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Degree: A.S. - Paramedic  
 Certificate: Paramedic  
 Department Certificate:  
 Emergency Medical Technician (EMT)

## Paramedic Degree and Certificate

**Major Code, degree: 011213A01**

**Major Code, certificate: 011213C01**

Paramedicine is an allied health specialty whose practitioners respond to emergencies before a patient reaches a hospital, rendering basic and advanced medical treatment before and during transport to a medical facility. Classroom, clinical and field internship training prepares paramedics to assess and treat a wide variety of medical emergencies. The knowledge, skills and experience gained through the paramedic program allows students to meet the responsibilities outlined in the Department of Transportation's Emergency Medical Services Education Standards.

### Student Learning Outcomes

*Upon completion of this program, the student will be able to:*

- synthesize pre-arrival information and initial assessment findings to classify patient acuity.
- utilize support personnel and equipment to maximize scene and patient management.
- diagnose patient conditions using auditory, tactile and visual senses.
- correlate signs and symptoms of common diseases to emergency patients and their primary complaint.
- formulate competent treatment plans for medical or trauma patients.
- report assessment findings, diagnosis, and treatment plans to appropriate health professionals.
- develop and implement strategies to strengthen personal empathy and sympathy for prehospital patients.
- apply ethical practices during all phases of an emergency medical response.
- demonstrate advanced life support skills competency as set by the National Registry of Emergency Medical Technicians.
- assess scene and personal safety before, during and after each emergency response.
- compose accurate, timely and specific patient care reports in accordance with local, regional and state documentation standards.

### Career Opportunities

The ARC Paramedic program is designed to prepare the student for licensure as a paramedic, working for a fire department, rescue squad, private provider, industry, clinic or hospital.

See [losrios.edu/gainful-emp-info/gedt.php?major=011213C01](https://losrios.edu/gainful-emp-info/gedt.php?major=011213C01) for Gainful Employment Disclosure.

### Enrollment Eligibility

*To be eligible for enrollment in the program, the student must meet the following criteria:*

- Graduation from an accredited high school in the United States, or successful completion of General Education Development (GED) or the California High School Proficiency Exam (CHSPE).
- Students with a high school diploma from a school outside the United States must have transcripts evaluated by an approved independent agency. Such cases will be evaluated on an individual basis.
- A cumulative college GPA of 2.0 and a grade of "C" or better in BIOL 102, or BIOL 430 and BIOL 431, or other college human anatomy and physiology course with a lab which includes all human systems; a grade of "C" or better in NURSE 320 or PMED 105 or equivalent course covering basic pharmacology and drug calculations.
- Current curriculum planning summary sheet within the semester in which the pre-enrollment packet is being submitted.
- Completion of the program application (pre-enrollment packet) and submittal prior to the deadline.
- Current certification as an Emergency Medical Technician-Basic and approximately one year verified EMS experience or a minimum of 280 verifiable EMS patient encounters acting as a team lead. See program website for examples of commonly acceptable experience and a patient encounter tracking form.

## Enrollment Process

Eligible students are selected for the program according to the following steps:

- Pre-enrollment applications to the program may be obtained from the Health and Education Division office or at <http://arc.losrios.edu/edhealth/paramed.html>. Applications for Spring admission will be available in September and must be submitted to the division office no later than the first Friday in December by 4:00 p.m. Please refer to the Paramedic Information Sheet for the most current information.
- Only students who meet the educational requirements and follow the pre-enrollment procedures will be considered for the program. Meeting all of these requirements does not guarantee enrollment in the program.
- Class size is limited. If the pre-enrollment pool is greater than the program can accept, students are chosen based on a computerized random selection process from among the qualified candidates.
- Students accepted into the Paramedic program are required to have a physical examination, approved immunizations, drug screen, background check, program uniform, field internship fees, and malpractice insurance prior to entering the second semester.

Requirements for Degree Major or Certificate	37.5-44.5 Units
BIOL 102	Essentials of Human Anatomy and Physiology (4) ..... 4 - 10
or [ BIOL 430 and BIOL 431	Anatomy and Physiology (5) Anatomy and Physiology (5) ]
PMED 105 or NURSE 320	Prehospital Calculations (0.5).....0.5 - 1.5
PMED 110	Medical Dosage Calculations (1.5)
PMED 120	Introduction to Advanced Prehospital Care ..... 12
PMED 130	Clinical Internship .....7
	Prehospital Field Internship ..... 14

**Associate Degree Requirements:** The Paramedic Associate in Science (A.S.) Degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

## DEPARTMENT CERTIFICATE

### Emergency Medical Technician (EMT) Certificate

This program prepares students to function as certified Emergency Medical Technicians. Training topics include skills necessary to provide emergency medical care at a basic life support level with a fire, ambulance, or other specialized service. This program is conducted in compliance with Title 22, Division 9, Chapter 2 of the California Code of Regulations and Emergency Medical Technician (EMT). A "C" or better is required to obtain a course completion certificate.

### Student Learning Outcomes

Upon completion of this program, the student will be able to:

- evaluate the nature and seriousness of the patient's condition or extent of injuries.
- apply emergency medical care based on assessments and findings.
- demonstrate proper procedures in lifting, moving, and positioning a patient to minimize discomfort and prevent further injury.
- utilize communicating, transporting, and record keeping skills.

### Career Opportunities

Emergency Medical Technicians operate in a variety of settings from public emergency services, private industry and health care facilities. EMT employment varies from community to community and is considered a growing occupation within the Allied Health professions.

## Enrollment Eligibility

To be eligible for enrollment in the program, the student must meet the following criteria:

- Documentation of current American Heart Association CPR Basic Life Support certification. No other form of CPR certification is accepted. Students must be present and provide a copy of the AHA CPR certification on the first day of the course. Not open to students with current NREMT or California State certification or licensure as an EMT, EMT-Basic, Advanced EMT or paramedic.

## Enrollment Process

Eligible students are selected for the program according to the following steps:

- Verification of current American Heart Association Basic Life Support CPR certification. No other form of CPR certification is accepted. Students must be present and provide a copy of the AHA CPR certification on the first day of the course. Not open to students with current NREMT or California State certification or licensure as an EMT, EMT-Basic, Advanced EMT or paramedic.

Requirements for Certificate	7 Units
EMT 110	Emergency Medical Technician (EMT) Didactic .....6
EMT 111	Emergency Medical Technician (EMT) Practicum ..... 1

## Emergency Medical Technology

### EMT 110 Emergency Medical Technician (EMT)

#### Didactic

6 Units

*Advisory: ENGWR 102, and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better; MATH 32 (Pre-Algebra), or MATH 42 (Algebra Readiness - Part II)*  
*Enrollment Limitation: Documentation of current American Heart Association CPR Basic Life Support certification. No other form of CPR certification will be accepted. Students must be present and provide a copy of the AHA BLS CPR certification on the first day of the course. Not open to students with current NREMT or California State certification or licensure as an EMT, EMT-Basic, Advanced EMT or paramedic.*  
*Hours: 81 hours LEC; 81 hours LAB*

This course provides academic preparation and psychomotor skills training to prepare the student for EMT 111, the Basic Life Support (BLS) clinical and field practicum. Successful completion of EMT 110 and EMT 111 will make the student eligible to take the National Registry of EMTs (NREMT) EMT certification exam. Topics include the BLS knowledge, application, and problem solving necessary to work as an EMT (formerly known as EMT-Basic or EMT-1) in the Emergency Medical Services (EMS) field for an ambulance service, fire department, emergency department, or other specialized service. A "C" letter grade as well as successful completion of the EMT 110 Exit Exam and psychomotor skill tests are required to be eligible for EMT 111. The course conforms to the 2007 National EMS Scope of Practice Model and 2009 EMS National Education Standards and complies with Title 22, Division 9, Chapter 2 of the California State Code of Regulations. This course is approved by the Emergency Medical Services (EMS) Agency of the Sacramento County Health Department. Field trips and off-campus lab assignments may be required.

**EMT 111 Emergency Medical Technician (EMT) Practicum 1 Unit**

*Prerequisite:* EMT 110, HEED 310, and HEED 323 with grades of "C" or better

*Advisory:* AH 110; ENGWR 102, and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better; MATH 32 (Pre-Algebra), or MATH 42 (Algebra Readiness - Part II)

*Enrollment Limitation:* Current Healthcare Provider CPR certification or equivalent is required. Must be able to pass a qualifying background check and drug screen, show proof of current immunizations. The student must be able to purchase online resources, malpractice insurance as well as a uniform and other lab equipment. This course is not available to students with current EMT certification or who are licensed paramedics since they have already achieved the learning outcomes for this course. Due to regulatory requirements, this course must be completed less than twelve months after the beginning of EMT 110.

*Hours:* 54 hours LAB

This course provides the supervised practical lab hours necessary to complete EMT education after completion of EMT 110. Successful completion of EMT 110 and EMT 111 will make the student eligible to take the National Registry of EMTs (NREMT) EMT certification exam. The student is placed in the clinical and field environments necessary to obtain the minimum required patient contacts. This course conforms to the 2007 National EMS Scope of Practice Model as well as the 2009 EMS National Education Standards and complies with Title 22, Division 9, Chapter 2 of the California State Code of Regulations. This course is approved by the Emergency Medical Services (EMS) Agency of the Sacramento County Health Department. Field trips or off-campus lab assignments are required. This course is Pass/No Pass only.

**EMT 150 Advanced Emergency Medical Technician (AEMT) Didactic 3 Units**

*Prerequisite:* HEED 310 and 323 with grades of "C" or better

*Advisory:* AH 110, BIOL 102, and PMED 105; ENGWR 102, and ENGRD 116 with a grade of "C" or better; OR ESLR 320 and ESLW 320 with a grade of "C" or better; MATH 32 (Pre-Algebra), or MATH 42 (Algebra Readiness - Part II)

*Enrollment Limitation:* Current Healthcare Provider CPR or equivalent recognition and California State EMT certification are required. The student must be able to purchase online resources as well as a uniform and other lab equipment. This course is not available to certified NREMT or California State Advanced EMTs or paramedics.

*Hours:* 36 hours LEC; 54 hours LAB

This course provides academic preparation and psychomotor skills training to prepare the student for EMT 151, the Advanced Emergency Medical Technician (AEMT) clinical and field Internship. Successful completion of EMT 150 and EMT 151 will make the student eligible to take the National Registry of EMTs (NREMT) Advanced EMT certification exam. Topics include the Limited Advanced Life Support (LALS) knowledge, application and problem solving skills necessary to work as an AEMT (formerly known as EMT-Intermediate or EMT-2) in the Emergency Medical Services (EMS) field for an ambulance service, fire department, emergency department or other specialized service. A "C" letter grade as well as successful completion of the EMT 150 Exit Exam and psychomotor skill tests are required to be eligible for EMT 151. The course conforms to the 2007 National EMS Scope of Practice Model and 2009 EMS National Education Standards and complies with Title 22, Division 9, Chapter 3 of the California State Code of Regulations. This course is approved by the Emergency Medical Services (EMS) Agency of the Sacramento County Health Department. Field trips or off-campus lab assignments are required.

**EMT 151 Advanced Emergency Medical Technician (AEMT) Internship 3.5 Units**

*Prerequisite:* EMT 150, HEED 310, and HEED 323 with grades of "C" or better

*Advisory:* AH 110 and BIOL 102; PMED 105 or NURSE 320

*Enrollment Limitation:* Current Healthcare Provider CPR or equivalent certification and California State EMT certification is required. The student must be able to pass a qualifying background check and drug screen, show proof of current immunizations. The purchase of online resources, malpractice insurance as well as a uniform and other lab equipment is also required. This course must be completed less than six months after the completion of EMT 150. This course is not available to NREMT or California State certified AEMTs or paramedics.

*Hours:* 189 hours LAB

This course provides supervised clinical and field internship experience at the Limited Advanced Life Support (LALS) scope of practice. Successful completion of EMT 150 and EMT 151 makes the student eligible to take the National Registry of EMTs (NREMT) Advanced Emergency Medical Technician (AEMT) certification exam. The course conforms to the 2007 National EMS Scope of Practice Model and 2009 EMS National Education Standards and complies with Title 22, Division 9, Chapter 3 of the California State Code of Regulations. This course is approved by the Emergency Medical Services (EMS) Agency of the Sacramento County Health Department. Field trips or off-campus lab assignments are required.

**EMT 298 Work Experience in Emergency Medical Technology 1-4 Units**

*Advisory:* Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.

*Enrollment Limitation:* Students must be in a paid or unpaid internship, volunteer position, or job related to the emergency medical technology field with a cooperating site supervisor. Students are advised to consult with the Emergency Medical Technology faculty to review specific certificate and degree work experience requirements.

*General Education:* AA/AS Area III(b) (effective Summer 2018)

*Hours:* 60-300 hours LAB

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the emergency medical technology field. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

## Paramedic

### **PMED 105 Prehospital Pharmacology .5 Units**

*Advisory: MATH 32 or 42 with a grade of "C" or better AND ENGRD 116 or ESLR 320 with a grade of "C" or better.*

*Hours: 9 hours LEC*

This course provides basic instruction in prehospital pharmacology and calculating medication dosages.

### **PMED 106 Emergency Medical Technician Pre-hospital Practices and Internship 6.5 Units**

*Prerequisite: Current California State Emergency Medical Technician certification.*

*Corequisite: NURSE 320 or PMED 105*

*Advisory: AH 110, BIOL 102, ENGRD 116, ENGWR 101, and MATH 32*

*Enrollment Limitation: A background check, drug screening, proof of current immunizations and malpractice insurance are required. Current California State Emergency Medical Technician (EMT) Certification and CPR certification at one of the following levels: Healthcare Provider, Professional Rescuer, or equivalent.*

*Hours: 36 hours LEC; 243 hours LAB*

This course provides expanded education in Emergency Medical Services (EMS) related topics, including assisting with Advanced Life Support (ALS) procedures as well as patient assessment and management training through patient simulation, clinical observation, and field experience. It can also serve as partial preparation for application to the American River College Paramedic Program.

### **PMED 108 Emergency Medical Response 3 Units**

*Hours: 45 hours LEC; 27 hours LAB*

This course is an introduction to the principles and practices of the Emergency Medical Services (EMS). It provides the knowledge and skills needed to integrate the care provided through the EMS system. A certificate of completion is available upon successful completion of this course.

### **PMED 110 Introduction to Advanced Prehospital Care 12 Units**

*Prerequisite: BIOL 102 and PMED 105 with grades of "C" or better*

*Advisory: AH 110, ENGRD 116, ENGWR 101, HCD 114, and MATH 32*

*Enrollment Limitation: Acceptance into the Paramedic Program*

*Hours: 144 hours LEC; 216 hours LAB*

This course covers the didactic material and the related skills necessary to establish a foundation for subsequent prehospital patient assessment and management. Topics include preparatory, human body and human systems, pharmacology, patient assessment, airway management, trauma management, and respiratory and cardiac emergencies.

### **PMED 120 Clinical Internship 7 Units**

*Prerequisite: PMED 110 with a grade of "B" or better.*

*Enrollment Limitation: Current Emergency Medical Technician certification. Current student enrolled in the Paramedic program.*

*Hours: 54 hours LEC; 216 hours LAB*

This course provides an opportunity to apply the cognitive knowledge and psychomotor skills gained in PMED 110 to patient care in a hospital or other approved clinical setting. This course provides for increasing assessment techniques and advanced prehospital skills. Field trips may be required. A portion of this course may be offered in a TBA component of 216 hours which may include direct patient care in a clinical setting.

### **PMED 130 Prehospital Field Internship 14 Units**

*Prerequisite: PMED 120 with a grade of "B" or better.*

*Enrollment Limitation: Current EMT certification. Current student enrolled in the Paramedic program.*

*Hours: 54 hours LEC; 600 hours LAB*

This course provides paramedic students with hands-on prehospital experiences and is the final course in the series preparing for a California paramedic license. Under the direct supervision and evaluation of a licensed paramedic or a mobile intensive care nurse, interns complete a prehospital field experience.

### **PMED 140 Pediatric Advanced Life Support Certification .5 Units**

*Enrollment Limitation: Current Provider C Basic Cardiac Life Support card or county-approved equivalent certificate. Current licensure as a paramedic, nurse, physician, or allied health professional, or current enrollment in the last semester of an allied health program.*

*Hours: 6 hours LEC; 12 hours LAB*

This course provides education modules specific to pediatric emergencies for health care professionals. Certification in Pediatric Advanced Life Support (PALS) is granted to students who successfully complete the course.

### **PMED 142 Advanced Cardiac Life Support Certification .5 Units**

*Enrollment Limitation: Current Provider C Basic Cardiac Life Support Card, equivalent licensure as a paramedic, nurse, physician, or allied health professional, or current enrollment in an allied health program.*

*Hours: 6 hours LEC; 12 hours LAB*

This course provides education modules specific to adult cardiac emergencies for health care professionals. Certification in Advanced Cardiac Life Support (ACLS) is granted to students who successfully complete the course.

### **PMED 160 Introductory Wilderness Medicine 2 Units**

*Hours: 27 hours LEC; 27 hours LAB*

This course provides the didactic material and related skills necessary to establish a foundation of medical care in the wilderness setting. Topics include anatomy and physiology, care of traumatic injuries, patient assessment, environmental injuries, medical emergencies, common simple wilderness medical problems, basic wilderness survival for the initial responder, improvised bleeding control in the field setting, and selecting and caring for wilderness medical equipment and supplies. This course emphasizes improvised care options and long-term care in field settings.

### **PMED 161 Advanced Wilderness Medicine 2 Units**

*Advisory: PMED 160*

*Hours: 27 hours LEC; 27 hours LAB*

This course provides the didactic material and related skills necessary to establish an advanced level of medical care in the wilderness setting. Topics include anatomy and physiology, improvised airway control, principles of musculoskeletal care, synthesis of wilderness medicine and urban care, and common simple wilderness medical problems. Additionally, basic wilderness survival for the wilderness responder, and selecting and caring for wilderness medical equipment and supplies are covered. This course emphasizes improvised care options and long-term care in remote field settings.

**PMED 165 EMS Search and Technical Rescue 2 Units***Hours: 27 hours LEC; 27 hours LAB*

This course provides a foundation in several technical rescue disciplines. Practical applications of water rescue, low angle and high angle rescue, and urban search and rescue are covered. Additionally, basic survival skills in rescue environments for the Emergency Medical Technician-Paramedic (EMT-P), and selecting and caring for rescue equipment and supplies are covered. This course emphasizes scenario-based learning in safely assessing, managing, and pre-planning for the technical rescue environment.

**PMED 240 Pediatric Advanced Life Support-Recertification .5 Units***Enrollment Limitation: Current American Heart Association Pediatric Advanced Life Support Provider Card or county approved equivalent certificate**Hours: 8 hours LEC; 3 hours LAB*

This course provides specific pediatric modules for health care professionals. It provides recertification according to the American Heart Association's Pediatric Advanced Life Support standards and guidelines.

**PMED 242 Advanced Cardiac Life Support-Recertification .5 Units***Enrollment Limitation: Current American Heart Association Advanced Cardiac Life Support Provider Card or county approved equivalent certificate**Hours: 8 hours LEC; 3 hours LAB*

This course provides education modules specific for adult cardiac emergencies for health care professionals. It provides recertification according to the American Heart Association's Advanced Cardiac Life Support standards and guidelines.

**PMED 295 Independent Studies in Paramedic 1-3 Units***Prerequisite: None**Hours: 54-162 hours LAB*

Course description: PMED 295 is an opportunity for the student to extend classroom experience in this subject area, while working independently of a formal classroom situation. PMED 295 is an extension of work offered in a specific class in the college catalog. To be eligible for PMED 295, students must have completed the basic regular catalog course at American River College. They must also discuss the study project with a professor in this subject area and secure prior approval. Only one independent study for each catalog course will be allowed.

**PMED 298 Work Experience in Paramedic 1-4 Units***Advisory: Eligible for ENGRD 310 or ENGRD 312 AND ENGWR 300; OR ESLR 340 AND ESLW 340.**Enrollment Limitation: Students must be in a paid or unpaid internship, volunteer position, or job related to the paramedic field with a cooperating site supervisor. Students are advised to consult with the Paramedic faculty to review specific certificate and degree work experience requirements.**General Education: AA/AS Area III(b) (effective Summer 2018)**Hours: 60-300 hours LAB*

This course provides students with opportunities to develop marketable skills in preparation for employment or advancement within the paramedic field. It is designed for students interested in work experience and/or internships in associate degree level or certificate occupational programs. Course content includes understanding the application of education to the workforce, completion of Title 5 required forms which document the student's progress and hours spent at the work site, and developing workplace skills and competencies. During the semester, the student is required to complete 75 hours of related paid work experience, or 60 hours of related unpaid work experience for one unit. An additional 75 or 60 hours of related work experience is required for each additional unit. All students are required to attend the first class meeting, a mid-semester meeting, and a final meeting. Additionally, students who have not already successfully completed a Work Experience course will be required to attend weekly orientations while returning participants may meet individually with the instructor as needed. Students may take up to 16 units total across all Work Experience course offerings. This course may be taken up to four times when there are new or expanded learning objectives. Only one Work Experience course may be taken per semester.

**PMED 1000 Emergency Medical Technician: Refresher 1.5 Units***Enrollment Limitation: Current or recent certification as an Emergency Medical Technician.**Hours: 23 hours LEC; 25 hours LAB*

This course provides continuing education and skills verification modules for current Emergency Medical Technicians (EMTs) certified at the Basic Life Support (BLS) level. It satisfies most of the refresher requirements of local, state, and national Emergency Medical Services (EMS) certifying organizations. EMS-related topics include airway management and ventilation, cardiac care and resuscitation, patient assessment, injury management, legal and ethical issues, vital signs monitoring, and assisting with medication administration. This course does not provide preparation for the National Registry of Emergency Medical Technicians (NREMT) entry or recertification exam. Completion of this course provides currently certified EMTs, wanting to recertify with the NREMT, with the 24 hours of required course content as well as the verification of required skills competency.