

Emergency Medical Science (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) RDG 120 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 221 Paramedic I - Human Systems* (3 Hours)

Prerequisites : Admission to the Paramedic Program.

This initial course in a ten-part series introduces advanced out-of-hospital emergency medical care. It prepares students for the National Registry Examination for Paramedics, covering essential EMS topics such as systems, ethics, and provider well-being. Students develop proficiency in medical terminology and human systems, focusing on anatomy, physiology, and pathophysiology relevant to paramedic practice. This course establishes a robust foundation for aspiring paramedics, emphasizing knowledge organization and synthesis.

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 226 Paramedic II - Patient Assessment and Pharmacology* (3 Hours)

Prerequisites : Admission to the Paramedic Program.

Prerequisites or corequisites: EMS 221 with a "C" or higher.

This is the second course in a series of ten, designed to provide advanced training in out-of-hospital emergency medical care. This course builds on foundational knowledge and prepares students for the National Registry Examination for Paramedics. In this focused and intensive course, students will develop in-depth knowledge of patient assessment techniques and pharmacology. They will learn medication administration methods critical for effective paramedic practice. The curriculum covers advanced airway assessment and management, emphasizing the skills needed to ensure patient safety and care quality in emergency situations. Additionally, students will explore EMS communications and documentation, gaining the competencies necessary for clear and effective communication in the field. The course material is presented at an accelerated pace, with an emphasis on organization, internalization, and synthesis of complex concepts. By the end of the course, students will be equipped with the advanced knowledge and skills required for effective emergency medical practice.

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 231 Paramedic III - Cardiology* (3 Hours)

Prerequisites : Admission to Paramedic Program.

Prerequisites or corequisites: EMS 226 with a grade of "C" or higher .

This third course in the ten-part series focuses on cardiovascular emergency care, preparing students for the National Registry Examination for Paramedics. It provides an in-depth exploration of cardiac electrophysiology and function, emphasizing the assessment and management of cardiac emergencies. Key topics include ECG interpretation; cardiac infarction evaluation and localization; and comprehensive management of pre-during and post-cardiac arrest patients. This course emphasizes the organization and synthesis of complex cardiac concepts. Students will develop crucial decision-making skills for high-pressure situations, building a solid foundation in cardiology for their paramedic careers.

EMS 235 Paramedic IV - Medical Emergencies 1* (3 Hours)

Prerequisites : Admission to Paramedic Program.

Prerequisites or corequisites: EMS 231 with a grade of "C" or higher .

This fourth course in the ten-part paramedic series focuses on advanced pre-hospital management of medical emergencies. It continues to prepare students for the National Registry Examination for Paramedics while enhancing their real-world application skills. The course covers developing and implementing treatment plans for abdominal and vascular emergencies and exploring pathophysiology and management strategies for behavioral patients and special populations. This fast-paced course emphasizes the organization and synthesis of advanced knowledge, with extensive simulation practice to ensure motor skill competency.

EMS 240 Paramedic V - Medical Emergencies 2* (3 Hours)

Prerequisites : Admission to Paramedic Program and EMS 231 with a "C" or higher.

Prerequisites or corequisites: EMS 235 with a grade of "C" or higher .

This fifth course in the ten-part paramedic series expands on Medic I-IV, focusing on managing complex pre-hospital medical emergencies. It continues to prepare students for the National Registry Examination for Paramedics while broadening their clinical expertise. The course covers the evaluation and management of environmental emergencies, toxicological exposures, and altered mental status. A key focus is contrasting adult and pediatric medical emergencies, providing a comprehensive understanding of age-specific approaches. Students will also learn to differentiate various endocrine emergencies, enhancing their diagnostic and treatment skills.

EMS 245 Paramedic VI - Trauma* (3 Hours)

Prerequisites : Admission to Paramedic Program.

Prerequisites or corequisites: EMS 240 with a grade of "C" or higher.

This sixth course in the ten-part paramedic series builds on Medic I-V, focusing on advanced pre-hospital management of traumatic emergencies. It continues to prepare students for the National Registry Examination for Paramedics while deepening their trauma care expertise. The course covers comprehensive evaluation and management of traumatic injuries across all body systems, including burns and environmental trauma. Students explore infectious disease management in trauma patients and the physics of trauma, providing a thorough understanding of injury impacts on the human body.

EMS 250 Paramedic VII - Clinicals 1* (6 Hours)

Prerequisites : Admission to Paramedic Program.

Prerequisites or corequisites: EMS 245 with a grade of "C" or higher .

This seventh course in the ten-part paramedic series marks a crucial transition, focusing on integrating and applying knowledge from Medic I-VI through supervised clinical and field practice. It continues to prepare students for the National Registry Examination for Paramedics while emphasizing hands-on experience. Students synthesize their learning in diverse clinical settings, including emergency departments, critical care units, surgery/recovery rooms, burn centers, respiratory therapy, and mental health facilities. Under physician and nurse supervision, they enhance their clinical competence and confidence.

EMS 255 Paramedic VIII - Clinicals 2* (6 Hours)

Prerequisites : Admission to Paramedic Program.

Prerequisites or corequisites: EMS 250 with a grade of "C" or higher .

This eighth course in the ten-part paramedic series marks a crucial transition, focusing on integrating and applying knowledge from Medic I-VI through supervised clinical and field experience. It continues to prepare students for the National Registry Examination for Paramedics while emphasizing hands-on experience. Students synthesize their learning in diverse clinical settings, including emergency departments, critical care units, surgery/recovery rooms, burn centers, respiratory therapy, and mental health facilities. Under physician and nurse supervision, they enhance their clinical competence and confidence.

EMS 260 Paramedic IX- Field Internship 1* (8 Hours)

Prerequisites : Admission to Paramedic Program.

Prerequisites or corequisites: EMS 255 with a grade of "C" or higher.

This ninth course in the ten-part paramedic series marks the beginning of intensive field internship experience, continuing to prepare students for the National Registry Examination for Paramedics. It offers an immersive opportunity for students to synthesize and apply their knowledge, skills, and professional behaviors in real-world emergencies. Students function as team leaders, demonstrating entry-level competence in assessing scenes and patients, developing and implementing therapeutic intervention plans, and effectively managing emergencies. This formative internship is crucial for building the confidence and competence needed for the final summative internship in Medic X.

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.

EMS 272 Paramedic X - Field Internship 2* (8 Hours)

Prerequisites : Admission to Paramedic Program.

Prerequisites or corequisites: EMS 260 with a grade of "C" or higher .

This tenth and final course in the paramedic series represents the culmination of advanced out-of-hospital emergency medical care training, preparing students for the National Registry Examination for Paramedics. It offers an intensive, synthesizing experience where students apply their comprehensive knowledge and skills in real-world emergency scenarios. Students demonstrate entry-level competence in scene and patient assessment, therapeutic intervention, and leadership of out-of-hospital resuscitation teams. This extensive hands-on experience, coupled with rigorous final assessments, ensures students are fully prepared for independent paramedic practice. This course solidifies students' competence and confidence, verifying their readiness to meet the high standards of professional emergency medical services.