Note: *May be taken 4 times*
Study of digital logic concepts and their real-world application. Identification, selection, and installation of electrical conductors.

ELTR 106 Overcurrent Protection, Lighting Systems, Basic Blueprints and Specifications, and National Electric Code (3.5)
3 hours lecture- 1½ hours laboratory
Recommended preparation: *ELTR 105*
Note: *May be taken 4 times*
Study of blueprints and specifications. Application of the National Electric Code to cover current protection, panelboards, and lighting systems.

ELTR 107 Grounding Systems, Advanced Blueprints and Specifications, Motor Design and Installation, and National Electric Code (3.5)
3 hours lecture- 1½ hours laboratory
Recommended preparation: *ELTR 106*
Note: *May be taken 4 times*
Advanced concepts for blueprints and specifications. Study of motor design and application and National Electric Code concepts.

ELTR 108 Motor Control Principles, Generators and Power Supplies, and National Electric Code (3.5)
3 hours lecture- 1½ hours laboratory
Recommended preparation: *ELTR 107*
Note: *May be taken 4 times*
Addresses techniques for controlling AC and DC motors. Students examine conventional and breaking technologies for power generation.

ELTR 109 Transformer Theory, Leadership and Management, and Test Equipment (3.5)
3 hours lecture- 1½ hours laboratory
Recommended preparation: *ELTR 108*
Note: *May be taken 4 times*
Explores the theory and field application of transformers. Electrical test equipment operation and use will be addressed. Includes management and leadership principles for supervisors. Special equipment for security systems is discussed.

ELTR 110 Specialty Systems (3.5)
3 hours lecture- 1½ hours laboratory
Recommended preparation: *ELTR 109*
Note: *May be taken 4 times*
Examines specialty electrical systems commonly found in building construction. Includes fire alarm systems, closed-circuit television (CCTV) systems, telephone systems, cable television (CATV & MATV) systems, local area networks (LANs), fiber optic data systems, heating and air conditioning control systems, and lightning protection systems.

Electro-Mechanical Equipment Technician (EMET)

Contact Occupational & Noncredit Programs for further information.
(760) 744-1150, ext. 2284
Office: AA-138

Certificates of Achievement -
Certificate of Achievement requirements are listed in Section 6 (green pages).
• Mail Processing Equipment Mechanic

Certificates of Proficiency -
Certificate of Proficiency requirements are listed in Section 6 (green pages).
• Maintenance Mechanic

PROGRAMS OF STUDY

Mail Processing Equipment Mechanic

This certificate will provide the student with the necessary knowledge, skills and abilities to perform at the level of Mail Processing Equipment Mechanic level 8. Students will learn to maintain the electrical and mechanical components for various mail processing eqiuipment.

CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
CI 105	Electrical Codes I	3
CI 106	Electrical Codes II	3
DMT 81	Basic Hydraulics	4
EMET 50	Basic Mechanics for Servicing Electro-Mechanical Equip.	3
EMET 51	Mail Processing Equipment Mechanic Exam Preparation	3
IT/WELD 108	Technical Mathematics	3
TOTAL UNITS		**19**

Maintenance Mechanic

Specifically for individual employed or seeking employment in a medium to large distribution center and to prepare candidates to pass the mail processing equipment (EMET) technician's examination.

CERTIFICATE OF PROFICIENCY

Program Requirements		Units
EMET 50	Basic Mechanics for Servicing Electro-Mechanical Equip.	3
EMET 51	Mail Processing Equipment Mechanic Exam Preparation	3
TOTAL UNITS		**6**

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

EMET 50 Basic Mechanics for Servicing Electro-Mechanical Equipment (3)
3 hours lecture
Recommended preparation: *Knowledge of simple algebraic equations; different number systems; different types of gears; mechanical advantage; and fluid dynamics*
Provides students with a basic overview of the maintenance process for postal service electro-mechanical equipment. Topics of study include levers and lever assemblies, gears and gear trains, sprockets and pulleys, basic hydraulics.

EMET 51 Mail Processing Equipment Mechanic Exam Preparation (3)
3 hours lecture
Recommended preparation: *Technical Mathematics-Ability to perform simple algebraic equations; Electricity-Understand DC and AC fundamentals; Electronics-Understand basic electronic principles; Mechanics-Understand basic mechanic fundamentals; Digital Electronics-Understand basic digital electronic principles.*
Designed to prepare students for the U.S. Postal Service Maintenance Mechanic, MPE-8 Entrance Examination. Highly recommended for students interested in a U.S. Postal Service Career focusing on equipment maintenance. Topics will cover all the aspects of mail processing equipment (MPE) maintenance, such as mechanics, electrical, and basic electronic systems.

Emergency Medical Education (EME)

Contact the Emergency Medical Education Department for further information.
(760) 744-1150, ext. 8150
Office: ESC-610

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

Certificates of Achievement -
Certificate of Achievement requirements are listed in Section 6 (green pages).
• Paramedic Training

Certificates of Proficiency -
Certificate of Proficiency requirements are listed in Section 6 (green pages).
• EMT Basic