

# BACHELOR OF EMERGENCY MEDICAL SERVICES

## Admission to Program

Admission to the program is explained in the HCT Admission Policy described in the Academic Policies section of this Catalog.

## Program Mission

The Emergency Medical Services program is committed to training the next generation of UAE nationals to the highest international standards of prehospital emergency care. With an emphasis on evidence-based medicine, competency-based learning, and the latest educational technology, we strive to meet the needs of the community and our industry partners to have trained UAE nationals providing quality emergency care to the critically ill or injured in the United Arab Emirates.

## Program Description

The Bachelor of Emergency Medical Services program is a four-year program preparing graduates for emergency medical care professional practice. In the first two program years students develop an extensive knowledge of communication, introduction to critical thinking, AI foundations, anatomy and physiology, emergency dispatching, disaster management, pharmacology, and prehospital emergency care up to a paramedic scope of practice. The final two years of the program develop students' skills to advanced paramedic scope of practice, which includes: advanced prehospital care, community and remote medicine, advanced pharmacology, mental health, advanced obstetric, neonatal, and pediatric care, research, quality leadership, and specialized transport and rescue practices. The program promotes the development of analytical thinking, problem-solving abilities, communication skills, professional ethics, social responsibility, professional citizenship, the ability to adapt to change and respond to challenges in the prehospital and in-hospital emergency settings, and a commitment to lifelong learning.

Students are eligible for a one year Work Experiential Learning experience during their study.

## Program Goals

1. Prepare competent, professional and autonomous pre-hospital emergency care providers equipped to provide quality and advanced life-support care to all critically ill or injured patients following the national and international EMS standards of care.
2. Educate the EMS graduates on the knowledge and skills to be compassionate and effective communicators and able to utilize critical thinking and problem solving skills when providing prehospital emergency care.
3. Prepare the EMS graduates with effective leadership and team work skills to work within an interdisciplinary healthcare team and foster the growth and development of the EMS in the UAE.
4. Foster excellence and professional development through reflective practitioners and life-long learning for the current and future EMS practice.
5. Prepare the EMS students as advanced life-support practitioners who contribute to the expansion, innovation and entrepreneurship in EMS professional practice and careers.

6. Prepare the EMS graduates to be collaborative and innovative through evidence-based practices and scholarly activities.

## Program Learning Outcomes

### Bachelor of Emergency Medical Services

*On successful completion of this program, the graduate will be able to:*

1. Use an evidence-based approach to provide internationally aligned best practice with safe, responsible, and quality patient care in the prehospital setting.
2. Apply knowledge, psychomotor skills, and technology through simulation and skills-based training to make ethical autonomous decisions and deliver quality care in accordance with Advanced Paramedic Clinical Practice Guidelines (AP-CPG).
3. Demonstrate effective communication, respect, integrity, and accountability to manage emergency medical situations for all patient populations.
4. Apply critical thinking without guidance, to analyse medical emergency situations and investigate medical innovations to deliver the best quality medical care in the prehospital environment.
5. Demonstrate competency in technical leadership skills, to be able to lead, advocate, and work collaboratively within a multidisciplinary team.
6. Use lifelong learning as a reflective practitioner in order to modify practice and enhance the prehospital emergency care profession.
7. Apply entrepreneurship and innovation skills to identify and contribute to potential solutions for emerging complex healthcare challenges in the prehospital setting.

### Diploma of Emergency Medical Services

*On successful completion of this program, the graduate will be able to:*

1. Use an evidence-based approach to provide internationally aligned best practice with safe, responsible, and quality patient care in the prehospital setting.
2. Apply knowledge, psychomotor skills, and technology through simulation and skills-based training to make ethical autonomous decisions and deliver quality care in accordance with the Paramedic Clinical Practice Guidelines (P-CPG).
3. Demonstrate effective communication, respect, integrity, and accountability to manage emergency medical situations for all patient populations.
4. Apply critical thinking with limited guidance to analyse medical emergencies and deliver the best quality emergency care in the prehospital environment.
5. Demonstrate competency in technical leadership skills, to advocate, and work collaboratively within a multidisciplinary team.
6. Use lifelong learning as a reflective practitioner to enhance the prehospital emergency care profession.
7. Demonstrate innovative and sustainable attributes relevant to the prehospital emergency care profession.

## Requirements

### Completion Requirements

Bachelor of Emergency Medical Services

Students must successfully complete a minimum of 120 credits as follows:

Code	Title	Credit Hours
Emergency Medical Services Core Courses		74
Emergency Medical Services Core Lab-Based Course		7
Emergency Medical Services Preceptorship Courses		21
General Studies		18
<b>Total Credit Hours</b>		<b>120</b>

**NOTE: Exit with Diploma**

Students seeking the exit with a Diploma in Emergency Medical Services (DPHEM) degree must successfully complete the following minimum requirements:

1. A minimum of 62 credits, as follows:
  - a. A minimum requirement of 35 credits in EMS core courses.
  - b. A minimum requirement of 3 credits in EMS core lab-integrated courses.
  - c. A minimum requirement of 6 credits in EMS Preceptorship courses.
  - d. A minimum requirement of 18 credits in General Studies.
2. A minimum CGPA of 2.00.

Code	Title	Credit Hours
<b>Bachelor: Emergency Medical Services Core Courses</b>		
Required Credits: 74		
HEM 1013	Anatomy for EMS	3
HEM 1012	Fundamentals of Paramedic Practice	2
HEM 1023	Physiology for EMS	3
HEM 1123	Prehospital Emergency Care – Theory I	3
HEM 1223	Pre-hospital Emergency Care – Practice I	3
HEM 2133	Prehospital Emergency Care – Medical Theory II	3
HEM 2233	Prehospital Emergency Care – Medical Practice II	3
HEM 2043	Applied Pharmacology I	3
HEM 2032	Emergency Services Dispatching	2
HEM 2143	Prehospital Emergency Care – Trauma Theory II	3
HEM 2243	Prehospital Emergency Care – Trauma Practice II	3
HEM 2042	Disaster & Mass Incident Management	2
HEM 2142	Gynecological, Obstetric & Pediatric Emergencies	2
HEM 3153	Advanced Prehospital Emergency Care Theory	3
HEM 3253	Advanced Prehospital Emergency Care Practice	3
HEM 3053	Community Health & Remote Paramedicine	3
HEM 3023	Applied Pharmacology II	3
HEM 3162	Mental Health Emergencies & Crisis Intervention	2
HEM 3163	Advanced Obstetrics & Neonatology Emergency Care	3
HEM 3263	Advanced Pediatric Emergency Care	3
HEM 4073	Research Methods for EMS	3
HEM 4023	EMS Leadership & Quality Improvement	3
HEM 4076	Specialized Transport & Rescue Practices for EMS	6

HEM 4083	Capstone Research Project for EMS	3
HEM 4084	Advanced Paramedic Case Studies & Critical Care	4

**Bachelor: Emergency Medical Services Lab Integrated Courses**

Required Credits: 7

HEM 1021	EMS Clinical Integration Lab I	1
HEM 2031	EMS Clinical Integration Lab II	1
HEM 2041	EMS Clinical Integration Lab III	1
HEM 3052	EMS Advanced Clinical Integration Lab I	2
HEM 3062	EMS Advanced Clinical Integration Lab II	2

**Bachelor: Emergency Medical Services Preceptorship Courses**

Required Credits: 21

HEM 2933	Hospital Preceptorship I	3
HEM 2943	Ambulance Preceptorship I	3
HEM 3933	Hospital Preceptorship II	3
HEM 3943	Ambulance Preceptorship II	3
HEM 4933	Responder Preceptorship I	3
HEM 4936	Responder Preceptorship II	6

**General Studies**

Required Credits: 18

LSC 1103	Professional Written Communication	3
AES 1003	Emirati Studies	3
LSS 1133	Critical Thinking and Research Skills	3
LSC 1503	Professional Spoken Communication	3
CIS 2603	Artificial Intelligence Foundations	3
BUS 2403	Innovation and Entrepreneurship	3

Note: Diploma in Emergency Medical Services Courses: Diploma Exit

**Diploma: Emergency Medical Services Core Courses**

Required Credits: 35

HEM 1013	Anatomy for EMS	3
HEM 1012	Fundamentals of Paramedic Practice	2
HEM 1023	Physiology for EMS	3
HEM 1123	Prehospital Emergency Care – Theory I	3
HEM 1223	Pre-hospital Emergency Care – Practice I	3
HEM 2133	Prehospital Emergency Care – Medical Theory II	3
HEM 2233	Prehospital Emergency Care – Medical Practice II	3
HEM 2043	Applied Pharmacology I	3
HEM 2032	Emergency Services Dispatching	2
HEM 2143	Prehospital Emergency Care – Trauma Theory II	3
HEM 2243	Prehospital Emergency Care – Trauma Practice II	3
HEM 2042	Disaster & Mass Incident Management	2
HEM 2142	Gynecological, Obstetric & Pediatric Emergencies	2

**Diploma: Emergency Medical Services Lab Integrated Courses**

Required Credits: 3

HEM 1021	EMS Clinical Integration Lab I	1
HEM 2031	EMS Clinical Integration Lab II	1
HEM 2041	EMS Clinical Integration Lab III	1

**Diploma: Emergency Medical Services Preceptorship Courses**

Required Credits: 6

HEM 2933	Hospital Preceptorship I	3
HEM 2943	Ambulance Preceptorship I	3

**General Studies**

Required Credits: 18

LSC 1103	Professional Written Communication	3
AES 1003	Emirati Studies	3
LSS 1133	Critical Thinking and Research Skills	3
LSC 1503	Professional Spoken Communication	3
CIS 2603	Artificial Intelligence Foundations	3
BUS 2403	Innovation and Entrepreneurship	3

Description	Data
Total Required Credits	120
Maximum Duration of Study	6 years
Minimum Duration of Study	4 years
Cost Recovery Program	No
Program Code	BHEMU
Major Code	HEM

## Ideal Study Plan

### Recommended Sequence of Study

Year 1		Credit Hours
<b>Semester 1</b>		
LSC 1103	Professional Written Communication	3
AES 1003	Emirati Studies	3
LSS 1133	Critical Thinking and Research Skills	3
HEM 1013	Anatomy for EMS	3
HEM 1012	Fundamentals of Paramedic Practice	2
	<b>Credit Hours</b>	<b>14</b>
<b>Semester 2</b>		
LSC 1503	Professional Spoken Communication	3
HEM 1023	Physiology for EMS	3
HEM 1123	Prehospital Emergency Care – Theory I	3
HEM 1223	Pre-hospital Emergency Care – Practice I	3
HEM 1021	EMS Clinical Integration Lab I	1
	<b>Credit Hours</b>	<b>13</b>
<b>Summer</b>		
HEM 2933	Hospital Preceptorship I	3
	<b>Credit Hours</b>	<b>3</b>
<b>Year 2</b>		
<b>Semester 3</b>		
CIS 2603	Artificial Intelligence Foundations	3
HEM 2133	Prehospital Emergency Care – Medical Theory II	3
HEM 2233	Prehospital Emergency Care – Medical Practice II	3
HEM 2032	Emergency Services Dispatching	2
HEM 2043	Applied Pharmacology I	3
HEM 2031	EMS Clinical Integration Lab II	1
	<b>Credit Hours</b>	<b>15</b>
<b>Semester 4</b>		
BUS 2403	Innovation and Entrepreneurship	3
HEM 2143	Prehospital Emergency Care – Trauma Theory II	3
HEM 2243	Prehospital Emergency Care – Trauma Practice II	3
HEM 2042	Disaster & Mass Incident Management	2
HEM 2142	Gynecological, Obstetric & Pediatric Emergencies	2
HEM 2041	EMS Clinical Integration Lab III	1
	<b>Credit Hours</b>	<b>14</b>
<b>Summer</b>		
HEM 2943	Ambulance Preceptorship I	3
	<b>Credit Hours</b>	<b>3</b>

<b>Year 3</b>		
<b>Semester 5</b>		
HEM 3153	Advanced Prehospital Emergency Care Theory	3
HEM 3253	Advanced Prehospital Emergency Care Practice	3
HEM 3053	Community Health & Remote Paramedicine	3
HEM 3023	Applied Pharmacology II	3
HEM 3052	EMS Advanced Clinical Integration Lab I	2
	<b>Credit Hours</b>	<b>14</b>
<b>Semester 6</b>		
HEM 3162	Mental Health Emergencies & Crisis Intervention	2
HEM 3163	Advanced Obstetrics & Neonatology Emergency Care	3
HEM 3263	Advanced Pediatric Emergency Care	3
HEM 3933	Hospital Preceptorship II	3
HEM 3062	EMS Advanced Clinical Integration Lab II	2
	<b>Credit Hours</b>	<b>13</b>
<b>Summer</b>		
HEM 3943	Ambulance Preceptorship II	3
	<b>Credit Hours</b>	<b>3</b>
<b>Year 4</b>		
<b>Semester 7</b>		
HEM 4073	Research Methods for EMS	3
HEM 4023	EMS Leadership & Quality Improvement	3
HEM 4076	Specialized Transport & Rescue Practices for EMS	6
HEM 4933	Responder Preceptorship I	3
	<b>Credit Hours</b>	<b>15</b>
<b>Semester 8</b>		
HEM 4083	Capstone Research Project for EMS	3
HEM 4084	Advanced Paramedic Case Studies & Critical Care	4
HEM 4936	Responder Preceptorship II	6
	<b>Credit Hours</b>	<b>13</b>
	<b>Total Credit Hours</b>	<b>120</b>

## Faculty and Academic Staff

**Anneke Jackson**, B-Tech (Emergency Medical Care), Durban University of Technology, South Africa

**Aruna Ramiseti**, MSc (Public Health), University of Glamorgan, United Kingdom

**Binyamien Kariem**, B-Tech (Emergency Medical Care), Cape Peninsula University of Technology, South Africa

**Carmel Nichols**, Bachelor (Clinical Practice-Paramedic), Charles Sturt University, Australia

**Dhanyakumari Hariharan**, BSc (Emergency & Trauma Care Technology), Sri Ramachandra Medical College, India

**Don Johnson Libor**, BSc (Nursing), La Union College of Arts and Sciences, Philippines

**Elias Thomas**, Bachelor (Emergency Medical Care), Namibia University of Science and Technology, Namibia

**Elie Ioannidis**, Bachelor (Emergency Health-Paramedicine), Monash University, Australia

**Girish Jose**, Master's (Prehospital Critical Care), University of Stavanger, Norway

**Harmiya Hakkim**, MSc (Nursing), Kerala University of Health Sciences, India

**Heinrich Schwieger**, Bachelor (Emergency Medical Care), Namibia  
University of Science and Technology, Namibia

**Ibraheem Abusaqri**, MSc (Paramedical Science), University Sultan Zainal  
Abidin, Malaysia

**Indu Asokan**, BSc (Accident and Emergency Care Technology), Christian  
Medical College & Hospital, India

**Jane-Louise Reid**, MSc (Professional Practice in Health Sciences),  
University of Southampton, United Kingdom

**Jani Mothibi**, Masters (Health Professions Education), University of the  
Free State, South Africa

**Jared McDowal**, MSc (Emergency Medicine), University of Witwatersrand,  
South Africa

**John Adams**, B-Tech (Emergency Medical Care), Cape Peninsula  
University of Technology, South Africa

**Kashmir Aking**, Bachelor (Criminology), Emergency Medical Technician,  
Philippines

**Kevin Breitsprecher**, MSc (Advanced Clinical Practice), University of  
Warwick, United Kingdom

**Lavanya Aradhya**, Masters (Emergency Medical Technology), Manipal  
College of Health Professions, India

**Mazoon Rashed Ali**, Masters (Public Health), Hamdan Bin Mohammad  
Smart University, United Arab Emirates

**Nabil Hathiyani**, Bachelor (Paramedical Science), University of Toronto,  
Canada

**Nadine Seymour**, MPhil (Emergency Medicine), University of Cape Town,  
South Africa

**Nurhan Chuen**, Masters (Disaster Risk Management), Universiti Teknologi  
Malaysia, Malaysia

**Patricia Murphy**, BSc (Paramedic Science), Anglia Ruskin University,  
United Kingdom

**Paul Du Toit**, Masters (Trauma Science), Queen Mary University of  
London, United Kingdom

**Petri Aspegren**, MSc (Nursing), University of Oulu, Finland

**Rawan Abu Jneineh**, MSc (Medical Education for Health Care  
Professionals), University of Warwick, United Kingdom

**Rufo Jr. Escosio**, Bachelor (Nursing), Virgen milagrosa University  
Foundation, Philippines

**Santhi Alagesan**, MSc (Trauma Care Management), Sri Ramachandra  
Institute of Higher Education & Research, India

**Sathiya Nagamanickam**, MSc (Emergency & Critical Care), Vinayaka  
Missions University, India

**Shameeg Jacobs**, Masters (Public Health), University of Stirling, Scotland

**Suresh Katta**, Masters (Disaster Management), Annamalai University,  
India

**Vanitha Viji Rasneed Balasamy**, Bachelor (Emergency Trauma Care  
Technology), Sri Ramachandra Medical College & Research Institute,  
India