

AP SC 108	Specialized Systems and Supervision Techniques	4
APWE 113	Electrician Work Experience	16
<b>TOTAL UNITS</b>		<b>48</b>

### 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 Apprenticeship 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 2 times

Introduction to the sound and communication industry, electrical code, fundamentals 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, including 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. 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 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 estimating, 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, 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)

#### AP WE 110 Sheet Metal Work Experience (4)

12 hours laboratory

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

**Note:** May be taken 4 times; Pass/No Pass grading only

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