AP C 259 Scaffold-Printreading (1.5)
1 hour lecture-1½ hours laboratory
Note: May be taken 2 times
Fundamentals of reading construction prints. Scaffold print views, lines, dimensioning methods, symbols and details will be covered. In addition to print interpretation, sketching techniques will be introduced and students will draw several scaffold views incorporating the basic print elements presented during the class.

AP C 260 Scaffold-Advanced Printreading (1.5)
1 hour lecture-1½ hours laboratory
Note: May be taken 2 times
Expansion of basic printreading ability to include project take-off, estimation, and layout accuracy. Methods used to determine datum and reference locations will be covered. References will be taken from multi-view drawings and students will evaluate the information to locate and orient scaffold for accurate site placement.

Drywall/Lather (AP DL)

A three-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 DL 206	Framing Ceilings and Soffits	1.5
AP DL 207	Basic Metal Framing	1.5
AP DL 208	Framing Suspended Ceilings	1.5
AP DL 209	Framing Curves and Arches	1.5
AP DL 210	Light Gage Welding - AWS	1.5
AP WE 112	Drywall/Acoustical Work Experience	16
Electives (Select 3 courses)		
AP DL/AP PL/ AP AC 204	Advanced Printreading	1.5
AP DL 211	Light Gage - L.A. City Certificate	1.5
AP DL 212	Basic Hand Finishing	1.5
AP DL 213	Drywall Acoustical Ceilings	1.5
AP DL 214	Door/Door Frames	1.5
AP DL/ AP PL 215	Exterior Insulation Finish Systems	1.5
AP DL/ AP PL 216	Firestopping Procedures	1.5
AP DL 217	Free-Form Lathing	1.5
AP DL 218	Machine Taping	1.5
AP DL 219	Hand Taping	1.5
AP DL 220	Gypsum Board Application and Finish Trim	1.5
AP DL 221	Advanced Hand Tool Finishing	1.5
AP DL 222	Advanced Machine Tool Finishing	1.5
TOTAL UNITS		**34**

COURSE OFFERINGS

AP DL 197 Drywall/Lather 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.
Prerequisite: Indentured apprentice to the Carpenters Joint Apprenticeship and Training Committee for Southern California
Note: May be taken 4 times
Topics in Drywall/Lather. See Class Schedule for specific topic offered. Course title will designate subject covered.

AP DL 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 PL 201/ AP AC 201; may be taken two times
Introduction to the Interior Systems program. Content includes safe and proper usage of hand tools, power/powder tools, an introduction to trade related math, beginning blueprint reading and layout. Certifications will include Ramset/Red Head or Hilti low velocity power/powder actuated tools and scaffold erector/dismantler (welded frame).

AP DL 202 Safety and Health Certifications (1.5)
1 hour lecture-1½ hours laboratory
Note: Cross listed as AP PL 202/ AP AC 202; may be taken two times
Designed to incorporate learning theories, methods and techniques that meet the needs of the Interior Systems industry. Content includes certification in forklift, aerial lift, American Red Cross, First Aid/CPR and OSHA 10.

AP DL 203 Printreading (1.5)
1 hour lecture-1½ hours laboratory
Note: Cross listed as AP PL 203/ AP AC 203; may be taken two times
This course is designed to teach the basics of reading, understanding and visualizing the blueprints. Terms, symbols and definitions from several trades will be incorporated. Prints showing both residential and commercial application will be used. Related safety, math and blueprint reading will be covered.

AP DL 204 Advanced Printreading (1.5)
1 hour lecture-1½ hours laboratory
Prerequisite: A minimum grade of 'C' in AP DL/AP AC 203
Note: Cross listed as AP PL 204/ AP AC 204; may be taken two times
This course will give the student more in depth training related to on the job conditions. Basic estimating, material take offs and organizing jobs will be included.

AP DL 205 Basic Lathing (1.5)
1 hour lecture-1½ hours laboratory
Note: Cross listed as AP PL 205; may be taken 2 times
This course will cover the different styles and techniques of structural framing compared to light gage framing. Proper waterproofing, lath or drywall and trim will be explained, demonstrated and applied to the framing. Related safety, math and blueprint reading will be covered.

AP DL 206 Framing Ceilings and Soffits (1.5)
1 hour lecture-1½ hours laboratory
Note: May be taken 2 times
This course is designed to provide instruction in the basics of framing ceilings and soffits with drywall and lath application. Related safety, math and blueprint reading will be covered.

AP DL 207 Basic Metal Framing (1.5)
1 hour lecture-1½ hours laboratory
Note: May be taken 2 times
An in-depth study of basic material identification, print layout, framing, drywall applications and proper trim applications for the Drywall/Lath industry. Safety, math and blueprint reading will be covered.

AP DL 208 Framing Suspended Ceilings (1.5)
1 hour lecture-1½ hours laboratory
Note: May be taken 2 times
This course is designed to provide related classroom instruction with the technical skills and knowledge to successfully frame any suspended ceiling in drywall and lath. Related hand and power tool safety, math and blueprint reading will be covered.

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.

AP DL 209 Framing Curves and Arches (1.5)
1 hour lecture-1½ hours laboratory
Note: May be taken 2 times
This course is designed to teach curves and arches, barrel ceilings, radius walls and soffits. Related hand and power tool safety, math and blueprint reading will be covered.

AP DL 210 Light Gage Welding - AWS (1.5)
1 hour lecture-1½ hours laboratory
Note: May be taken 2 times
This course is designed to teach the practical skills needed for the arc welding processes and applications. Students will have the practical skills to successfully pass the AWS light gage certification. Related safety, codes and materials will be covered.

AP DL 211 Light Gage - L.A. City Certificate (1.5)
1 hour lecture-1½ hours laboratory
Note: May be taken 2 times
Assists students in preparing for the Los Angeles City Light Gage Welding Certification. Written and practical skills of the test will be demonstrated and discussed in order to associate the student with the working knowledge necessary to successfully achieve a Los Angeles City Light Gage Welding Certification. Related safety, codes and materials will be covered.

AP DL 212 Basic Hand Finishing (1.5)
1 hour lecture-1½ hours laboratory
Note: May be taken 2 times
This course is designed to give the apprentice a full perspective of the finish trade. Blueprint and finish schedules will be covered. The basic gypsum board applications and finish trims will be explored. The various tools used from basic hand tools such as the "bazooka", boxes and nail spotters will also be covered. Related safety and math will be included.

AP DL 213 Drywall Acoustical Ceilings (1.5)
1 hour lecture-1½ hours laboratory
Note: May be taken 2 times
This course is designed to provide the apprentice with the knowledge and application of Acoustical ceilings, seismic codes and the supporting theory. Wall molds and trims, and ceiling layouts will be covered. Blueprints reading will cover terms, symbols and definitions for both commercial and residential projects. Related safety, math, safety codes and materials will be covered.

AP DL 214 Door/Door Frames (1.5)
1 hour lecture-1½ hours laboratory
Note: May be taken 2 times
Introduction to the basic installation of door frames and various types of doors. Lock sets, closures, hinges, panic hardware, and door sweeps will be discussed and demonstrated.

AP DL 215 Exterior Insulation Finish Systems (1.5)
1 hour lecture-1½ hours laboratory
Note: Cross listed as AP PL 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 DL 216 Firestopping Procedures (1.5)
1 hour lecture-1½ hours laboratory
Note: Cross listed as AP PL 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 DL 217 Free-Form Lathing (1.5)
1 hour lecture-1½ hours laboratory
Note: May be taken 2 times
Introduction to the techniques and skills needed for construction of freeform lath projects. Layout techniques using grids and projection overlay will be presented. Methods for bending and shaping of rebar and pencil rod, lath handling and tying along with welding and cutting techniques will be demonstrated and applied.

AP DL 218 Machine Taping (1.5)
1 hour lecture-1½ hours laboratory
Note: May be taken 2 times
Advanced instruction in blueprints and finish schedules and machine parts identification as well as proper use, assembly and breakdown of tools.

AP DL 219 Hand Taping (1.5)
1 hour lecture-1½ hours laboratory
Note: May be taken 2 times
Instruction in blueprints, specifications and finish schedules, taping techniques, trade terminology and sequences of operations for hand taping.

AP DL 220 Gypsum Board Application and Finish Trim (1.5)
1 hour lecture-1½ hours laboratory
Note: May be taken 2 times
Instruction in the basics of gypsum board application and finish trims.

AP DL 221 Advanced Hand Tool Finishing (1.5)
1 hour lecture-1½ hours laboratory
Note: May be taken 2 times
This course will give more in depth instruction in hand tool use. The different operations, phases and materials to be used in order to have information of what a finished product should look like.

AP DL 222 Advanced Machine Tool Finishing (1.5)
1 hour lecture-1½ hours laboratory
Note: May be taken 2 times
Instruction in the proper methods and sequences of the "bazooka," flat boxes, nail spotters and angle boxes.

Electrician (AP E)

Applications for Riverside/San Bernardino/Mono/Inyo counties should apply to the Riverside and San Bernardino Joint Electrical Apprenticeship Training Committees, 1855 Business Center Drive, San Bernardino, CA 92408. Telephone: (909) 890-1703.

A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
AP E 101	Electrical Trade/Industry/DC/Conduit	4
AP E 102	Electrical Theory/Practice/Blueprint Reading	4
AP E 103	Inductance/Capacitance Theory	4
AP E 104	Transformers/Code Calculations/Conduit	4
AP E 105	Electronic/Industrial Blueprints	4
AP E 106	Grounding/Electrical Services/Connection	4
AP E 107	Motor Control/Pilot Devices/Starters	4
AP E 108	Digital Electronics	4
AP E 109	Mgmt/Alarms/Testing/Wiring	4
AP E 110	Programmable Logic Controllers	4
AP WE 113	Electrician Work Experience	16
TOTAL UNITS		**56**

COURSE OFFERINGS

AP E 101 Introduction to the Electrical Trade and Industry, DC Theory and Conduit Bending (4)
3 hours lecture-3 hours laboratory
Prerequisite: Completion of the following: (1) One semester of Algebra 1 with a grade of 'C' or better; (2) Designated tests with a passing grade determined by the appropriate committee; (3) Indentured apprentice to the San Diego Electrical Joint Apprenticeship and Training Committee or the Riverside and San Bernardino Joint Electrical Apprenticeship Training Committee
Note: May be taken 2 times
Orientation to the electrical industry; introduction to the electrical code; fundamentals of wiring methods, fastening devices, electrical conductors, circuits, and voltage.