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.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
AP DL/AP PL/ AP AC 201	Orientation	1.5
AP DL/AP PL/ AP AC 202	Safety and Health Certifications	1.5
AP DL/AP PL/ AP AC 203	Printreading	1.5
AP DL/ AP PL 205	Basic Lathing	1.5
AP PL 206	Basic Plastering	1.5
AP PL 207	Exterior Plastering	1.5
AP PL 208	DOT and Screed Techniques	1.5
AP PL 209	Interior Plastering	1.5
AP PL 210	Finish Applications	1.5
AP PL 211	Ornamental Plastering	1.5
AP PL 213	Theme Plastering	1.5
AP DL/ AP PL 215	Exterior Insulation Finish Systems (EIFS)	1.5
AP DL/ AP PL 216	Firestop/Fireproofing Procedures	1.5
AP PL 217	Plastering Equipment Application	1.5
AP PL 218	Plastering Equipment	1.5
AP WE 114	Plasterer Work Experience	16
TOTAL UNITS		**38.5**

COURSE OFFERINGS

AP PL 197 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.

AP PL 201 Orientation (1.5)
1 hour lecture - 1½ hours laboratory
Prerequisite: *Indentured apprentice to a designated Joint Apprenticeship and Training Committee*
Note: *Cross listed as AP DL 201/ AP AC 201; may be taken 2 times*
Designed to introduce the apprentice to the Interior Systems program. The content of the course will include 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 202 Safety and Health Certifications (1.5)
1 hour lecture - 1½ hours laboratory
Note: *Cross listed as AP DL 202/ AP AC 202; may be taken 2 times*
Provides safety and health training that meets the needs of the Interior Systems industry. The content of the course will include certification in Power Industrial Trucks, Aerial Lift, American Red Cross First Aid / CPR/ AED, and OSHA 10.

AP PL 203 Printreading (1.5)
1 hour lecture - 1½ hours laboratory
Note: *Cross listed as AP DL 203/ AP AC 203; may be taken 2 times*
Introduces basic visualization skills needed for reading and interpreting construction prints. Identifies the various components of a typical drawing and highlights their significance. Views, elevations, and the role of specifications as they relate to prints will be discussed. Students will complete a basic layout using information from a typical print for a commercial project.

AP PL 205 Basic Lathing (1.5)
1 hour lecture - 1½ hours laboratory
Note: *Cross listed as AP DL 205; 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 206 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 207 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 208 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 209 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 210 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 211 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 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 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 Firestop/Fireproofing 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.

AP PL 217 Plastering Equipment Application (1.5)
1 hour lecture - 1½ hours laboratory
Note: *May be taken 2 times*
Identifies the materials, application methods, and techniques for operating a plaster pump. Students will complete a three-coat work application to industry standards. An emphasis will be placed on proper pump set-up, washout, and maintenance.

AP PL 218 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.

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
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 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 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 109	Foreman and Project Management Training	4
AP SM 110	Architectural Application	4
AP SM 111	HVAC I	4
AP SM 112	HVAC II	4
AP WE 110	Sheet Metal Work Experience	16
TOTAL UNITS		**55**

To satisfy a prerequisite, the student must have earned a letter grade of A, B, C or CR in the prerequisite course, unless otherwise stated. See Catalog addendum at http://www.palomar.edu/catalog/2011/ for updates and new program approvals.