# **Emergency Medical Science/MICT (EMS)**

### Courses

# EMS 121 CPR I - Basic Life Support for Healthcare Provider (1 Hour)

This course provides an overview of the cardiovascular and respiratory systems, a discussion of medical and environmental emergencies leading to the need for CPR, and an introduction to diagnostic signs and triage, as well as insight into the structure and function of the emergency medical services system. The most current practical CPR skills will be taught, including CPR, AED, and airway obstruction techniques for adults, children and infants. Upon successful completion of all American Heart Association standards, the student will receive affirmation at the Healthcare Provider level.

#### EMS 129 Emergency Medical Responder\* (6 Hours)

Prerequisites: (RDG 096 or RDG 126) or College Reading Readiness.

The primary focus of the Emergency Medical Responder (EMR) is to initiate immediate lifesaving care at the scene of an emergency for ill or injured patients. This individual possesses the basic knowledge and skills necessary to provide lifesaving interventions while awaiting additional EMS response and to assist higher-level personnel at the scene and during transport. Emergency Medical Responders function as part of a comprehensive EMS response, under medical oversight. Emergency Medical Responders perform basic interventions with minimal equipment. This course is taught according to the Kansas EMS Educational Standards and National Educational Standards and allows students to gain appropriate skills and knowledge necessary for the National and State certifications as an Emergency Medical Responder.

#### EMS 132 Emergency Medical Technician\* (12 Hours)

Prerequisites: EMS 128 or EMS 129 with a grade of "C" or higher or Department approval.

The primary focus of the Emergency Medical Technician (EMT) is to initiate immediate lifesaving care at the scene of an emergency for ill or injured patients. This individual possesses the basic knowledge and skills necessary to provide lifesaving interventions at the emergency scene and during transport. Emergency Medical Technicians function as part of a comprehensive EMS response under medical oversight. Emergency Medical Technicians perform essential interventions with minimal equipment. This course is taught according to the Kansas EMS Educational Standards and National Educational Standards and allows students to gain appropriate skills and knowledge necessary for the National and State certifications as an Emergency Medical Technician.

#### EMS 140 Basic Cardiology and EKG Recognition\* (3 Hours)

Prerequisites: Prospective students should be certified in a health profession, i.e., EMT, RN, LPN, EMT-P.

The health care worker with an understanding of ECG tracing will function more effectively when providing care for the cardiac patient. Increasing numbers of professionals are being called upon to utilize ECG tracing in their work settings, but without adequate knowledge of its use. This course will serve as both continuing education and the preparation for the job entry and/or job advancement. During the course, students will learn to apply monitoring and 12-lead electrodes, diagnose ECG dysrhythmias and infarct locations, treat ECG dysrhythmias, and defibrillate ventricular fibrillation.

#### EMS 220 Medic I\* (10 Hours)

Prerequisites: Admission to the Paramedic program.

Medic I is the first of four courses in advanced out-of-hospital emergency medical care leading to the opportunity to sit for the National Registry Examination for Paramedics. In this narrowly focused but intense foundational course, the paramedic student will gain a significant knowledge of patient assessment, pharmacology and medication administration techniques, electrocardiography, advanced airway management and paramedic scope of practice. Much material will be covered rapidly, and emphasis is on organization, internalization and synthesis of the basic knowledge of the discipline in this 10-week course. Additionally, during the initial psychomotor teaching labs, students will gain the ability to assess patients, administer medications, treat dysrhythmias and manage the airway through manikin practice.

#### EMS 225 Medic II\* (10 Hours)

**Prerequisites:** Admission to the Paramedic program.

Prerequisites or corequisites: EMS 220 with a grade of "C" or higher.

Medic II is the second of four courses in advanced out-of-hospital emergency medical care leading to the opportunity to sit for the National Registry Examination for Paramedics. This course builds on the foundational knowledge developed in Medic I and covers advanced management of medical and trauma emergencies in the out-of-hospital environment. Much material will be covered rapidly, and emphasis is on organization, internalization, synthesis and application of the basic knowledge of the discipline in this 10-week course. Students demonstrate competency at motor skill performance, and extensive simulation practice is afforded. Students begin field observation with a paramedic ambulance crew and complete an Advanced Cardiac Life Support course.

## EMS 230 Medic III Clinicals\* (12 Hours)

Prerequisites: Admission to the Paramedic program and EMS 225 with a grade of "C" or higher.

Medic III is the third of four courses in advanced out-of-hospital emergency medical care leading to the opportunity to sit for the National Registry Examination for Paramedics. During Medic III, paramedic students have the opportunity to take the knowledge and skills gained in Medic I and II and apply them in actual supervised clinical practice. Medic III represents a brief, intense 14-week course in which knowledge and skills are synthesized and applied to patients under supervision of physicians and nurses in clinical practice in the emergency department, critical care unit, surgery/ recovery room, labor/delivery room, pediatric emergency department and burn center. Field observation lab and classroom and laboratory review are included as well.

#### EMS 271 Medic IV Field Internship\* (15 Hours)

Prerequisites: Admission to the Paramedic program and EMS 230 with a grade of "C" or higher.

Medic IV is the final of four courses in advanced out-of-hospital emergency medical care leading to the opportunity to sit for the National Registry Examination for Paramedics. During MICT IV, paramedic students have the opportunity to take the knowledge and skills gained in MICT I, II, and III and apply them in an actual practice environment. MICT IV represents an intense 4-month course in which knowledge, skills, and professional behaviors are synthesized and applied to victims of sudden trauma or medical emergencies under the supervision of paramedic preceptors at the emergency scene and in the ambulance. Entry-level competence into the profession is demonstrated as the student demonstrates the ability to assess the scene and the patient, develop a plan for therapeutic intervention as well as scene management, and effectively lead the out-of-hospital resuscitation team's effort. Classroom and laboratory reviews are included.