

tion given to the techniques used to achieve a finished job that looks like the real material it is replacing. Students will also learn masonry terms and study architectural details related to masonry.

**AP PL 213 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 214 Architectural Wall Finishing (1.5)**  
1 hour lecture - 1½ hours laboratory

**Note:** May be taken 2 times

This course is designed to introduce the sophisticated design elements of architectural wall finishing. Walls as an art form with transitioning color and texture are becoming increasingly popular and are in high demand.

**AP PL 215 Exterior Insulation Finish Systems (EIFS) (1.5)**  
1 hour lecture - 1½ hours laboratory

**Note:** Cross listed as AP DL 215; 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 216 Firestopping Procedures (1.5)**  
1 hour lecture - 1½ hours laboratory

**Note:** Cross listed as AP DL 216; 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.

## 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 101 Introduction to Residential Wiring Concepts	4
AP RW 102 Electrical Theory, Practice & Blueprint Reading	4
AP RW 103 AC/DC Electrical Theory and Applications	4
AP RW 104 Residential Certification Preparation	4
AP RW 105 Home Technology Integrator I	4
AP RW 106 Home Technology Integrator II	4
AP WE 113 Electrician Work Experience	16
<b>TOTAL UNITS</b>	<b>40</b>

### COURSE OFFERINGS

**AP RW 101 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 102 Electrical Theory, Practice & Blueprint Reading (4)**  
3 hours lecture - 3 hours laboratory

**Prerequisite:** A minimum grade of 'C' in AP RW 101

**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 103 AC/DC Electrical Theory and Applications (4)**  
3 hours lecture - 3 hours laboratory

**Prerequisite:** A minimum grade of 'C' in AP RW 102

**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 104 Residential Certification Preparation (4)**  
3 hours lecture - 3 hours laboratory

**Prerequisite:** A minimum grade of 'C' in AP RW 103

**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 105 Home Technology Integrator I (4)**  
3 hours lecture - 3 hours laboratory

**Prerequisite:** A minimum grade of 'C' in AP RW 104

**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 106 Home Technology Integrator II (4)**  
3 hours lecture - 3 hours laboratory

**Prerequisite:** A minimum grade of 'C' in AP RW 105

**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 197 Residential Wireman Topics (.5-4)**

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/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 101 Core I	4
AP SM 102 Core II	4
AP SM 103 Core III	4
AP SM 104 Core IV	4
AP SM 105 Sheet Metal Welding	3
AP SM 106 Plans & Specifications	4