



A DUAL ENROLLMENT CAREER PATHWAY FOR EMERGENCY MEDICAL TECHNOLOGY

tctc.edu/careerpathways

About the Program

- If you are interested in a dynamic healthcare option with schedule flexibility, competitive benefits and pay, and a work environment unlike any other, then Emergency Medical Technology may be the career for you.
- The Emergency Medical Technology Program at TCTC prepares competent entry-level Emergency Medical Technicians at each level of certification (EMT, AEMT, and Paramedic) in the cognitive (knowledge), psychomotor (skills), and effective (behavior) learning domains.
- Students learn both theory and hands-on education on their way to beginning their career in Emergency Medical Services.

About the Pathway

- Emergency Medical Technology is a Technical Career Pathway in which courses and textbooks are at no cost to students planning to enter the career field after high school.
- High school students take dual enrollment classes at the **Anderson 1 and 2 Career & Technology Center**.
- Students have the opportunity to graduate high school with 7 hours of college credit. After high school, students seamlessly transition into the Association in Applied Science Degree in Emergency Technology.
- Students would be eligible to take the National Registry of Emergency Medical Technicians' Emergency Medical Technician (EMT) certification exam upon turning 18 years of age.

Emergency Medical Technology CAREER PATHWAY

IN HIGH SCHOOL

Spring of 12th Grade Year:

- EMS 110
- EMS 212

Students would be eligible to take the NREMT EMT certification exam upon turning 18 years of age.

HIGH SCHOOL GRADUATION AND 7 HOURS COLLEGE CREDIT

AFTER HIGH SCHOOL Emergency Medical Technology

FALL	• BIO 112	• CPT 170	• ENG 101	• MAT 120	
SPRING	• EMS 111	• EMS 219	• PSY 201	• SPC 205	• Humanities Requirement
SUMMER	• EMS 120	• EMS 210	• EMS 217	• EMS 220	
FALL	• EMS 119	• EMS 211	• EMS 213	• EMS 221	
SPRING	• EMS 214	• EMS 218	• EMS 222	• EMS 270	

SC Mean Annual Wages
\$33,303-\$43,180

AFTER TCTC GRADUATION

Student would be eligible to take the NREMT Paramedic certification exam.
United States 2030 Projected Employment rate for Paramedics to increase by 11% from 2020 figures.

CONNECT WITH US

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EMERGENCY MEDICAL TECHNOLOGY COURSE DESCRIPTIONS

The Emergency Medical Technology Program at TCTC prepares competent entry-level Emergency Medical Technicians at each level of certification (EMT, AEMT, and Paramedic) in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

BIO 112 - Basic Anatomy and Physiology

Class Hours: 4 Lab Hours: 2 Credit Hours: 4

This course is a basic integrated study of the structure and function of the human body. Topics include the anatomy and physiology of cells, tissues, organs, and systems. Laboratory requirement supplements lecture.

Prerequisites: Completion of BIO 105 with a grade of "C" or higher recommended.

Note: Credit may not be earned for both BIO 112 and BIO 210.

This course will not satisfy any Associate of Science requirements.

CPT 170 - Microcomputer Applications

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course introduces microcomputer applications software, including word processing, databases, spreadsheets, graphs, and their integration.

Note: 1. Reading placement scores satisfactory for ENG 100 or ENG 155 is strongly recommended. 2. Course is offered every semester.

EMS 110 - Emergency Medical Technician

Class Hours: 3 Lab Hours: 6 Credit Hours: 5

This is an introductory course to the health care system and the function, role, and responsibility of emergency medical providers within the system. Emphasis is placed on legal and ethical practices and stress management. A team approach is emphasized in the study of the initial assessment and management of illness and injury.

Corequisite: EMS 212.

EMS 111 - Advanced Emergency Care

Class Hours: 3 Lab Hours: 6 Credit Hours: 5

This course is a study of the concepts and skills related to general patient assessment, initial management of life-threatening emergencies, airway management, pulmonary ventilation and oxygen administration, the pathophysiology of shock and treatment modalities for the shock syndrome, and pharmacological actions of groups of drugs and fluids. Emphasis is placed on administration of medication and fluid therapy, basic vehicle extrication, and rescue.

Prerequisites: Approval needed by the Department Head, Program Director, or Coordinator of Instructional Activities.

Corequisite: EMS 219.

EMS 119 - Emergency Medical Services Operations

Class Hours: 2 Lab Hours: 0 Credit Hours: 2

This course is a multi-faceted approach to theory of EMS operations. Topics include expanded provider roles, EMS systems overview, medical/legal aspects, theory of ambulance operations, mass casualty incident management, rescue awareness, crime scenes, terrorism, and weapons of mass destruction.

EMS 120 - Pharmacology

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of concepts related to the pharmacological actions of groups of drugs and includes the development of skills related to the administration of medications and intravenous therapy. Physiology of systems affected drug action is also included in the course.

EMS 210 - Advanced Emergency Medical Care I

Class Hours: 4 Lab Hours: 3 Credit Hours: 5

This course is a study of concepts related to EMS communications, trauma, obstetric/gynecological emergencies, neonatal transport, psychiatric emergencies, central nervous system, GI/GU systems, anaphylaxis, toxicologic emergencies, drug abuse, infectious diseases, geriatric and pediatric patients, and environmentally related emergencies.

Prerequisites: Approval needed by the Department Head, Program Director, or Coordinator of Instructional Activities.

Corequisite: EMS 220.

EMS 211 - Advanced Clinical Experience I

Class Hours: 1 Lab Hours: 6 Credit Hours: 3

This course includes hospital clinical experiences in obstetrics (labor/delivery), pediatrics, and emergency/trauma settings.

EMS 212 - EMS Field Internship

Class Hours: 0 Lab Hours: 6 Credit Hours: 2

This course includes experiences with advanced life support emergency medical services.

Corequisite: EMS 110.

EMS 213 - Advanced Emergency Medical Care II

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is a study of emergency medical care procedures for the paramedic provider. It is designed to cover topics related to the preparation of a paramedic, the human body and body systems, operations and patient assessment. This course includes compressed content from EMS 213.

Prerequisites: EMS 210. Corequisite: EMS 221.

EMS 214 - Advanced Clinical Experience II

Class Hours: 1 Lab Hours: 6 Credit Hours: 3

This course includes hospital clinical experiences in coronary care and emergency and trauma settings.

Prerequisites: EMS 211.

EMS 217 - Introduction to Electrocardiography

Class Hours: 1 Lab Hours: 3 Credit Hours: 2

This course covers the basic principles of recognizing and interpreting EKG tracings. Laboratory emphasis is placed on the operation of electrocardiographic equipment.

EMS 218 - EMS Management Seminar

Class Hours: 2 Lab Hours: 0 Credit Hours: 2

This course covers concepts related to the application of management skills to emergency medical services. Focus is on common problems which occur in the work setting utilizing a problem solving approach.

EMS 219 - Advanced EMS Field Internship II

Class Hours: 0 Lab Hours: 6 Credit Hours: 2

This course builds in the knowledge and skills of advanced emergency medical practice in the pre-hospital environment. Focus is on situations involving complex patient problems including trauma, surgical and medical emergencies and the treatment modalities.

Corequisite: EMS 111.

EMS 220 - Paramedic Internship I

Class Hours: 0 Lab Hours: 9 Credit Hours: 3

This course includes experiences with advanced life support emergency medical service providers.

Corequisite: EMS 210.

EMS 221 - Paramedic Internship II

Class Hours: 0 Lab Hours: 9 Credit Hours: 3

This course builds on the experiences gained in Paramedic Internship I. Focus is on the student and their ability to apply knowledge gained in the classroom during an emergency situation while treating a wide variety of patients in different situations.

Prerequisites: EMS 220.

Corequisite: EMS 213.

EMS 222 - Paramedic Internship III

Class Hours: 0 Lab Hours: 9 Credit Hours: 3

This course builds on the experiences gained in Paramedic Internship II. Focus is centered on the student's ability to function as the EMS team leader and direct patient care in any emergency situation.

Prerequisites: EMS 221. Corequisite: EMS 270.

EMS 270 - NREMT Review

Class Hours: 2 Lab Hours: 6 Credit Hours: 4

This course provides the opportunity to practice and demonstrate proficiency in all of the required National Registry of Emergency Medical Technician (NREMT) skill stations.

Corequisite: EMS 222.

ENG 101 - English Composition I

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This is a (college transfer) course in which the following topics are presented: a study of composition in conjunction with appropriate literary selections, with frequent theme assignments to reinforce effective writing. A review of standard usage and the basic techniques of research are also presented.

Prerequisites: Satisfactory Writing placement score or a grade of "C" or higher in ENG 100 or in ENG 155 and satisfactory Reading placement score or a grade of "C" or higher in RDG 100. (UNIVERSITY TRANSFER)

MAT 120 - Probability and Statistics

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes the following topics: introductory probability and statistics, including organization of data; sample space concepts; random variables; counting problems; binomial and normal distributions; central limit theorem; confidence intervals and test hypothesis for large and small samples; types I and II errors; linear regression and correlation.

Prerequisites: Satisfactory math placement score or MAT 102 with a grade of "C" or higher, or MAT 101 with a grade of A and a satisfactory reading placement score or RDG 100 with a grade of "C" or higher or ENG 101 or ENG 103 with a grade of "C" or higher. (UNIVERSITY TRANSFER)

PSY 201 - General Psychology

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes the following topics and concepts in the science of behavior: scientific method, biological bases for behavior, perception, motivation, learning, memory, development, personality, abnormal behavior, therapeutic techniques, and social psychology.

Prerequisites: Satisfactory reading and English placement scores for ENG 101; or satisfactory English scores for ENG 101 and completion of RDG 100 with a grade of "C" or higher; or completion of ENG 100, ENG 101, ENG 103 or ENG 155 with a grade of "C" or higher. BIO 101 strongly recommended. (UNIVERSITY TRANSFER)

SPC 205 - Public Speaking

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is an introduction to principles of public speaking with application of speaking skills.

Prerequisites: ENG 101, ENG 103, ENG 155, or ENG 156 with a grade of "C" or higher. (UNIVERSITY TRANSFER)



TCTC
Tri-County Technical College