcomes

- A successful student will be able to compile detail information from plans, specs, submittals, standards, field measurement and codes.
- A successful student will be able to Produce detail shop drawings for fabrication and installation.

Description

Detailing in the sheet metal industry is a specialized skill that requires extensive knowledge and proper attention to detail when working with drawings and specifications. In this course, students will compile detail information from plans, specs, submittals, standards, field measurements, and codes.

Course Objectives

The student will be able to:

- Compile information from plans, specs, submittals, standards, field measurements, codes, and other project designers in order to complete details for fabrication and installation of an HVAC system
- Produce hand-drawn detail shop drawings for fabrication and installation of HVAC systems

Course Content

- Compile information from plans, specs, submittals, standards, field measurements, codes, and other project designers in order to complete details for fabrication and installation of an HVAC system
 - Review of construction documents
 - Review process to create composite drawings by coordinating with related trades
 - Organize information sources, (plans, specifications, submittals, codes and standards)
 - Complete RFI, request for information documents and other communication
- Produce hand-drawn detail shop drawings for fabrication and installation of HVAC systems
 - Preparation for shop drawings

- Making the background drawing
- Apply duct design concepts for best system design
- Completing the shop drawing
- Take-offs from the shop drawing

Lab Content

Working individually and in teams, students will:

- Practice verifying information from plans and specifications
- Use information in preparation of shop drawings that record details of a project
- Learn to gather information through creating and processing an RFI
- Learn to incorporate background drawings into the shop drawing

Special Facilities and/or Equipment

- Laboratory with sheet metal tools
- Personal protective equipment

Method(s) of Evaluation

- Results of written quizzes and tests
- Shop participation
- Comprehensive written final examination
- Comprehensive final project
- Evaluation of progress by weekly assignments

Method(s) of Instruction

- Discussion
- Laboratory instruction
- Demonstration

Representative Text(s) and Other Materials

International Training Institute. [International Training Institute, Detailing \(student manual\)](#). 2007.

This is the standard Sheet Metal textbook/workbook used for this course. Although it may not be within 5 years of the required published date, it is the most current book used when teaching this course.

Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

- Reading assignment:
 - Read the text chapter "Coordination", pages CD-1-16
- Writing assignment, in textbook:
 - Complete the written Review Sheet, page CD1-17

Discipline(s)

Sheet Metal