COURSE OFFERINGS

**AP SC 101   Introduction to the Sound and
                     Communication Trade Industry   (4)**
3 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in MATH 50. Completion of designated tests
with a passing grade determined by the appropriate committee. Indentured Appren-
tice to the Riverside, San Bernardino, Mono, and Inyo Counties Sound and Communi-
cations Joint Apprenticeship Committee or the San Diego Sound & Communications
Joint Apprenticeship Committee.*
Note: *May be taken 2 times*
Introduction to the sound and communication industry, electrical code, funda-
mentals of wiring methods, fastening devices, electrical conductors, circuits,
voltage and data communication.

AP SC 102   Electrical Theory and Practices DC   (4)
3 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in AP SC 101*
Note: *May be taken 2 times*
Study of floor and plot plans, basic blueprint reading and circuit drawing, theory
of magnetism, DC and AC generators, motors and transformers, on-the-job safety,
first aid, electrical code, telephony and data communications.

AP SC 103   Electrical Theory and Practices AC   (4)
3 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in AP SC 102*
Note: *May be taken 2 times*
Study of apprenticeship, electrical inductance, capacitance and reactance, includ-
ing grounded conductors, branch circuits, transformer principles, RCL circuits
and filters.

AP SC 104   Semiconductor Electronics   (4)
3 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in AP SC 103*
Note: *May be taken 2 times*
Study of solid-state electronic theory and components, diodes, transistors, SCR,
triacs, diacs, IC amplifiers and op-amps.

**AP SC 105   Introduction to Digital Electronics and
                     Signaling Devices   (4)**
3 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in AP SC 104*
Note: *May be taken 2 times*
Introduction to digital electronic technology and electronic equipment. Instruc-
tion includes basic digital systems, binary and decimal numbering systems, de-
cision-making logic circuits, Boolean Algebra, flip-flops, counters, shift registers,
encoders, decoders, ROMs, DC to AC converters and organization of these com-
ponent blocks to accomplish manipulation of data.

AP SC 106   Management/Alarms/Codes/Circuits   (4)
3 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in AP SC 105*
Note: *May be taken 2 times*
Introduction to management, installation of security and fire alarm systems, the
National Electrical Code as it relates to alarm installation and circuits as applied
to alarm systems.

AP SC 107   Life Safety and Security System Applications   (4)
3 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in AP SC 106*
Note: *May be taken 2 times*
Continuation of digital theory studies. Instruction expands coverage
of Life Safety Systems, and introduces the theory and application of Nurse Call
Systems and Security Systems with an emphasis on closed circuit television
(CCTV) installations.

AP SC 108   Specialized Systems and Supervision Techniques   (4)
3 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in AP SC 107*
Note: *May be taken 2 times*
Study of specialized building systems including cable television systems (CATV),

master antenna systems (MATV), and building automation systems. Training will
cover aspects of job administration including personal computer use, job estimat-
ing, customer relations, and building system startup procedures.

**AP SC 197   Sound and Communication Systems
                     Installer 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 Riverside, San Bernardino, Mono, and
Inyo Counties Sound and Communications Joint Apprenticeship Committee or the San
Diego Sound & Communications Joint Apprenticeship Committee.*
Note: *May be taken 4 times*
Topics in Sound and Communication Systems Installer. See Class Schedule for
specific topic covered. Course title will designate subject covered.

Work Experience (AP WE)

AP WE 110   Sheet Metal Work Experience   (4)
12 hours laboratory
Prerequisite: *Indentured apprentice to a designated Joint Apprenticeship and Train-
ing Committee*
Note: *Pass/No Pass grading only; may be taken 4 times*
Supervised on-the-job training in the Sheet Metal Trade.

AP WE 111   Carpentry Work Experience   (4)
12 hours laboratory
Prerequisite: *Indentured apprentice to a designated Joint Apprenticeship and Train-
ing Committee*
Note: *May be taken 4 times; Pass/No Pass grading only*
Supervised on-the-job training in the Carpentry trade.

AP WE 112   Drywall/Acoustical Work Experience   (4)
12 hours laboratory
Prerequisite: *Indentured apprentice to a designated Joint Apprenticeship and Train-
ing Committee*
Note: *May be taken 4 times; Pass/No Pass grading only*
Supervised on-the-job training in the Interior Systems Trade.

AP WE 113   Electrician Work Experience   (4)
12 hours laboratory
Prerequisite: *Indentured apprentice to a designated Joint Apprenticeship and Train-
ing Committee*
Note: *May be taken 4 times; Pass/No Pass grading only*
Supervised on-the-job training in the Electrician trade.

AP WE 114   Plasterer Work Experience   (4)
12 hours laboratory
Prerequisite: *Indentured apprentice to a designated Joint Apprenticeship and Train-
ing Committee*
Note: *May be taken 4 times; Pass/No Pass grading only*
Supervised on-the-job training in the Interior Systems Trade

Arabic (ARAB)

Contact the World Languages Department for further information.
(760) 744-1150, ext. 2390
Office: F-5

COURSE OFFERINGS

ARAB 101A Arabic IA   (3)
3 hours lecture
Note: *Covers the first half of first semester Arabic.*
Transfer acceptability: *CSU; UC*
Arabic 101A and 101B are equivalent to the first semester of an elementary level
course in Arabic. This elementary level course is a study of the Arabic language
and Arabic-speaking cultures, with emphasis on the development of communica-
tive skills and basic structures. This beginning-level course is for students with no
previous coursework in Arabic.

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.

ARAB 101B Arabic IB (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in ARAB 101A or one year of high school Arabic*
Note: *Covers the second half of first semester Arabic.*
Transfer acceptability: *CSU; UC*
Arabic 101A and 101B are equivalent to the first semester of an elementary level course in Arabic. ARAB 101B is a continuation of ARAB 101A. This elementary level course is a study of the Arabic language and Arabic-speaking cultures, with emphasis on the development of communicative skills and basic structures.

ARAB 102A Arabic IIA (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in ARAB 101B or two years of high school Arabic*
Note: *Covers the first half of second semester Arabic.*
Transfer acceptability: *CSU; UC*
Arabic 102A and 102B are equivalent to the second semester of an elementary level course in Arabic. This elementary level course is a study of the Arabic language and Arabic-speaking cultures, with emphasis on the development of communicative skills and basic structures.

ARAB 102B Arabic IIB (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in ARAB 102A or two years of high school Arabic*
Note: *Covers the second half of second semester Arabic.*
Transfer acceptability: *CSU; UC*
Arabic 102A and 102B are equivalent to the second semester of an elementary course in Arabic. Arabic 102B is a continuation of Arabic 102A. This elementary level course is a study of the Arabic language and Arabic-speaking cultures, with emphasis on the development of communicative skills and basic structures.

ARAB 201A Arabic IIIA (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in ARAB 102B or three years of high school Arabic*
Note: *Covers the first half of third semester Arabic.*
Transfer acceptability: *CSU; UC*
Arabic 201A and 201B are equivalent to the third semester of an intermediate course in Arabic. This intermediate level course is a study of the Arabic language and Arabic-speaking cultures, focusing on intermediate level structures and readings of culturally relevant authentic materials. Emphasis is on developing oral, listening, reading and writing skills in order to acquire proficiency in Arabic. Class is largely conducted in Arabic.

ARAB 201B Arabic IIIB (3)
3 hours lecture
Prerequisite: *A minimum grade of 'C' in ARAB 201A*
Note: *Covers the second half of third semester Arabic.*
Transfer acceptability: *CSU; UC*
Arabic 201A and 201B are equivalent to the third semester of an intermediate level course in Arabic. ARAB 201B is a continuation of ARAB 201A. This intermediate level course is a study of the Arabic language and Arabic-speaking cultures, focusing on intermediate level structures and readings of culturally relevant authentic materials. Emphasis is on developing oral, listening, reading and writing skills in order to acquire proficiency in Arabic. Class is largely conducted in Arabic.

Architecture (ARCH)

Contact the Design and Consumer Education Department for further information.
(760) 744-1150, ext. 2349
Office: P-8A

Associate in Arts Degrees -
AA Degree requirements are listed in Section 6 (green pages).
• Architectural Drafting

Certificates of Achievement -
• Architectural Drafting
• Eco-Building Professional

At the time of publication of this catalog, Palomar College was awaiting approval by the California Community Colleges Chancellor's Office for a proposed Architecture Associate in Arts Degree. Should approval be granted, updated information will be announced on the Palomar College catalog addendum at http:www.palomar.edu/catalog/2011/

PROGRAMS OF STUDY

Architectural Drafting

Prepares students for employment as a design/production drafter in the field of architecture.

A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
ARCH 105	Basic Architectural Drafting	3
DT/ARCH 125	AutoCAD Introduction to Computer Aided Drafting	3
ARCH 135	Architectural Materials and Methods of Construction	3
ARCH 144	Architectural Drawing and Color	4
ARCH 145	Architectural Delineation and Pictorial Drawing	4
ARCH 155	Architectural Theory	3
ARCH 160	Environmental Architecture and Design	4
ARCH 200	Advanced Computer Aided Architectural Drafting	4
DT/ARCH 202	Introduction to Revit Architecture	3

Electives (Select 9 units)		
ARCH 120	Architectural History	3
ARCH 121	Multicultural Architectural History	3
CSIT 120	Computer Applications	3
CE 100	Cooperative Education	1 - 4
DT 126	AutoCAD Intermediate Computer Aided Drafting	3
DT 127	AutoCAD Customization	2
MATH 115	Trigonometry	3
TOTAL UNITS		**40**

Eco-Building Professional

This program is designed to provide the knowledge and skills needed to promote energy and resource efficient building practices through current code changes and new tax cost payback. Graduates will be prepared for numerous jobs within the deconstruction and remodel industries and would have skills needed by builders, contractors, architects or designers seeking assessment of current construction methods for framing, water use and LEED environmental compliance.

CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
ARCH 135	Architectural Materials and Methods of Construction	3
ARCH 160	Environmental Architecture and Design	4
ARCH 216	Architectural Design Fundamentals II	5
ID 105	Materials and Resources	3
ID 130	Light and Color	3
TOTAL UNITS		**18**

Recommended Electives: GEOG 120, MATH 60

COURSE OFFERINGS

ARCH 105   Basic Architectural Drafting (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: *CSU*
An introduction to architectural drafting including symbols, lettering, construction principles, details, and codes as related to the development of working drawings for simple residential design.

ARCH 106   Intermediate Architectural Drafting (3)