

AP PL 215 Exterior Insulation Finish Systems (1.5)
1 hour lecture-1 1/2 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-1 1/2 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
APWE 113 Electrician Work Experience	16
TOTAL UNITS	40

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
AP SM 107 Construction Plan Problem Solving	4
AP SM 108 Introduction to Basic Refrigeration	4
AP SM 109 Foreman and Project Management Training	4
AP SM 110 Architectural Problem Solving	4
AP WE 110 Sheet Metal Work Experience	16
TOTAL UNITS	55

COURSE OFFERINGS

AP SM 101 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.