#### **AP SC 102 Electrical Theory and Practices DC**

3 hours lecture-3 hours laboratory

Prerequisite: 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: AP SC 102 Note: May be taken 2 times

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

#### **AP SC 104 Semiconductor Electronics**

(4)

(4)

(4)

(4)

3 hours lecture-3 hours laboratory

Prerequisite: 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

3 hours lecture-3 hours laboratory

Prerequisite: AP SC 104 Note: May be taken 2 times

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.

## Management/Alarms/Codes/Circuits **AP SC 106**

3 hours lecture-3 hours laboratory

Prerequisite: 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** (4) Life Safety and Security System Applications

3 hours lecture-3 hours laboratory

Prerequisite: 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: 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 estimating, customer relations, and building system startup procedures.

### **AP SC 197 Sound and Communication Systems** (.5-4)**Installer Topics**

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 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)

## APWE II0 **Sheet Metal Work Experience**

(4)

(4)

12 hours laboratory

Prerequisite: Indentured apprentice to a designated Joint Apprenticeship and Training Committee

Note: Credit/No Credit grading only; may be taken 4 times Supervised on-the-job training in the Sheet Metal Trade.

# **APWEIII** Carpentry Work Experience

12 hours laboratory

Prerequisite: Indentured apprentice to a designated Joint Apprenticeship and Training Committee

Note: May be taken 4 times; Credit/No Credit grading only Supervised on-the-job training in the Carpentry trade.

#### APWE 112 **Drywall/Acoustical Work Experience** (4)

12 hours laboratory

Prerequisite: Indentured apprentice to a designated Joint Apprenticeship and Training Committee

Note: May be taken 4 times; Credit/No Credit grading only Supervised on-the-job training in the Interior Systems Trade.

#### APWE 113 **Electrician Work Experience** (4)

12 hours laboratory

Prerequisite: Indentured apprentice to a designated Joint Apprenticeship and Training Committee

Note: May be taken 4 times; Credit/No Credit grading only Supervised on-the-job training in the Electrician trade.

#### APWE 114 **Plasterer Work Experience** (4)

12 hours laboratory

Prerequisite: Indentured apprentice to a designated Joint Apprenticeship and Training Committee

Note: May be taken 4 times; Credit No Credit Grading Only Supervised on-the-job training in the Interior Systems Trade.

# Arabic (ARAB)

Contact the Foreign 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 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: 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.