

Electrician Trainee (ELTR)

Contact Occupational & Noncredit Programs for further information.
(760) 744-1150, ext. 2284
Office: AA-136

COURSE OFFERINGS

- ELTR 101 Introduction to the Electrical Trade and Industry and Construction Safety (3.5)**
3 hours lecture - 1 ½ hours laboratory
Note: May be taken 4 times
Examines safety issues surrounding construction jobsites and installation of electrical systems. Includes OSHA 10 certification, identification of job-site hazards, safe work practices and personal protective equipment for various construction site hazards. Care for breathing and cardiac emergencies along with basic first aid and AED training for both adults and children is covered. Substance abuse will be addressed. Basic math operations will be reviewed and reinforced.
- ELTR 102 Introduction to Electrical Theory, Basic Algebra Concepts, and the National Electric Code (3.5)**
3 hours lecture - 1 ½ hours laboratory
Note: May be taken 4 times
Provides an introduction to algebraic and trigonometric concepts and application of their principles to solve basic electrical equations and layout conduit bends. Teaches the student to apply basic electrical theory to predict circuit behavior. Basic conduit bending techniques will be developed. The National Electric Code will be introduced.
- ELTR 103 Advanced DC Circuit Concepts, Introduction to 3Ø Circuits, and National Electric Code Applications (3.5)**
3 hours lecture - 1 ½ hours laboratory
Recommended preparation: ELTR 102
Note: May be taken 4 times
Study of circuit analysis techniques, series, parallel, and combination DC circuits, test instruments, National Electric Code (NEC), and elementary 3Ø circuits.
- ELTR 104 AC Circuit Concepts, Applied Electronics, and National Electric Code Applications (3.5)**
3 hours lecture - 1 ½ hours laboratory
Recommended preparation: ELTR 103
Note: May be taken 4 times
Study of AC theory, exploration of inductance and capacitance and the effect of their reactance on AC circuits and the application of electronic concepts and components.
- ELTR 105 Digital Logic Circuits, Conductor Characteristics and Applications, and National Electric Code (3.5)**
3 hours lecture - 1 ½ hours laboratory
Recommended preparation: ELTR 104
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 - 1 ½ 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 - 1 ½ 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 - 1 ½ 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 - 1 ½ 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 - 1 ½ 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-136

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 equipment.

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)
<i>3 hours lecture</i>		
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)
<i>3 hours lecture</i>		
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

The Paramedic Training program is accredited by the Committee on Accreditation of Educational Programs for Emergency Medical Services Professionals.

College Credit for Certified Paramedics

This policy is for granting college credit for certified paramedics toward an Associate in Arts degree in Emergency Medical Technician Paramedic. In order for an already certified Paramedic to be granted college units for his/her certification, the following requirements must be met:

1. The EMT P must be currently certified in California as an EMT P.
2. The EMT P must be currently registered at Palomar College.

EMT P Credit

1. The student may receive a maximum of 40.5 units for EMT P training, which is equal to the number of units given at Palomar College for the EMT P courses.
2. The student may receive a maximum of 7 units for former EMT B training, which is equal to the number of units given at Palomar College for the EMT B courses.
3. The student may not receive duplicate credit for any other EMT B or EMT P courses.

Degree Requirements

The Associate in Arts degree in Emergency Medical Technician Paramedic requires 60 units. The following criteria must be met:

1. 30 units must be issued by an accredited college on a letter grade basis, of which 12 units must be completed at Palomar College.
2. All other general education and competency requirements for the Associate in Arts degree as provided in the college catalog must be met.
3. When the student has completed the general education and competency requirements for the Associate in Arts degree and the 12 units required to be completed at Palomar College, the student will be awarded unit credit for education/training received in becoming an EMT P.

Paramedics interested in taking advantage of this policy should contact the Emergency Medical Education Department at (760) 744 1150, ext. 8150. Paramedics will be required to provide a copy of his or her paramedic license and course completion certificate for verification of paramedic licensure. Paramedics must also send prior college transcripts to the College and make an appointment with the Counseling Department at (760) 744-1150, ext. 2179 for evaluation of general education requirements.

PROGRAMS OF STUDY

EMT Basic

This program prepares the student with the knowledge and skills necessary to take the National Registry EMT examination and enter the workforce in the State of California.

CERTIFICATE OF PROFICIENCY

Program Requirements		Units
EME 100/HE 104	First Responder	3
EME 106	Emergency Medical Technician (Lecture)	6
EME 106L	Emergency Medical Technician Skills (Laboratory)	1.5
TOTAL UNITS		10.5

Paramedic Training

The Paramedic Program prepares the student in all elements of prehospital advanced life support. Upon successful completion of the program, the student is eligible to take the State of California EMT-P certification exam, which is the National Registry Emergency Medical Technician-Paramedic Exam.

Admission to the program is by special application.

To be eligible for consideration, the applicant must:

1. Have one year full-time pre-hospital experience as an EMT Basic.
2. Be eligible for admission to Palomar College.
3. Meet academic requirements outlined in the Paramedic Program brochure produced by the EME Program.

AND

4. Have completed ZOO 145 with a grade of 'C' or better and EME 175 and EME 175L with a "B" or better.