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)

1½ hours lecture - 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in ARCH 105*
Transfer acceptability: *CSU*
A continued study in residential design including study in details, materials, elevations, specifications, electrical, and plumbing.

ARCH 120   Architectural History   (3)
3 hours lecture
Transfer acceptability: *CSU; UC – ARCH 120 and 121 combined: maximum credit, one course*
An overview of architectural history beginning with prehistoric cultures and continuing through Egyptian and Mesopotamia, Aegean and Greek, Roman and Byzantine, Romanesque and Gothic, and the Renaissance and Baroque periods. The second half of the course focuses on the development of modern western architecture.

ARCH 121   Multicultural Architectural History   (3)
3 hours lecture
Transfer acceptability: *CSU; UC – ARCH 120 and 121 combined: maximum credit, one course*
A comparative study of the architecture of cultures outside the Western mainstream including: Pre-Columbian America; India and Southeast Asia, China and Japan, Russia and Eastern Europe; and the Moslem Empires. Special emphasis on the cultural forces and conditions which shaped and evolved the architecture.

**ARCH 125   AutoCAD Introduction to
                          Computer Aided Drafting   (3)**
1½ hours lecture - 4½ hours laboratory
Note: *Cross listed as as DT 125; may be taken 2 times; maximum of 4 completions in any combination of ARCH/DT 125, DT 126 and DT 127.*
Transfer acceptability: *CSU; UC – ARCH 125 and 126 combined: maximum credit, one course*
An introduction to computer aided drafting using AutoCAD software and IBM compatible computers. Hands on experience with AutoCAD to include the following operations: preparing and editing drawings, storage and retrieval of drawings, and production of commercial quality drawings on a plotter. Introductory computer terminology and techniques in Windows.

ARCH 129   Basic Architectural Drafting with Auto CAD   (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: *CSU*
Basic fundamentals of architectural drafting using AutoCAD software to include the following drawings: plot plans, floor plans, foundation plans, framing plans, sections, elevations, and basic construction details.

**ARCH 135   Architectural Materials and
                          Methods of Construction   (3)**
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: *CSU*
An introduction to the use and application of building construction materials and processes.

ARCH 144   Architectural Drawing and Color   (4)
3 hours lecture - 3 hours laboratory
Note: *May be taken 2 times*
Transfer acceptability: *CSU; UC - ARCH 144, 145, 160, 215, 216 and ART 102, 103 combined: maximum credit, 18 units*
An introduction to basic architectural drawing and design that explores the theory and application of perspective, shades and shadows, and color to architectural sketching, drawing, and model building. Includes a basic architectural design problem exploring the concept of architectural complexity.

ARCH 145   Architectural Delineation and Pictorial Drawing   (4)
3 hours lecture - 3 hours laboratory
Recommended preparation: *DT/ARCH 125*
Note: *May not be taken for Pass/No Pass grading; may be taken 2 times*
Transfer acceptability: *CSU; UC - ARCH 144, 145, 160, 215, 216 and ART 102, 103 combined: maximum credit, 18 units*
Principles and techniques of pictorial drawing in architecture including isometric,

oblique, and perspective projection; shades and shadows; and presentation graphics. The three dimensional and shading capabilities of AutoCAD will be utilized in coordination with the use of Photoshop software as a color rendering tool. Abstract architectural design concepts will also be explored.

ARCH 155   Architectural Theory   (3)
3 hours lecture
Transfer acceptability: *CSU*
A study and analysis of the concepts and philosophies that have influenced or been the basis of architectural form from the Classical period to the present. The analysis will include the use of drawing and model-building tools to gain an understanding of these principles applied to specific structures throughout history.

ARCH 160   Environmental Architecture and Design   (4)
3 hours lecture - 3 hours laboratory
Note: *May be taken 3 times. May not be taken for Pass/No Pass grading*
Transfer acceptability: *CSU; UC - ARCH 144, 145, 160, 215, 216 and ART 102, 103 combined: maximum credit, 18 units*
 An introduction to the theory and application of bio-climate adaptive architectural design in small scale buildings including effective energy use, solar geometry, environmental measurements, heat flow, heat transfer, and thermal masses. Emphasis is on design and construction principles for lighting, passive shading, heating, cooling and ventilating envelope load-dominated buildings. This is a service learning course. Students must be involved in relevant community service as a part of this course work. Students will conduct research and work collaboratively towards a solution for community development.

ARCH 196 Special Problems in Architecture   (1, 2, 3)
½, 1, or 1½ hours lecture - 1½, 3, or 4½ hours laboratory
Note: *May be taken 4 times; may note be taken for Pass/No Pass grading*
Transfer acceptability: *CSU; UC - credit determined by UC upon review of course syllabus*
Designed to enrich the student's experience within the Architecture program and is of a research or special project nature. Content to be determined by the need of the student under signed contract with the instructor.

**ARCH 200   Advanced Computer Aided
                          Architectural Drafting   (4)**
2 hours lecture - 6 hours laboratory
Prerequisite: *A minimum grade of 'C' in ID 150, or ARCH/DT 125, and a minimum grade of 'C' in ARCH 105, or concurrent enrollment in ARCH 105*
Note: *May be taken 2 times*
Transfer acceptability: *CSU*
Advanced techniques in the operation of AutoCAD software for architectural applications. Preparation of various architectural working drawings from a preliminary residential design.

ARCH 202   Introduction to Revit Architecture   (3)
1½ hours lecture - 4½ hours laboratory
Recommended preparation: *ARCH 200*
Note: *Cross listed as as DT 202. May be taken 2 times*
Transfer acceptability: *CSU*
Preparation of basic 3D architectural information models and (BIM). Manipulation for preparation of individual architectural working drawings, including: dimensioned floor plans, building sections, elevations, etc. using Revit software.

ARCH 215   Architectural Design Fundamentals I   (5)
2½ hours lecture - 7½ hours laboratory
Recommended preparation: *ARCH 144 and 145*
Transfer acceptability: *CSU; UC - ARCH 144, 145, 160, 215, 216 and ART 102, 103 combined: maximum credit, 18 units*
Development of problem solving and analytical skills in architectural design involving consideration of factors of architectural form in two- and three-dimensional compositions, and design concepts and applications.

ARCH 216   Architectural Design Fundamentals II   (5)
2½ hours lecture - 7½ hours laboratory
Recommended preparation: *ARCH 145 and 215*
Transfer acceptability: *CSU; UC - ARCH 144, 145, 160, 215, 216 and ART 102,*

103 combined: maximum credit, 18 units
Complex architectural problems involving consideration of factors of structure, site, and climate.

Art (ART)

Contact the Art Department for further information.
(760) 744-1150, ext. 2302
Office: D-14

Associate in Arts Degrees -
AA Degree requirements are listed in Section 6 (green pages).
• Graphic Design
• Illustration
• Interactive Media Design - Emphasis in 3D Modeling and Animation
• Interactive Media Design - Emphasis in Multimedia Design
• Pictorial Arts - Emphasis in Painting
• Pictorial Arts - Emphasis in Printmaking
• Three-Dimensional Arts - Emphasis in Ceramics
• Three-Dimensional Arts - Emphasis in Crafts
• Three-Dimensional Arts - Emphasis in Glass
• Three-Dimensional Arts - Emphasis in Jewelry and Metalsmithing
• Three-Dimensional Arts - Emphasis in Sculpture

Certificates of Achievement -
Certificate of Achievement requirements are listed in Section 6 (green pages).
• Interactive Media Design - Emphasis in 3D Modeling and Animation
• Interactive Media Design - Emphasis in Multimedia Design

Certificates of Proficiency -
Certificate of Proficiency requirements are listed in Section 6 (green pages).
• Digital Animation, Compositing, and Music

PROGRAMS OF STUDY

Digital Animation, Compositing, and Music

This program is directed at the digital design and implementation of 3D animations, graphic compositing and music.

CERTIFICATE OF PROFICIENCY

Program Requirements (Select five courses)		Units
ARTI 246	Digital 3D Design and Modeling	3
ARTI 247	Digital 3D Design and Animation	3
GCMW 204	Motion Graphics for Multimedia	4
GCMW 206	Motion Graphics Production and Compositing	4
MUS 180	Computer Music I	3
MUS 184	Electronic Ensemble	3
TOTAL UNITS		**16-17**

Digital Animation, Compositing, and Music Certificate of Proficiency is also listed in Graphic Communications - Multimedia and Web, and in Music.

Graphic Design

Prepares students in basic skills necessary to prepare a portfolio for application to Graphic Design, Environmental Design, and Packaging Design programs at 4 year schools. In addition, develops creative design ability and conceptual skills in the printed media, motion graphics, and web design.

A.A. DEGREE MAJOR

Program Requirements		Units
ART 104	Design and Composition	3
ART 166	History of Art II	3
ART 200	Color/Light and Theory	3
ARTD 100	Graphic Design I	3
ARTD 150	Digital Concepts and Techniques in Art	3
ARTD 200	Graphic Design II- Lettering and Layout	3

ARTD 210	Typography Design	3
ARTD 220	Motion Design	3
ARTD 250	New Media Studio	3
ARTI 100	Introduction to Illustration	3
ARTI 246	Digital 3D Design and Modeling	3
ARTI 247	Digital 3D Design and Animation	3
BUS 150	Advertising	3
PHOT 100	Elementary Photography	3
Final Art Portfolio Review		0

Electives (Select 6-7 units)		
ART 120	Life Drawing and Composition I	3
ART 296	Special Projects	1 - 3
ARTI 220	Illustration II, Digital Techniques	3
ARTI 248	Digital 3D Design and Sculpture	3
GCIP 140	Digital Imaging/Photoshop I	4
GCIP 152	Digital Publishing/Illustrator I	4
RTV 275	Avid Editing for Television and Film	3
BMGT 105	Small Business Management	3
MUS 180	Computer Music I	3
MUS 181	Computer Music II	3
	or	
MUS 184	Electronic Ensemble	3
CE 100	Cooperative Education	1 - 4
TOTAL UNITS		**48 - 49**

Graphic Design A.A. Degree Major is also listed in Art - Design.

Illustration

Provides students with specific skills necessary to prepare a portfolio for application to Illustration programs at 4-year schools. In addition develops creative conceptual and Illustrative skills for use in advertising and story Illustration.

A.A. DEGREE MAJOR

Program Requirements		Units
ART 104	Design and Composition	3
ART 120	Life Drawing and Composition I	3
ART 125	Head Drawing	3
ART 166	History of Art II	3
ART 200	Color/Light and Theory	3
ART 220 or	Oil Painting I	
ART 225	Acrylic Painting I	3
ARTD 150	Digital Concepts and Techniques in Art	3
ARTI 100	Introduction to Illustration	3
ARTI 200	Rendering	3
ARTI 210	Illustration I	3
ARTI 220	Illustration II, Digital Techniques	3
ARTI 230	Illustration III, Experimental Techniques	3
ARTI 246	Digital 3D Design and Modeling	3
ARTI 247	Digital 3D Design and Animation	3
	Final Art Portfolio Review	0

Electives (Select 3 units)		
ART 121	Life Drawing and Composition II	3
ART 197B	Topics in Art – Painting	3
ART 197F	Topics in Art – Drawing	.5-3
ART 235	Watercolor Painting I	3
ART 296	Special Projects	1, 2, 3
ARTD 100	Graphic Design I	3
ARTD 220	Motion Design	3
ARTD 250	New Media Studio	3
BUS 150	Advertising	3
BMGT 105	Small Business Management	3
PHOT 100	Elementary Photography	3
CE 100	Cooperative Education	1, 2, 3, 4
TOTAL UNITS		**45**

Illustration A.A. Degree Major is also listed in Artl – Illustration.