

# HEM-EMERGENCY MEDICAL SERVICES (HEM)

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## HEM 1103 EMT-Basic (2-2-3)

The EMT-B level prepares the student to provide basic emergency health care in the clinical environment. The course will introduce the student to the knowledge, skills and competencies to assess, diagnose and manage patients. EMT-B will also assist other practitioners in the clinical environment under the supervision of a qualified practitioner.

## HEM 2015 Medical Emergencies (3-4-5)

Introduces theoretical knowledge, skills and competencies to provide medical care to ill patients in the pre-hospital emergency care setting at an intermediate level. Students will have the opportunity to solve a wide range of medical and other non-traumatic cases for all patient populations at the specified intermediate scope of practice.

**Prerequisites:** HEM 1103

## HEM 2024 Trauma Emergencies (2-4-4)

Provides the necessary theoretical knowledge, skills and competencies to provide medical care to patients in the prehospital and in-hospital emergency care setting. A wide range of traumatic pathologies, illnesses and diseases will be presented at the intermediate level in the scope of emergency medicine. In addition it addresses the community's needs for health prevention, promotion and curative care. Caters for special populations and contemporary epidemiology.

**Prerequisites:** HEM 1103

## HEM 2033 EMS Applied Pharmacology I (2-2-3)

Provides an introduction into basic concepts and fundamentals of applied pharmacology within the prehospital emergency care context. Focuses on the basic drug classification and concepts with special consideration to Emergency Medical Care. This subject requires you to link your understanding of physiology, pathophysiology and emergency medical care to the administration of medications within a defined scope of practice. Each of the medications that are administered by emergency care practitioners within the UAE are dealt with at an introductory level based on the relevant scope of practice.

**Prerequisites:** HEM 1103

## HEM 2103 Foundations of Professional Practice (2-2-3)

This course develops the knowledge, skills and competencies required for the multiple roles the paramedic is expected to play in the EMS environment. This encompasses leadership, basic EMS administration, management of emergency response situations, facilitating transfer of knowledge and skills, and promoting quality improvement processes.

## HEM 2123 Obstetric, Gynecology, Neonatal and Pediatric Emergencies (2-2-3)

Introduces knowledge, skills and competencies in the pre-hospital assessment and management of gynecological, obstetric, pediatric emergencies and neonatal resuscitation at an intermediate level. The student has the opportunity to apply previous knowledge of pharmacology, medical and trauma emergencies to specific disorders within this special patient population.

**Prerequisites:** HEM 1103

## HEM 2903 Ambulance Practicum I (0-12-3)

Integrate knowledge, skills and competencies learned in the classroom and clinical lab with real and or immersive patients in the pre-hospital environment. Students will have the opportunity to attend ambulance shifts in the clinical environment and apply patient management techniques and relevant scope of practice under supervision to real patients in the pre-hospital environment and simulated patients in the immersive environment.

**Prerequisites:** HEM 1103

## HEM 2913 Hospital Practicum I (0-12-3)

Integrate knowledge, skills and competencies learned in the classroom and clinical lab, and apply to real and or simulated patients for the in-hospital and immersive environment. Students will have the opportunity to attend shifts in various hospital departments and apply patient management at the relevant paramedic scope of practice under supervision.

**Prerequisites:** HEM 2015, HEM 2024

## HEM 2923 Ambulance Practicum II (0-12-3)

Integrate knowledge, skills and competencies learned in the classroom and clinical lab with real and or immersive patients in the pre-hospital environment. Students will have the opportunity to attend ambulance shifts in the clinical environment and apply patient management techniques and relevant scope of practice under supervision to real patients in the pre-hospital environment and simulated patients in the immersive environment.

**Prerequisites:** HEM 2903, HEM 2015, HEM 2024

## HEM 3006 Advanced Prehospital Emergency Care I (4-4-6)

Integrate knowledge and clinical skills for the diagnoses and management of patients with airway, cardiovascular and respiratory emergencies at an advanced paramedic level. Students will have the opportunity to apply clinical reasoning skills that underpins the management of such patients across the lifespan.

**Prerequisites:** HEM 2015

## HEM 3013 EMS Applied Pharmacology II (2-2-3)

Incorporate evidence-based medicine into current knowledge and practice of applied pharmacology. Students will have the opportunity to interrogate concepts of best practice and legislation, pharmacokinetics, pharmacotherapy, drug classifications and calculations within the Advanced Paramedic scope of practice.

**Prerequisites:** HEM 2033

## HEM 3106 Advanced Prehospital Emergency Care II (4-4-6)

Apply advanced clinical diagnostics and implement relevant management plans for critically ill or injured patients in the pre-hospital environment at an advanced paramedic level. Students will have the opportunity to critically discuss and implement advanced patient management pertaining to trauma, environmental and toxicological emergencies.

**Prerequisites:** HEM 2024, HEM 3006

## HEM 3113 Primary Health Care (4-0-3)

Apply the principles of primary health care to the pre-hospital environment in the UAE. Students will have the opportunity to promote health and education as well as apply prevention and curative strategies to patients with mental health issues, minor injuries/ailments and infectious diseases.

**Prerequisites:** HEM 1103, HEM 2903

**HEM 3903 Ambulance Practicum III (0-12-3)**

Integrate knowledge, skills and competencies learned in the classroom and clinical lab with real and immersive patients in the pre-hospital environment. Students will have the opportunity to attend ambulance shifts in the clinical environment where they will apply patient management techniques and relevant scope of practice under supervision to real patients in the clinical environment and simulated patients in the immersive environment.

**Prerequisites:** HEM 2923

**HEM 3913 Hospital Practicum II (0-12-3)**

The course is designed to prepare the paramedic student for the job which involves the supervised practical application of previously studied theory. You will be required to integrate knowledge, skills and competencies learned in the classroom and clinical laboratory settings with real patient interactions.

**Prerequisites:** HEM 2913, HEM 3006

**HEM 3923 Responder Practicum I (0-12-3)**

Integrate knowledge, skills and competencies learned in the classroom and clinical lab, and apply to real and immersive generated patients in the authentic and immersive created pre-hospital environment. Students will have the opportunity to attend responder shifts where they will observe and apply patient management techniques and relevant scope of practice under supervision at an advanced paramedic level.

**Prerequisites:** HEM 3006, HEM 3106, HEM 3903

**HEM 4006 Advanced Gynecological/Obstetric and Pediatric Emergencies (4-4-6)**

Integrate knowledge, skills and competencies to manage specific medical and trauma related Obstetric, Neonatal and Pediatric emergencies at an Advanced Paramedic level in the prehospital environment. Students will have the opportunity to critically discuss and demonstrate current advanced practices in Obstetric, Neonatal and Pediatric emergency care.

**Prerequisites:** HEM 2123

**HEM 4013 Leadership in Professional Practice (4-0-3)**

Leadership is a vital part of delivering high quality healthcare for all healthcare professionals. This course develops the knowledge, skills and competencies required for the multiple leading roles the advanced paramedic is expected to play in the EMS environment. This encompasses leadership, basic EMS administration, management of emergency response situations, facilitating transfer of knowledge and skills, and promoting quality improvement processes.

**Prerequisites:** HEM 2103

**HEM 4106 Advanced Standards of Prehospital Emergency Care and Transport (4-4-6)**

Introduces evidence based knowledge and reflective processes to improve the quality of patient care through advanced management plans for specialized patients. Students will have the opportunity to solve complex patient scenarios in the primary and intensive care setting.

**Prerequisites:** HEM 3006

**HEM 4903 Hospital Practicum III (0-12-3)**

Integrate knowledge, skills and competencies learned in the classroom and clinical lab with real and immersive generated patients in the authentic and immersive created hospital environment. Students will have the opportunity to attend hospital shifts where they will observe and apply patient management techniques and relevant scope of practice under supervision, at an advanced paramedic level.

**Prerequisites:** HEM 3913

**HEM 4913 Responder Practicum II (0-12-3)**

Integrate knowledge, skills and competencies learned in the classroom and clinical lab with real and immersive generated patients in the authentic and immersive created pre-hospital environment. Students will have the opportunity to attend responder shifts where they will observe and apply patient management techniques and relevant scope of practice under supervision, at an advanced paramedic level.

**Prerequisites:** HEM 3923

**HEM 4923 Responder Practicum III (IST Optional) (0-12-3)**

Integrate knowledge, skills and competencies learned in the classroom and clinical lab with real and immersive generated patients in the authentic and immersive created pre-hospital environment. Students will have the opportunity to attend responder shifts where they will observe and apply patient management techniques and relevant scope of practice under supervision, at an advanced paramedic level.

**Prerequisites:** HEM 4913