

AP PL 702 Safety and Health Certifications (1.5)
1 hour lecture - 1½ hours laboratory
Note: Cross listed as AP DL 702/ AP AC 702; may be taken 2 times
 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 - 1½ hours laboratory
Note: Cross listed as AP DL 703/ AP AC 703; may be taken 2 times
 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 - 1½ hours laboratory
Note: Cross listed as AP DL 705; may be taken 2 times
 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 - 1½ hours laboratory
Note: May be taken 2 times
 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 - 1½ hours laboratory
Note: May be taken 2 times
 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 - 1½ hours laboratory
Note: May be taken 2 times
 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 - 1½ hours laboratory
Note: May be taken 2 times
 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 - 1½ hours laboratory
Note: May be taken 2 times
 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 - 1½ hours laboratory
Prerequisite: A minimum grade of 'C' in AP PL 210
Note: May be taken 2 times
 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 - 1½ hours laboratory
Note: May be taken 2 times
 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 - 1½ hours laboratory
Note: Cross listed as AP DL 715; may be taken 2 times
 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; may be taken 2 times
 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
Note: May be taken 2 times
 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
Note: May be taken 2 times
 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)
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 Carpenters Joint Apprenticeship and Training Committee for Southern California
Note: May be taken 4 times
 Topics in Plasterer. See Class Schedule for specific topic offered. Course title will designate subject covered.

Residential Wireman (AP RW)

A three-year apprenticeship program. Applicants for San Diego/Imperial counties should apply to the San Diego Electrical Training Trust, 4675 Viewridge Avenue, Suite D, San Diego, CA 92123. Telephone: (858) 569-6633, ext. 111.

A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements	Units
AP RW 701 Introduction to Residential Wiring Concepts	4
AP RW 702 Electrical Theory, Practice & Blueprint Reading	4
AP RW 703 AC/DC Electrical Theory and Applications	4
AP RW 704 Residential Certification Preparation	4
AP RW 705 Home Technology Integrator I	4
AP RW 706 Home Technology Integrator II	4
AP WE 713 Electrician Work Experience	16
TOTAL UNITS	40

COURSE OFFERINGS

AP RW 701 Introduction to Residential Wiring Concepts (4)
3 hours lecture - 3 hours laboratory**Prerequisite:** Indentured apprentice to a designated Joint Apprenticeship and Training Committee**Note:** May be taken 2 times

Introduction to the electrical industry, with emphasis on jobsite safety, basic residential wiring, National Electric Code (NEC), sexual harassment, introduction to blueprints, tools and their use.

AP RW 702 Electrical Theory, Practice & Blueprint Reading (4)
3 hours lecture - 3 hours laboratory**Prerequisite:** A minimum grade of 'C' in AP RW 701**Note:** May be taken 2 times

Survey of drug awareness, Union Constitution and Bylaws, parliamentary procedure, test instruments, National Electric Code (NEC), blueprint analysis, specialty residential wiring systems including telephone, LAN, security, fire alarm and CATV systems.

AP RW 703 AC/DC Electrical Theory and Applications (4)
3 hours lecture - 3 hours laboratory**Prerequisite:** A minimum grade of 'C' in AP RW 702**Note:** May be taken 2 times

Introduction to the electrical industry, with emphasis on jobsite safety, AC and DC theory, National Electric Code (NEC), electric motors, transforms, relays, motor controls, tools and their use. Particular attention will be given to residential lighting, wiring devices, appliance cords/connections, and residential branch circuit wiring.

AP RW 704 Residential Certification Preparation (4)
3 hours lecture - 3 hours laboratory**Prerequisite:** A minimum grade of 'C' in AP RW 703**Note:** May be taken 2 times

This course is designed to prepare the student to take the California Electrician Certification Examination (CECE). The class provides a review of concepts and principles, but focuses primarily on understanding and applying the National Electric Code (NEC), the set of standards upon which the CECE is based.

AP RW 705 Home Technology Integrator I (4)
3 hours lecture - 3 hours laboratory**Prerequisite:** A minimum grade of 'C' in AP RW 704**Note:** May be taken 2 times

Provides the student with the background necessary to install, troubleshoot, and maintain computer networks, video theater systems, voice networks, CATV networks, and other specialized audio/video systems designed for the home environment.

AP RW 706 Home Technology Integrator II (4)
3 hours lecture - 3 hours laboratory**Prerequisite:** A minimum grade of 'C' in AP RW 705**Note:** May be taken 2 times

Provides the essential networking concepts to permit design and engineering of a residential network and its components. Provides information on home network installations that includes lighting control systems; telecommunication devices; security, access control, home automation controllers; heating, ventilation, and air conditioning control systems; and integration of each. Upon completion of this course students will be prepared to take two CompTIA HTI+ certification exams: Residential Systems and Systems Infrastructure and Integration.

AP RW 797 Residential Wireman Topics (.5-4) (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.

Note: May be taken 4 times

Topics in Residential Wireman. See Class Schedule for the 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.A. 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
AP WE 710	Sheet Metal Work Experience	16
TOTAL UNITS		55

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**Note:** May be taken 2 times

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**Note:** May be taken 2 times

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**Note:** May be taken 2 times

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**Note:** May be taken 2 times

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**Note:** May be taken 2 times

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.