

**AP IW 797 Inside Wireman Topics (2 - 4)**  
 Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.  
 Topics in Inside Wireman. See Class Schedule for the specific topic offered.  
 Course title will designate subject covered.

## Plasterer (AP PL)

A four-year apprenticeship program. Applicants for this program should be directed to the Carpenters Joint Apprenticeship and Training Committee for Southern California, San Diego Carpenters Training Center, 8595 Miralani Drive, San Diego, CA 92126. Telephone (858) 621-2667.

### A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements	Units
AP DL/AP PL/ AP AC 701 Orientation	1.5
AP DL/AP PL/ AP AC 702 Safety and Health Certifications	1.5
AP DL/AP PL/ AP AC 703 Printreading	1.5
AP DL/ AP PL 705 Basic Lathing	1.5
AP PL 706 Basic Plastering	1.5
AP PL 707 Exterior Plastering	1.5
AP PL 708 DOT and Screed Techniques	1.5
AP PL 709 Interior Plastering	1.5
AP PL 710 Finish Applications	1.5
AP PL 711 Ornamental Plastering	1.5
AP PL 713 Theme Plastering	1.5
AP DL/ AP PL 715 Exterior Insulation Finish Systems (EIFS)	1.5
AP DL/ AP PL 716 Firestop/Fireproofing Procedures	1.5
AP PL 717 Plastering Equipment Application	1.5
AP PL 718 Plastering Equipment	1.5
AP WE 714 Plasterer Work Experience	16
<b>TOTAL UNITS</b>	<b>38.5</b>

### COURSE OFFERINGS

**AP PL 701 Orientation (1.5)**  
 1 hour lecture - 1 1/2 hours laboratory

**Prerequisite:** Indentured apprentice to a designated Joint Apprenticeship and Training Committee

**Note:** Cross listed as AP DL 701/AP AC 701

An introduction to the Interior Systems program. Safe and proper use of hand tools, power tools, trade related math, beginning print reading and layout as well as safety certifications. Certifications will include scaffold erector/dismantler (welded frame) and low velocity powder actuated tools.

**AP PL 702 Safety and Health Certifications (1.5)**  
 1 hour lecture - 1 1/2 hours laboratory

**Note:** Cross listed as AP DL 702/AP AC 702

Instruction in safety and health training that meets the needs of the Interior Systems industry. Content includes certification in Power Industrial Trucks, Aerial Lift, American Red Cross First Aid / CPR/AED, and OSHA 10.

**AP PL 703 Printreading (1.5)**  
 1 hour lecture - 1 1/2 hours laboratory

**Note:** Cross listed as AP DL 703/AP AC 703

An introduction to the basic visualization skills needed for reading and interpreting construction prints. Demonstration of the significance of views, elevations and the role of specifications as they relate to prints.

**AP PL 705 Basic Lathing (1.5)**  
 1 hour lecture - 1 1/2 hours laboratory

**Note:** Cross listed as AP DL 705

Presents the basic lathing methods used in the industry for exterior/interior installations. Students will use the skills presented to complete a lathing project as part of this course.

**AP PL 706 Basic Plastering (1.5)**  
 1 hour lecture - 1 1/2 hours laboratory

This course provides a brief history of plastering and a complete picture of what the plastering industry is like today. The importance of good lathing and proper inspection of lathing will be emphasized. Proper hawk and trowel and basic tool use will be demonstrated.

**AP PL 707 Exterior Plastering (1.5)**  
 1 hour lecture - 1 1/2 hours laboratory

An introduction to Portland Cement Plaster (a.k.a. stucco) and the processes involved in completing a plastering job. This course will stress the importance of good workmanship and adherence to proven methods of work. Students will begin to develop mastery of basic plastering tools in this course.

**AP PL 708 DOT and Screed Techniques (1.5)**  
 1 hour lecture - 1 1/2 hours laboratory

This course is designed to teach the importance of plumb and square projects. The students will use 3-4-5 or center line methods to square the project, establish control lines and wall finish lines. The plumbing of the project will be demonstrated through the dotting and screeding portion of instruction. The student will brown up and finish a project using methods of application previously covered.

**AP PL 709 Interior Plastering (1.5)**  
 1 hour lecture - 1 1/2 hours laboratory

An introduction to modern gypsum interior plastering systems. Proper methods of application, proper proportioning and mixing, and good workmanship will be demonstrated in this course.

**AP PL 710 Finish Applications (1.5)**  
 1 hour lecture - 1 1/2 hours laboratory

The course will emphasize three different types of molds, their use and application. Components and production of a mold, how to horse a mold and create inside and outside miters will also be covered.

**AP PL 711 Ornamental Plastering (1.5)**  
 1 hour lecture - 1 1/2 hours laboratory

**Prerequisite:** A minimum grade of 'C' in AP PL 210

This course is designed to provide instruction and practice in advanced geometric lay out problems. Class project will guide students through each phase of production to produce an elliptical arch, with keystone at the arch apex. The project will introduce students to benching a mold, setting and pointing staff, building a working trammel and successfully running a trammel mold.

**AP PL 713 Theme Plastering (1.5)**  
 1 hour lecture - 1 1/2 hours laboratory

This course is designed to teach the student the basic knowledge and skills required to successfully plan and execute a simple project that requires the use of manufactured rock. A study of real rock formations and the techniques used to copy them will be covered as well as painting and highlighting, required tools, art lay out, and carving techniques.

**AP PL 715 Exterior Insulation Finish Systems (EIFS) (1.5)**  
 1 hour lecture - 1 1/2 hours laboratory

**Note:** Cross listed as AP DL 715

Introduction to the basic working knowledge and technical skills needed to successfully install Exterior Insulation and Finish Systems EIFS (foam products) to meet industry specifications and standards. Introduction to the proper usage of products and materials will be discussed and used.

**AP PL 716 Firestop/Fireproofing Procedures (1.5)**  
 1 hour lecture - 1½ hours laboratory  
**Note:** Cross listed as AP DL 716  
 Emphasis on the correct methods, technical skills and firestop materials required to complete a Firestop System. Firestopping is a complete fire containment system designed to prevent the passage of fire, smoke and hot gasses from one side of a rated wall/ceiling assembly to another.

**AP PL 717 Plastering Equipment Application (1.5)**  
 1 hour lecture - 1½ hours laboratory  
 Instruction in the materials, application methods and techniques for operating a plaster pump. Students will complete a three-coat work application to industry standards. Emphasis on proper pump set-up, washout and maintenance.

**AP PL 718 Plastering Equipment (1.5)**  
 1 hour lecture - 1½ hours laboratory  
 Terminology, components and operating procedures for plastering equipment and machinery. Machine maintenance, safety, troubleshooting procedures, limits of operation and communication practices will be covered. Students will inspect and properly set up and clean a plastering pump.

**AP PL 797 Plasterer Topics (.5-4)**  
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**Prerequisite:** Indentured apprentice to the Carpenters Joint Apprenticeship and Training Committee for Southern California  
 Topics in Plasterer. See Class Schedule for specific topic offered. Course title will designate subject covered.

**Sheet Metal (AP SM)**

A five-year apprenticeship program. Applicants for this program should be directed to the San Diego Sheet Metal Joint Apprenticeship and Training Committee, 4596 Mission Gorge Place, San Diego, CA 92120. Telephone (619) 265-2758.

**A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT**

Program Requirements	Units
AP SM 701 Core I	4
AP SM 702 Core II	4
AP SM 703 Core III	4
AP SM 704 Core IV	4
AP SM 705 Sheet Metal Welding	3
AP SM 706 Plans & Specifications	4
AP SM 709 Foreman and Project Management Training	4
AP SM 710 Architectural Application	4
AP SM 711 HVAC I	4
AP SM 712 HVAC II	4
APWE 710 Sheet Metal Work Experience	16
<b>TOTAL UNITS</b>	<b>55</b>

**COURSE OFFERINGS**

**AP SM 701 Core I (4)**  
 3 hours lecture - 3 hours laboratory  
**Prerequisite:** Indentured apprentice to the San Diego Sheet Metal Joint Apprenticeship and Training Committee  
 An introduction to the basic principles, processes, drawings, materials and practices used in the sheet metal industry.

**AP SM 702 Core II (4)**  
 3 hours lecture - 3 hours laboratory  
**Prerequisite:** A minimum grade of 'C' in AP SM 701  
 A continuation of basic sheet metal processes as well as an introduction to simple sheet metal forming processes.

**AP SM 703 Core III (4)**  
 3 hours lecture - 3 hours laboratory  
**Prerequisite:** A minimum grade of 'C' in AP SM 702  
 An introduction to intermediate sheet metal processes demonstrating job layout, architectural details and construction techniques with problems of unusual complexity and difficulty.

**AP SM 704 Core IV (4)**  
 3 hours lecture - 3 hours laboratory  
**Prerequisite:** A minimum grade of 'C' in AP SM 703  
 A continuation of intermediate processes with problems of unusual difficulty and complexity.

**AP SM 705 Sheet Metal Welding (3)**  
 1½ hours lecture - 4½ hours laboratory  
**Prerequisite:** A minimum grade of 'C' in AP SM 704  
 An introduction to the basic principles and methods of gas and arc welding used in the sheet metal industry. Includes codes, standards, welding theory and the practical application using prescribed welding procedures and equipment.

**AP SM 706 Plans and Specifications (4)**  
 3 hours lecture - 3 hours laboratory  
**Prerequisite:** A minimum grade of 'C' in AP SM 705  
 An introduction to the language and organization of plans and specifications for sheet metal projects. Topics will include architectural, structural, mechanical and electrical drawings as well as how to write and implement a change order to plans and specifications.

**AP SM 709 Foreman and Project Management Training (4)**  
 3 hours lecture - 3 hours laboratory  
**Prerequisite:** A minimum grade of 'C' in AP SM 712  
 Overview of the knowledge, skills and abilities required to effectively perform as a foreman and project manager in the sheet metal industry.

**AP SM 710 Architectural Application (4)**  
 3 hours lecture - 3 hours laboratory  
**Prerequisite:** A minimum grade of 'C' in AP SM 709  
 Overview of the knowledge, skills, and abilities of advanced architectural project performance.

**AP SM 711 HVAC I (4)**  
 3 hours lecture - 3 hours laboratory  
**Prerequisite:** A minimum grade of 'C' in AP SM 706  
 An introduction to the physical components and systems of a basic HVAC system as well as hands-on techniques for startup and basic system troubleshooting.

**AP SM 712 HVAC II (4)**  
 3 hours lecture - 3 hours laboratory  
**Prerequisite:** A minimum grade of 'C' in AP SM 711  
 Designed to build on the principles of basic HVAC system design and installation. Students will develop a better understanding of how a modern HVAC system is designed and functions. Field installation, plans and specifications, commissioning, project management and basic LEED principles will also be covered.

**AP SM 797 Sheet Metal Topics (.5 - 4)**  
 Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.  
**Prerequisite:** Indentured apprentice to the San Diego Sheet Metal Joint Apprenticeship and Training Committee  
 Topics in Sheet Metal. See Class Schedule for specific topic offered. Course title will designate subject covered.