

AP SC 702 Electrical Theory and Practices DC (4)

3 hours lecture - 3 hours laboratory

Prerequisite: A minimum grade of 'C' in AP SC 701

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 703 Electrical Theory and Practices AC (4)

3 hours lecture - 3 hours laboratory

Prerequisite: A minimum grade of 'C' in AP SC 702

Study of apprenticeship, electrical inductance, capacitance and reactance, including grounded conductors, branch circuits, transformer principles, RCL circuits and filters.

AP SC 704 Semiconductor Electronics (4)

3 hours lecture - 3 hours laboratory

Study of solid-state electronic theory and components, diodes, transistors, SCR, triacs, diacs, IC amplifiers and op-amps.

AP SC 705 Introduction to Digital Electronics and Signaling Devices (4)

3 hours lecture - 3 hours laboratory

Introduction to digital electronic technology and electronic equipment. Instruction includes basic digital systems, binary and decimal numbering systems, decision-making logic circuits, Boolean Algebra, flip-flops, counters, shift registers, encoders, decoders, ROMs, DC to AC converters and organization of these component blocks to accomplish manipulation of data.

AP SC 706 Management/Alarms/Codes/Circuits (4)

3 hours lecture - 3 hours laboratory

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 707 Life Safety and Security System Applications (4)

3 hours lecture - 3 hours laboratory

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 708 Specialized Systems and Supervision Techniques (4)

3 hours lecture - 3 hours laboratory

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 estimating, customer relations, and building system startup procedures.

AP SC 797 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.

Topics in Sound and Communication Systems Installer. See Class Schedule for specific topic covered. Course title will designate subject covered.

Work Experience (AP WE)

Students may earn a maximum of 16 units in AP Work Experience.

AP WE 710 Sheet Metal Work Experience (4)

12 hours laboratory

Note: Pass/No Pass grading only

Supervised on-the-job training in the Sheet Metal Trade.

AP WE 711 Carpentry Work Experience (4)

12 hours laboratory

Note: Pass/No Pass grading only

Supervised on-the-job training in the Carpentry trade.

AP WE 712 Drywall/Acoustical Work Experience (4)

12 hours laboratory

Note: Pass/No Pass grading only

Supervised on-the-job training in the Interior Systems Trade.

AP WE 713 Electrician Work Experience (4)

12 hours laboratory

Note: Pass/No Pass grading only

Supervised on-the-job training in the Electrician trade.

Arabic (ARAB)

Contact the World Languages Department for further information.

(760) 744-1150, ext. 2390

Office: H-201

COURSE OFFERINGS**ARAB 101 Arabic I (5)**

5 hours lecture - 1 hour laboratory

Note: Not open to students with credit for ARAB 101B.**Transfer acceptability:** CSU; UC

This course is the first semester of 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. Course combines in-class instruction and practice with self-paced study in the World Languages Laboratory. This beginning-level course is for students with no previous coursework in Arabic.

ARAB 101A Arabic IA (3)

3 hours lecture

Note: Covers the first half of first semester Arabic; not open to students with credit for ARAB 101**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 communicative skills and basic structures. This beginning-level course is for students with no previous coursework in Arabic.

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; not open to students with credit for ARAB 101.**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 102 Arabic II (5)

5 hours lecture - 1 hour laboratory

Prerequisite: A minimum grade of 'C' in ARAB 101 or two years of high school Arabic**Transfer acceptability:** CSU; UC**Note:** Not open to students with credit for ARAB 102B

This course is the second semester of Arabic. This elementary level course is a study of the Arabic language and Arabic-speaking cultures, with continued emphasis on the development of communicative skills and basic structures. Course combines in-class instruction and practice with self-paced study in the World Languages Laboratory.

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; not open to students with credit for ARAB 102**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; not open to students with credit for ARAB 102**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 201 Arabic III (5)

5 hours lecture - 1 hour laboratory

Prerequisite: A minimum grade of 'C' in ARAB 102 or three years of high school Arabic**Transfer acceptability:** CSU; UC**Note:** Not open to students with credit for ARAB 201B

This course is the third semester of 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. Course combines in-class instruction with self-paced study in the World Languages Laboratory. Class is largely conducted in Arabic.

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; not open to students with credit for ARAB 201**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; not open to students with credit for ARAB 201**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 Science Degrees -

AS Degree requirements are listed in Section 6 (green pages).

- Architectural Drafting
- Architecture

Certificates of Achievement -

- Architectural Drafting
- Architecture
- Eco-Building Professional

PROGRAMS OF STUDY**Architecture**

This coursework prepares students for transfer into a university architectural program. Emphasis is on current architectural and construction practices, fundamental design skills, sustainable building guidelines, and transfer preparation. Students should review specific course requirements and transfer agreements with their architectural instructor and transfer counselor. General education course requirements such as mathematics, physics, etc. will vary depending upon the specific university program.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
ARCH 105	Basic Architectural Drafting	3
ARCH 120	Architectural History	3
	or	
ARCH 121	Multicultural Architectural History	3
ARCH 135	Architectural Materials and Methods of Construction	4
ARCH 144	Architectural Drawing and Color	4
ARCH 145	Architectural Delineation and Pictorial Drawing	4
ARCH 155	Architectural Theory	3
ARCH 215	Architectural Design Fundamentals I	3
ARCH 216	Architectural Design Fundamentals II	5

TOTAL UNITS 29

Students should review specific course requirements and transfer agreements with their architectural instructor and transfer counselor. General education course requirements such as mathematics, physics, etc. will vary depending upon the specific university program.

Architectural Drafting

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

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
ARCH 105	Basic Architectural Drafting	3
ARCH 135	Architectural Materials and Methods of Construction	4
ARCH 144	Architectural Drawing and Color	4
ARCH 145	Architectural Delineation and Pictorial Drawing	4
ARCH 150/ ID 150	Computer Aided Drafting for Designers (CADD)	3
ARCH 160	Environmental Architecture and Design	4
ARCH 200	Advanced Computer Aided Architectural Drafting	4
ARCH 202	Introduction to Revit Architecture	3

TOTAL UNITS 29**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.