

EMT PARAMEDIC CERTIFICATE

Emergency Medical Services, more commonly known as EMS, is a system that provides emergency medical care. Once it is activated by an incident that causes serious illness or injury, the focus of EMS is emergency medical care of the patient(s).

EMS is most easily recognized when emergency vehicles or helicopters are seen responding to emergency incidents. But EMS is much more than a ride to the hospital. It is a system of coordinated response and emergency medical care, involving multiple people and agencies. A comprehensive EMS system is ready every day for every kind of emergency. EMS does not exist in isolation, but is integrated with other services and systems intended to maintain and enhance the community's health and safety.

The University of Toledo Emergency Medical Services (EMS)

Program offers **Basic EMT courses** over one- and two-semester options, as well as **Paramedic courses** over a one-year (three semester) certificate program under UToledo's College of Medicine and Life Sciences (<https://www.utoledo.edu/med/>).

Didactic education is 100% online with in-person skills labs and in-person clinical rotations. Students will have either a Monday or Tuesday option for required skills lab via sign-up genius scheduled every other week. Every Thursday will be a 3-hour required didactic review with the class and Instructor.

We use experienced instructors and a variety of other well trained medical professionals to facilitate training using low and high fidelity simulation for scenario based learning and cadaveric experiences for real life skill and procedural performance.

The University of Toledo Emergency Medical Services (EMS) Program (<https://www.utoledo.edu/med/ems/about.html>) produces competent entry level emergency medical responders in the area of cognitive, psychomotor, and effective/behavioral domains.

The program boasts a 100% pass rate for the State of Ohio DPS EMT and Paramedic Certified status, and a 100% employment rate in the EMS field.

To be admitted to the program, students must meet pre-requirements that include an in-person meeting with the Program Director, successfully pass a department administered entrance exam and meet all pre-requirements. Those pre-requirements include an FBI background check, a current American Heart (AHA) CPR card, and completed health and immunization requirements. Students are encouraged to contact the department and schedule a meeting time at least 30 days in advance before the course begins.

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For further information, please visit <https://www.utoledo.edu/med/ems/>

With cutting edge technologies and wide variety of opportunities for interprofessional interactions, UToledo's EMS students are trained and prepared for real patient interaction like no other students in the Midwest.

Students trained through UToledo's EMS Education program will receive college credit for coursework completed and receive some of the most cutting edge and high tech training available in the U.S. Students have access to many of UToledo's cutting edge training and simulation centers such as The Interprofessional Immersive Simulation Center (IISC) (<https://www.utoledo.edu/centers/iisc/>) and the Hillebrand Clinical Skills Center. (<https://www.utoledo.edu/centers/csc/>) Through various forms of training and simulation, students gain hands on experience in areas such as:

1) Gross Anatomy: Hands on experience with both fresh and embalmed cadavers is provided for students as they complete their coursework in anatomy & physiology and advanced airway skills development.

2) Clinical Skills: Utilizing both pre-programmed mechanical and real-life (actor) patients, students develop and evaluate communication and assessment skills, and receive timely feedback and debriefing to enforce the educational benefit. Student's also have access to hands-on skill labs for individual skill development.

3) Simulated Patient Scenarios: Students often have the opportunity to interact interprofessionally with students from other professions in controlled simulated scenarios. Student's train with state of the art computerized simulated patients for team scenarios. Events can be recorded and provided the ability to debrief and provide immediate feedback to individuals and teams, reinforcing performance concepts.

4) Virtual Immersive Reality (VIR) and Computer Aided Learning Modules: Technologies used include virtual immersive stereoscopic 3D model modules along with a variety of advanced educational learning modules.

The successful completion of the coursework supports the application for the state of Ohio's EMS certificate and National Registry.

Code	Title	Hours
EMS 2310	Paramedic I	10
EMS 3320	Paramedic II	10
EMS 4330	Paramedic III	10
Total Hours		30

MINIMUM percentage of 80% must be achieved in Paramedic I before advancing to Paramedic II and III

First Term		Hours
EMS 2310	Paramedic I	10
Hours		10
Second Term		Hours
EMS 3320	Paramedic II	10
Hours		10
Third Term		Hours
EMS 4330	Paramedic III	10
Hours		10
Total Hours		30

- PLO 1. Demonstrate knowledge of Human Systems , as related to emergency medical care.

- PLO 2. Distinguish between the needs and care of pediatric, adult, and geriatric patients in emergency medical care.
- PLO 3. Demonstrate proficiency in airway control of medical and trauma patients in emergency medical situations.
- PLO 4. Evaluate and properly treat dangerous cardiac rhythms, according to American Heart Association guidelines, in all patient types in emergency medical situations.
- PLO 5. As a member of an EMS team , evaluate, assess, treat, and transport a variety of patient types , in diverse settings in the community, in an emergency medical situation.
- PLO 6. As a member of an EMS team, demonstrate the ability to assess, treat, and transport a variety of patient types , in a wide range of realistic simulation scenarios.
- PLO 7. As a member of an EMS Team , act as the lead Paramedic in charge , and assess and treat 20 patients in the Capstone Experience. Each student in the capstone will delegate tasks to other paramedic members of the team , communicate with med control, and properly mitigate any emergencies, in accordance with local protocols, and recognized best standard of care.
- PLO 8. Properly demonstrate the acquisition of the following skills: mechanical ventilation of a patient, endotracheal intubation, use of a king airway device, appropriate oxygen administration, use of a cervical collar and backboard, EKG acquisition with proper interpretation and treatment, defibrillation, cardioversion and cardiac pacing, treatment of burns, splinting and treatment of fractures, administration of medications, preparation and insertion of an IV (adult and pediatric), administration of an intramuscular and subcutaneous injection, and bleeding control.
- PLO 9. Describe the body's physiologic response to changes in perfusion. Define shock and the pathophysiology of compensated and decompensated shock, and demonstrate the management of different types of shock.
- PLO 10. Distinguish between the priorities of medical versus trauma patients.
- PLO 11. Describe the role of communication in EMS, and demonstrate proper communication with other crew members, hospital staff, medical control, patients and their families.
- PLO 12. Outline and demonstrate the prehospital management of cerebral injuries.
- PLO 13. Describe and demonstrate the principals of triage and operations at a mass casualty incident.\n
- PLO 14. Discuss and demonstrate general safety principals that EMS personnel should follow at every incident.
- PLO 15. Discuss actions to take when responding to possible terrorists events.\n
- PLO 16. Discuss and demonstrate the principals of out of hospital births and their proper management, along with other prehospital obstetrical emergencies.
- PLO 17. Demonstrate the care and treatment of prehospital pediatric emergencies , from neonate to adolescents.