



Emergency Medical Technicians and Paramedics

Course Overview: Focuses on careers in planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

Career Goal (O*NET Code): (31-9092) - Emergency medical technicians (EMTs) and paramedics care for the sick or injured in emergency medical settings. People's lives often depend on their quick reaction and competent care. EMTs and paramedics respond to emergency calls, performing medical services and transporting patients to medical facilities.

Student Name: _____
Grade: _____
School: _____

SUGGESTED COURSEWORK

EXTENDED LEARNING EXPERIENCES

Middle School	8th	HS Courses:	(Local districts may list high school credit courses here)		<p>Curricular Experiences: *** Health Occupations Students of America</p> <p>Career Learning Experiences: Career Preparation Internship Job Shadowing Clinical Rotations Certifications Clinical Volunteer Work (local hospitals & medical facilities)</p> <p>Service Learning Experiences: Boy/Girl Scouts Campus Service Organizations Community Service Volunteer Medical Mission Trips Peer Mentoring / Peer Tutoring Special Olympics</p>	<p>Extracurricular Experiences:*** Language Immersion Programs National Youth Leadership Forum on Medicine School Newspaper Student Council UIL Academic Competitions Yearbook</p>		
High School	9th	Courses*:	English I Algebra I or Geometry Biology	World Geography Foreign Language I Physical Education or Athletics			<p>COLLEGE CREDIT OPPORTUNITIES -- High School</p> <p>Students should take Advanced Placement (AP), International Baccalaureate (IB), dual credit, Advanced Technical Credit (ATC), or locally articulated courses (Tech Prep), if possible. List those courses that count for college credit on your campus.</p>	
		Career-Related Electives:	Principles of Health Science					
	10th	Courses:	English II Geometry or Algebra II Chemistry	World History Foreign Language II Elective				
		Career-Related Electives:	Medical Terminology and Pathophysiology					
	11th	Core Courses:	English III Algebra II or Pre-Calculus Physics	United States History Foreign Language III ** Professional Communications or Speech				
		Career-Related Electives:	Health Science					
	12th	Core Courses:	English IV Pre-Calculus or Calculus 4th Science	Government/Economics Elective Elective				
		Career-Related Electives:	Practicum in Health Science					
Postsecondary	How to Become an EMT or Paramedic Paramedics have the most advanced level of training. They must complete EMT-level and Advanced EMT training, as well as training in advanced medical skills. Community colleges and technical schools may offer this training, in which graduates may receive an associate's degree.			Carrer Options (Sample of reported job titles)			<p>Professional Associations:</p> <ul style="list-style-type: none"> National Association of Emergency Medical Technicians National Highway Traffic Safety Administration, Office of Emergency Medical Services National Registry of Emergency Medical Technicians 	
		Texas Southmost College	South Texas College	Texas State Technical College				
		EMT – Basic (CERT) EMT – Intermediate (CERT) EMT – Paramedic (AAS)	EMT – Basic (CERT) EMT – Intermediate (CERT) EMT – Paramedic (AAS)					
		The University of Texas at Brownsville	The University of Texas - Pan American					

* Students must meet local & state high school graduation requirements. ** Required course for the Distinguished Graduation Plan (in addition to other measures). *** Based on campus availability. Students may select other elective courses for personal enrichment purposes.

This plan of study serves as a guide, along with other career planning materials, for pursuing a career path and is based on the most recent information as of 2009. All plans meet high school graduation requirements as well as college entrance requirements.



EMTs and Paramedics

TEA Industry Cluster	Health Science
SOC Code	29-2041
Identified by	Tech Prep Occupations
Projected Growth (2018)	27%
BISD Magnet School Available	Yes

Source: Demand Occupations by Cluster, updated *June 27, 2012*

Description

What EMTs and Paramedics Do

EMTs and paramedics use special equipment, including backboards and restraints, to immobilize patients and secure them in the ambulance for transport.

Emergency medical technicians (EMTs) and paramedics care for the sick or injured in emergency medical settings. People's lives often depend on their quick reaction and competent care. EMTs and paramedics respond to emergency calls, performing medical services and transporting patients to medical facilities.

A 911 operator sends EMTs and paramedics to the scene of an emergency, where they often work with police and firefighters. For more information, see the profiles on [police and detectives](#) and [firefighters](#).

Duties

EMTs and paramedics typically do the following:

- Respond to 911 calls for emergency medical assistance, such as cardiopulmonary resuscitation (CPR) or bandaging a wound
- Assess a patient's condition and determine a course of treatment
- Follow guidelines that they learned in training and that they receive from physicians who oversee their work
- Use backboards and restraints to keep patients still and safe in an ambulance for transport
- Help transfer patients to the emergency department of a healthcare facility and report their observations and treatment to the staff
- Create a patient care report; documenting the medical care they gave the patient
- Replace used supplies and check or clean equipment after use

When taking a patient to the hospital, one EMT or paramedic may drive the ambulance while another monitors the patient's vital signs and gives additional care. Some paramedics work as part of a helicopter's flight crew to transport critically ill or injured patients to a hospital.

EMTs and paramedics also take patients from one medical facility to another. Some patients may need to be transferred to a hospital that specializes in treating their injury or illness or to a facility that provides long-term care, such as a nursing home.

If a patient has a contagious disease, EMTs and paramedics decontaminate the interior of the ambulance and may need to report these cases to the proper authorities.

The specific responsibilities of EMTs and paramedics depend on their level of training and the state they work in. The [National Registry of Emergency Medical Technicians](#) (NREMT) provides national certification of EMTs and paramedics at four levels: EMT-Basic, EMT-Intermediate (which has two levels, respectively called 1985 and 1999), and Paramedic. Some states, however, have their own certification programs and use different titles.

An **EMT-Basic**, also known as an EMT, cares for patients at the scene and while taking patients by ambulance to a hospital. An EMT-Basic has the emergency skills to assess a patient's condition and manage respiratory, cardiac, and trauma emergencies.

An **EMT-Intermediate (1985 or 1999)**, also known as Advanced EMT, has completed the training required at the EMT-Basic level, as well as training for more advanced skills, such as the use of intravenous fluids and some medications.

Paramedics provide more extensive prehospital care than do EMTs. In addition to carrying out the procedures that EMTs use, paramedics can give medications orally and intravenously, interpret electrocardiograms (EKGs)—used to monitor heart function—and use other monitors and complex equipment.

The specific tasks or procedures EMTs and paramedics are allowed to perform at any level vary by state.

Training Opportunities Linked to Those Jobs (Degree Types and Colleges/Universities)

How to Become an EMT or Paramedic

EMTs and paramedics need to be physically fit as their job requires a considerable amount of bending, lifting, and kneeling.

All emergency medical technicians (EMTs) and paramedics must complete a formal training program. All states require EMTs and paramedics to be licensed; requirements vary by state.

Education and Training

Both a high school diploma or equivalent and cardiopulmonary resuscitation (CPR) certification are prerequisites for most formal education and training programs. High school students interested in entering these occupations should take courses in anatomy and physiology. Formal training is offered by technical institutes, community colleges, and facilities that specialize in emergency care training.

At the EMT-Basic level, training includes instruction in assessing patients' conditions, dealing with trauma and cardiac emergencies, clearing obstructed airways, using field equipment, and handling emergencies. Formal courses include about 100 hours of specialized training. Some training may be required in a hospital or ambulance setting.

The EMT-Intermediate 1985 or EMT-Intermediate 1999 level, also known as the Advanced EMT level, typically requires 1,000 hours of training based on the scope of practice. At this level, people must complete the training required at the EMT level, as well as more advanced training, such as training in the use of complex airway devices, intravenous fluids, and some medications.

Paramedics have the most advanced level of training. They must complete EMT-level and Advanced EMT training, as well as training in advanced medical skills. Community colleges and technical schools may offer this training, in which graduates may receive an associate's degree. Paramedic programs require about 1,300 hours of training and may take up to 2 years. Their broader scope of practice may include stitching wounds or administering IV medications.

Separate training and licensure is required to drive an ambulance. Although some emergency medical services hire separate drivers, most EMTs and paramedics take a course requiring about 8 hours of training before they can drive an ambulance.

Licenses and Certification

The [National Registry of Emergency Medical Technicians](#) (NREMT) certifies EMTs and paramedics. All levels of NREMT certification require completing a certified training or education program and passing the national exam. The national exam has both a written part and a practical part.

All states require EMTs and paramedics to be licensed; requirements vary by state. In most states, an individual who has NREMT certification qualifies for licensure; in some, passing an equivalent state exam is required. Typically to apply for a license, an applicant must be over the age of 18. Many states require background checks and may decide not to give a license to an applicant who has a criminal history.

Important Qualities

Compassion. EMTs and paramedics must provide emotional support to patients in an emergency, especially patients who are in life-threatening situations or extreme mental distress.

Interpersonal skills. EMTs and paramedics almost always work on teams and must be able to coordinate their activities closely with others in stressful situations.

Listening skills. EMTs and paramedics need to listen to patients to determine the extent of their injuries or illnesses.

Physical strength. EMTs and paramedics need to be physically fit. Their job requires a lot of bending, lifting, and kneeling.

Problem-solving skills. EMTs and paramedics need strong problem-solving skills. They must evaluate patients' symptoms and administer the appropriate treatments.

Speaking skills. EMTs and paramedics need to be able to comfort and explain procedures to the patient, give orders, and relay information to others.

Texas Southmost College	South Texas College	Texas State Technical College	University of Texas at Brownsville	University of Texas - Pan American
Emergency Medical Science (CERT1)	EMT – Basic (CERT1)			
Emergency Medical Science (CERT2)	EMT – Intermediate (CERT2)			
Emergency Medical Science (AAS)	EMT – Paramedic (AAS)			

Local Employers

Employer	City	Employer	City
Abc Pediatrics	Brownsville	Emergency Medical Svc	Harlingen
Anesthesia Consultants	Brownsville	Family Medical Ctr	Harlingen
Asthma Center	Brownsville	Family Practice Residency Ctr	Harlingen
Border Anesthesia Svc Pc	Brownsville	Harlingen Anesthesia Assoc	Harlingen
Boys & Girls Pediatric Clinic	Brownsville	Harlingen Bone & Joint Clinic	Harlingen

Career Options (Specific Job Types)

Sample of reported job titles:

- Emergency Medical Technician (EMT)
- Paramedic, Emergency Medical Technician - Basic (EMT - B)
- Firefighter/EMT (Firefighter/Emergency Medical Technician)
- Emergency Medical Technician - Intermediate (EMT - I)
- Firefighter/Paramedic
- EMT/Dispatcher (Emergency Medical Technician/Dispatcher)
- Fire Fighter First Responder
- First Responder
- Flight Paramedic

Salary Ranges

Wages for Emergency Medical Technicians and Paramedics

Location	Pay Period	2011				
		10%	25%	Median	75%	90%
United States	Hourly	\$9.56	\$11.74	\$14.77	\$19.44	\$25.50
	Yearly	\$19,900	\$24,400	\$30,700	\$40,400	\$53,000
Texas	Hourly	\$9.65	\$11.71	\$14.10	\$18.24	\$23.00
	Yearly	\$20,100	\$24,400	\$29,300	\$37,900	\$47,800
Brownsville-Harlingen, TX MSA	Hourly	\$7.87	\$8.75	\$10.89	\$13.49	\$19.56
	Yearly	\$16,400	\$18,200	\$22,700	\$28,100	\$40,700
McAllen-Edinburg-Mission, TX MSA	Hourly	\$9.94	\$11.32	\$13.43	\$15.66	\$17.53
	Yearly	\$20,700	\$23,500	\$27,900	\$32,600	\$36,500

Professional Associations Linked to the Careers

For more information about emergency medical technicians and paramedics, visit

[National Association of Emergency Medical Technicians](#)

[National Highway Traffic Safety Administration, Office of Emergency Medical Services](#)

[National Registry of Emergency Medical Technicians](#)

Sources

The information provided in this document was collected from the following sources:

- Occupational Outlook Handbook (<http://www.bls.gov/ooh/>)
- O*NET OnLine (<http://www.onetonline.org/>)
- Texas CARES (<http://www.texascaresonline.com/>)
- CareerOneStop (<http://www.careeronestop.org/>)