

# EMERGENCY MEDICAL TECHNOLOGY AND PARAMEDIC COURSES

## EMTP 115. PARAMEDIC PREPARATION 1.5 UNITS

*Pass/No Pass only*

*Recommended Preparation: EMT 113 and EMT 113L or equivalent; and RDG 56 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent*

*Lecture 1 hour, laboratory 2 hours*

*Offered: Variable*

Prepares the basic emergency medical technician (EMT) to begin paramedic training. Emphasizes review of EMT knowledge, human anatomy and physiology, math calculation, and electrocardiograph (ECG) interpretation. Provides the basic EMT with intensive scenario-based training. Designed to improve student success in paramedic school. [D; CSU]

## EMTP 200. ADVANCED LIFE SUPPORT PARAMEDIC THEORY I 12 UNITS

*Grade only*

*Corequisite: EMTP 200L*

*Limitation on Enrollment: Acceptance into the paramedic program*

*Lecture 12 hours*

*Offered: Fall*

Fee: \$20. Offers first half of paramedic didactic training. Follows National Emergency Medical Services Education Standards (NEMSES) published by U.S. Department of Transportation. Includes preparatory, airway, assessment, pharmacology, and trauma modules. [D; CSU]

## EMTP 200L. ADVANCED LIFE SUPPORT PARAMEDIC LABORATORY I 3 UNITS

*Pass/No Pass only*

*Corequisite: EMTP 200 and 202*

*Limitation on Enrollment: Acceptance into the paramedic program*

*Laboratory 9 hours*

*Offered: Fall*

Fee: \$40. Provides skills portion of the National Emergency Services Education Standards (NEMSES) published in 2009. Includes psychomotor skills for medication administration, intravenous access, advanced airway management, patient assessment, history taking, and physical examination. [D; CSU]

## EMTP 201. ADVANCED LIFE SUPPORT PARAMEDIC THEORY II 12 UNITS

*Grade only*

*Prerequisite: EMTP 200 and 200L, or equivalent*

*Corequisite: EMTP 201L*

*Lecture 12 hours*

*Offered: Spring*

Provides second half of paramedic didactic training. Follows National Emergency Medical Services Education Standards (NEMSES) published by U.S. Department of Transportation. Includes medical, special patients and EMS operations. [D; CSU]

## EMTP 201L. ADVANCED LIFE SUPPORT PARAMEDIC LABORATORY II 3 UNITS

*Pass/No Pass only*

*Prerequisite: EMTP 200 and 200L, or equivalent*

*Corequisite: EMTP 201 and 203*

*Laboratory 9 hours*

*Offered: Spring*

Continues skills portion of the National Emergency Services Education Standards (NEMSES) published in 2009. Includes psychomotor skills electrocardiograph (ECG) interpretations, electrical therapy, lab-simulated patient emergency calls, multi-patient drills, and emergency childbirth. [D; CSU]

## EMTP 202. EMS COMMUNITY EXPERIENCE I 1.5 UNITS

*Pass/No Pass only*

*Corequisite: EMTP 200L*

*Limitation on Enrollment: Acceptance into the paramedic program*

*Laboratory 5.5 hours*

*Offered: Fall*

Fee: \$40. Provides Emergency Medical Services (EMS) observational experience in the hospital, clinic, and ambulance. Includes ambulance ride-alongs at area ambulance agencies and fire departments. Clinical sites expose students to the EMS patient in a secure, controlled environment. [D; CSU]

## EMTP 203. EMS COMMUNITY EXPERIENCE II 1.5 UNITS

*Pass/No Pass only*

*Prerequisite: EMTP 202 or equivalent*

*Corequisite: EMTP 201L*

*Laboratory 5.5 hours*

*Offered: Spring*

Provides hands-on experience in the hospital, clinic, and ambulance. Includes ambulance ride-alongs at area ambulance agencies and fire departments. Clinical sites expose students to the EMS patient in a secure and controlled environment. [D; CSU]

## EMTP 225. HOSPITAL CLINICAL EXPERIENCE FOR PARAMEDICS 3 UNITS

*Pass/No Pass only*

*Prerequisite: EMTP 201 and 201L, or equivalent*

*Limitation on Enrollment: Student must complete criminal background check and drug screen prior to clinical experience*

*Laboratory 9 hours*

*Offered: Variable*

Provides instruction to enhance student's knowledge of emergency care in a clinical setting; opportunity to assist and observe in emergency rooms, as well as other areas of the facility under direct supervision of hospital staff. Takes place in varied shift assignments. [D; CSU]

**EMTP 230.**  
**FIELD TRAINING FOR PARAMEDICS I**  
**8 UNITS**

*Pass/No Pass only*

*Prerequisite: EMTP 225 or equivalent*

*Laboratory 24 hours*

*Offered: Variable*

Provides practicum experience for paramedic students to observe and participate in emergency medical care supervised by a preceptor in an ambulance. Requires 20 twenty-four hour shifts, and students must document at least 40 advanced life support (ALS) patient contacts and serve as a team leader. [D; CSU]

**EMTP 231.**  
**FIELD TRAINING FOR PARAMEDICS II**  
**1 UNIT**

*Pass/No Pass only*

*Prerequisite: EMTP 225 or equivalent*

*Laboratory 3.5 hours*

*Offered: Variable*

Receives assignment to a preceptor in an ambulance. Assists with prehospital care in emergencies of all types which includes completion of 480 clock hours to satisfy field internship requirements (California) for paramedics and registered nurses seeking paramedic licensure. [D; CSU]

**EMTP 250.**  
**PARAMEDIC NREMT REFRESHER**  
**2 UNITS**

*Limitation on Enrollment: Previous EMT or paramedic course completion or certification*

*Lecture 1.5 hours, laboratory 2 hours*

*Offered: Variable*

Provides all continuing education hours required for biannual paramedic recertification. Follows California EMS Authority (CAEMSA) requirements for content directly or indirectly related to ALS patient care. Follows National Registry of Emergency Medical Technician Paramedic (NREMT) requirements for content in patient assessment, pharmacology, airway management, cardiology, medical and behavioral emergencies, trauma, obstetrics and pediatrics, and EMS operations. Students will receive certifications in Prehospital Trauma Life Support (PHTLS) and Pediatric Education for Prehospital Professionals (PEPP). [D; CSU]

**EMTP 295.**  
**SELECTED TOPICS IN EMERGENCY**  
**MEDICAL TECHNOLOGY AND**  
**PARAMEDIC**  
**1–3 UNITS**

*Offered: Variable*

Permits students to study relevant subjects within the field of emergency medical technology and paramedic. The specific objectives, methods of instruction and units of credit to be determined individually for projects proposed under this course description. [D; \*CSU]

**EMTP 299.**  
**INDEPENDENT STUDY**  
**1–3 UNITS**

*Limitation on Enrollment: Eligibility for independent study. See page 45.*

*Offered: Variable*

Individual study or research in some area of emergency medical technology for paramedics of particular interest to the student and not included in regular courses of the College. [D; CSU]

## ENGINEERING COURSES

**ENGR 101.**  
**INTRODUCTION TO ENGINEERING**  
**CAREERS**  
**1 UNIT**

*Lecture 1 hour*

*Offered: Fall*

Provides orientation to the various careers and future employment in engineering and related technical fields. Investigates education requirements, university programs, and student resources available on campus. [D; CSU; UC]

**ENGR 110.**  
**ENGINEERING DESIGN AND GRAPHICS**  
**3 UNITS**

*Grade only*

*Lecture 1 hour, laboratory 5 hours*

*Offered: Fall, Spring*

Covers fundamentals of engineering graphics, the design process, and solid modeling. Develops skills and techniques of solid modeling (Creo and Solidworks) to create parts, assemblies and drawings, including orthographic, detail, sectional, and auxiliary views. Includes dimensioning and dimensional tolerance, and thread notation per AMSE Y 14.5m standards [D; CSU; UC]

**ENGR 120C.**  
**ENGINEERING PROBLEM ANALYSIS—C/**  
**C++ LANGUAGE**  
**3 UNITS**

*Grade only*

*Prerequisite: MATH 104 or MATH 244 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent*

*Lecture 2 hours, laboratory 3 hours*

*Offered: Fall*

Introduces programming methodology and problem solving using C and C++. Emphasizes concepts of computer systems, algorithm design and development, data types, program structures, object-oriented programming, documentation, testing, and verification techniques. [D; CSU; UC]

**ENGR 202.**  
**ENGINEERING STATICS FOR ELECTRICAL**  
**ENGINEERS**  
**1.5 UNITS**

*Grade only*

*Prerequisite: MATH 121 or 250 or equivalent*

*Lecture 1.5 hours*

*Offered: Fall*

Covers the principles of engineering statics for rigid bodies. For the electrical engineering student. (Not open to students with credit in ENGR 250.) [D; CSU; UC]

**ENGR 204.**  
**ENGINEERING DYNAMICS FOR**  
**ELECTRICAL ENGINEERS**  
**1.5 UNITS**

*Grade only*

*Prerequisite: ENGR 202 or 250 or equivalent*

*Lecture 1.5 hours*

*Offered: Spring*

Covers kinematics and kinetics of particles and rigid bodies; application to engineering problems. (Not open to students with credit in ENGR 251.) [D; CSU; UC]

**ENGR 250.**  
**ENGINEERING STATICS**  
**3 UNITS**

*Grade only*

*Prerequisite: MATH 250 and PHYS 270 or equivalent*

*Lecture 3 hours*

*Offered: Fall*

Analyzes engineering structures in equilibrium. Includes topics of 2D and 3D forces, moments, couples, vector mathematics, friction, distributed forces, centroids, moments of inertia, shear and bending diagrams, and virtual work. [D; CSU; UC]