



# HEALTH SCIENCES DIVISION





# Health Sciences Division

## Divisional Mission

To offer nationally and internationally accredited programs to educate and train healthcare and human services work force in the UAE.

## Senior Staff

Executive Dean: **Dr. Muhadditha Al Hashimi**

Associate Deans: **Dr. Mohammed Hag Ali, Loay Othman**

Degree	Offered at
Bachelor of Emergency Medical Services	Dubai Men's
Bachelor of Health Information Management	Khalifa City Women's, Sharjah Women's, Fujairah Women's
Bachelor of Medical Imaging Science.	Abu Dhabi Women's, Dubai Women's, Fujairah Women's
Bachelor of Medical Laboratory Technology	Abu Dhabi Women's, Sharjah Women's
Bachelor of Nursing	Sharjah Women's, Fujairah Women's
Bachelor of Pharmacy	Dubai Women's
Bachelor of Social Work	Khalifa City Women's, Sharjah Women's
Bachelor of Veterinary Science	Al Ain Men's, Sharjah Men's, Sharjah Women's

# Bachelor of Applied Science 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 Catalogue.

## Program Mission

The Department of Emergency Medical Services is committed to training the next generation of UAE nationals to the highest international standards of emergency medical care. With an emphasis on evidence based medicine, learning by doing and the latest educational technology, we strive to meet the needs of the community and our sponsors to have UAE nationals trained to provide emergency care to the critically ill or injured in the United Arab Emirates.

## Program Description

The Bachelor of Applied Science in Emergency Medical Services program is a four-year post-Foundations program preparing graduates for emergency medical care professional practice. In the first two program years students develop an extensive knowledge of health sciences, communication, terminology and emergency medical care up to an intermediate life support level. The final two years of the program develop students' skills to advanced life support levels which include diagnostic, clinical judgment, research, quality and leadership. 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 will have the option to graduate with a Diploma in Emergency Medical Sciences upon the successful completion of all Health Science common year courses and the Emergency Care modules and Preceptorships in the second year.

## Program Learning Outcomes

*On successful completion of the Bachelor of Applied Science in Emergency Medical Services program, the graduate will be able to:*

1. Interpret and apply a wide range of detailed theoretical knowledge in order to formulate and implement an advanced level of treatment and alternative management modalities to provide safe, responsible and quality patient care in the emergency care setting.
2. Integrate clinical practice guidelines, evidence

based medicine and theoretical principles to provide internationally aligned best practice within the emergency care setting.

3. Demonstrate a deep understanding of technological applications and medical innovation within the field of emergency medical care.
4. Demonstrate the psychomotor skills that are necessary to render emergency medical care to patients in accordance with the relevant advanced life support clinical practice guidelines (CPG).
5. Apply critical thinking skills to analyze medical emergencies and inform autonomous decision-making to deliver safe and effective emergency medical care.
6. Demonstrate the ability to integrate management and research skills with advancing technology in order to develop specialized clinical strategies for patients in the emergency care setting.
7. Work independently as well as part of a team in a diverse range of clinical and non-clinical emergency care settings.
8. Use lifelong learning as a reflective practitioner in order to modify practice and enhance the emergency medical care profession.
9. Demonstrate the professional attributes, conduct and leadership relevant to their role as advanced life support emergency care providers within the healthcare system and community.

## Completion Requirements

Students must successfully complete a minimum of 138 credits as follows:	
Health Science Core Courses:	24 credits
Emergency Medical Services Core Courses:	54 credits
Emergency Medical Services Preceptorship Courses:	27 credits
General Studies:	33 credits

Course Credits

**Health Science Core Courses****Required Credits: 24**

HSC 1023	Chemistry for Health Sciences	3
HSC 1033	Anatomy and Physiology	3
HSC 1113	Introduction to Healthcare Systems and Professional Practice	3
HSC 1123	Work Health and Safety	3
HSC 1803	Medical Terminology for Health Sciences	3
HSC 4003	Research Methods for Health Sciences	3
HSC 4006	Capstone Research Project for Health Sciences	6

**Emergency Medical Services Core Courses****Required Credits: 54**

HEM 1103	EMT Basic	3
HEM 2015	Medical Emergencies	5
HEM 2024	Trauma Emergencies	4
HEM 2033	EMS Applied Pharmacology I	3
HEM 2103	Foundations of Professional Practice	3
HEM 2123	Obstetric, Gynecology, Neonatal and Pediatric Emergencies	3
HEM 3006	Advanced Prehospital Emergency Care I	6
HEM 3013	EMS Applied Pharmacology II	3
HEM 3106	Advanced Prehospital Emergency Care II	6
HEM 3113	Primary Health Care	3
HEM 4006	Advanced Obstetric, Gynecology and Pediatric Emergencies	6
HEM 4013	Leadership in Professional Practice	3
HEM 4106	Advanced Standards of Prehospital Emergency Care and Transport	6

Course Credits

**Emergency Medical Services Preceptorship Courses****Required Credits: 27**

HEM 2903	Ambulance Preceptorship I	3
HEM 2913	Hospital Preceptorship I	3
HEM 2923	Ambulance Preceptorship II	3
HEM 3903	Ambulance Preceptorship III	3
HEM 3913	Hospital Preceptorship II	3
HEM 3923	Responder Preceptorship I	3
HEM 4903	Hospital Preceptorship III	3
HEM 4913	Responder Preceptorship II	3
HEM 4923	Responder Preceptorship III (IST Optional)	3

**General Studies****Required Credits: 33**

English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics	3
The Natural Sciences	3
The Social or Behavioural Sciences	9

# Diploma in Emergency Medical Services

## Program Learning Outcomes

*Students exiting with the Diploma will be able to:*

1. Apply knowledge, management and decision making aspects in order to provide safe, responsible and quality patient care in the emergency care setting.
2. Understand and integrate theoretical principles in order to use established clinical practice guidelines according to international standards within the field of emergency care.
3. Demonstrate the psychomotor skills that are necessary to render care to patients in accordance with the relevant clinical practice guidelines (CPG).
4. Apply specialist cognitive and practical skills in order to diagnose and treat a range of patients in a variety of emergency and non-emergency situations.
5. Demonstrate communication and information technology skills in order to coherently manage complex situations in the field of emergency care.
6. Coordinate or supervise routine and some non-routine emergency care of patients within a range of clinical and non-clinical settings at an intermediate life support level.
7. Participate in lifelong learning as a reflective practitioner in order to improve clinical practice and enhance the standards of emergency medical care.
8. Demonstrate the professional attributes, conduct and leadership relevant to their role as mid-level emergency care providers within the healthcare system and community.

## Completion Requirements

Students must successfully complete a minimum of 69 credits as follows:	
<b>Health Science Core Courses:</b>	15 credits
<b>Emergency Medical Services Core Courses:</b>	18 credits
<b>Emergency Medical Services Preceptorship Courses:</b>	9 credits
<b>General Studies:</b>	24 credits

# Recommended Sequence of Study

## Bachelor in Emergency Medical Services

Course Code	Course Title	Course Credits	Course Code	Course Title	Course Credits
<b>Year 1 Semester 1</b>			<b>Year 1 Semester 2</b>		
Required Credits: 15			Required Credits: 15		
HSC 1013	Human Biology	3	HSC 1033	Anatomy and Physiology	3
HSC 1803	Medical Terminology	3	HSC 1023	Chemistry for Health Sciences	3
HSC 1113	Intro to Healthcare Systems & Professional Practice	3	HSC 1123	Work Health & Safety	3
LSC 1103	Academic Reading & Writing I	3	LSM 1113	Statistical Mathematics	3
LSS 1003	Life and Study Skills	3	AES 1013	Arabic Communications I	3
<b>Year 1 Summer Semester</b>			<b>Year 2 Semester 4</b>		
Required Credits: 3			Required Credits: 15		
HEM 1103	EMT-Basic	3	HEM 2103	Foundations of Professional Practice	3
<b>Year 2 Semester 3</b>			<b>Year 2 Semester 4</b>		
Required Credits: 18			Required Credits: 15		
HEM 2015	Medical Emergencies	5	HEM 2123	Obstetric/gynecology/Neonatal/Paediatric Emergencies	3
HEM 2024	Trauma Emergencies	4	HEM 2913	Hospital Preceptorship I	3
HEM 2033	EMS Applied Pharmacology I	3	AES 1003	Emirati Studies	3
HEM 2903	Ambulance Preceptorship I	3	LSS 1123	Basic Methods of Scientific Research and Development	3
LSC 2183	English for Specific Purposes	3			
<b>Year 2 Summer Semester</b>			<b>Year 3 Semester 5</b>		
Required Credits: 3			Required Credits: 18		
HEM 2923	Ambulance Preceptorship II	3	HEM 3006	Advanced Prehospital Emergency Care I	6
<b>Year 3 Semester 5</b>			<b>Year 3 Semester 6</b>		
Required Credits: 18			Required Credits: 15		
HEM 3013	EMS Applied Pharmacology II	3	HEM 3106	Advanced Prehospital Emergency Care II	6
HEM 3903	Ambulance Preceptorship III	3	HEM 3113	Primary Health Care	3
LSC 2103	Academic Reading and Writing II	3	HEM 3913	Hospital Preceptorship II	3
LSS 2403	Innovation and Entrepreneurship	3	AES 3003	Professional Arabic	3
<b>Year 3 Summer Semester</b>			<b>Year 4 Semester 7</b>		
Required Credits: 3			Required Credits: 15		
HEM 3923	Responder Preceptorship I	3	HEM 4006	Advanced Gynaecological/Obstetric & Paediatric Emergencies	6
<b>Year 4 Semester 7</b>			<b>Year 4 Semester 8</b>		
Required Credits: 15			Required Credits: 18		
HEM 4903	Hospital Preceptorship III	3	HEM 4106	Advanced Standards of Prehospital Emergency Care and Transport	6
HEM 4013	Leadership in Professional Practice	3	HSC 4006	Capstone Research Project For HS	6
HSC 4003	Research Methods for Health Sciences	3	HEM 4913	Responder Preceptorship II	3
			HEM 4923	Responder Preceptorship III (IST Optional)	3

### Diploma Exit Option

Course Code	Course Title	Course Credits	Course Code	Course Title	Course Credits
<b>Year 3 Semester 5</b>			<b>Year 3 Semester 6</b>		
Required Credits: 18			Required Credits: 15		
HEM 3006	Advanced Prehospital Emergency Care I	6	HEM 3106	Advanced Prehospital Emergency Care II	6
HEM 3013	EMS Applied Pharmacology II	3	HEM 3113	Primary Health Care	3
HEM 3903	Ambulance Preceptorship III	3	HEM 3913	Hospital Preceptorship II	3
LSC 2103	Academic Reading and Writing II	3	AES 3003	Professional Arabic	3
LSS 2403	Innovation and Entrepreneurship	3			
<b>Year 3 Summer Semester</b>			<b>Year 4 Semester 7</b>		
Required Credits: 3			Required Credits: 15		
HEM 3923	Responder Preceptorship I	3	HEM 4006	Advanced Gynaecological/Obstetric & Paediatric Emergencies	6
<b>Year 4 Semester 7</b>			<b>Year 4 Semester 8</b>		
Required Credits: 15			Required Credits: 18		
HEM 4903	Hospital Preceptorship III	3	HEM 4106	Advanced Standards of Prehospital Emergency Care and Transport	6
HEM 4013	Leadership in Professional Practice	3	HSC 4006	Capstone Research Project For HS	6
HSC 4003	Research Methods for Health Sciences	3	HEM 4913	Responder Preceptorship II	3
			HEM 4923	Responder Preceptorship III (IST Optional)	3

## Academic Staff

**Reon Conning**, Bachelor in Emergency Medical Care & Rescue

**Sunil Sookraj**, Bachelor in Emergency Medical Care & Rescue

**Faisal Binks**, Bachelor in Emergency Medical Care & Rescue, Masters Business Administration

**Jacobus Naude**, Bachelor in Emergency Medical Care & Rescue

# Bachelor of Health Information Management

## Admission to program

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

## Program Mission

The Health Information Management program is a nationally and internationally accredited program that educates and trains Health Information Management workforce in the UAE.

## Program Description

The Bachelor of Health Information Management program prepares graduates for health information management professional practice. In the first three years of the program students develop extensive knowledge of health information coding and introductory management and health informatics studies. The final year of the program develops students' skills in health informatics, research, management, leadership and health data analysis.

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 health information management, and a commitment to lifelong learning.

Students will have the option to graduate with a Higher Diploma in Health Information Coding upon the successful completion of all required courses and preceptorships after 3 years of study.

## Program Learning Outcomes

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

- Apply management concepts, skills and decision making in order to manage accurate and timely health information.
- Demonstrate basic knowledge of healthcare policy, economics and regulatory environments to include local, national and international health information management trends.
- Apply appropriate classification system in evaluating and assigning diagnostic and procedural codes in a timely manner whilst maintaining the completeness and accuracy of data.
- Manage healthcare data by applying applicable principles of health information technology and policies in compliance with Ministry of Health, local authorities and accreditation agency requirements.

- Demonstrate the ability to work independently as well as part of a team in a diverse range of clinical and non-clinical settings to ensure safe management of health information practice.
- Develop, and maintain professional competence and incorporate new solutions into health information management.
- Demonstrate professional attributes relevant to their role and apply reflective practice in health information management

## Completion Requirements

Students must successfully complete a minimum of 129 credits as follows:	
Health Science Core Courses:	24 credits
Health Information Management Core Courses:	60 credits
Health Information Management Preceptorship Courses:	12 credits
General Studies:	33 credits



Health Science Core Courses		
Required Credits: 24		
HSC 1023	Chemistry for Health Sciences	3
HSC 1033	Anatomy and Physiology	3
HSC 1113	Introduction to Healthcare Systems and Professional Practice	3
HSC 1123	Work Health and Safety	3
HSC 1803	Medical Terminology for Health Sciences	3
HSC 4003	Research Methods for Health Sciences	3
HSC 4006	Capstone Research Project for Health Sciences	6

Health Information Management Core Courses		
Required Credits: 60		
CIA 3103	Database Design and Administration	3
CIS 1303	Data and Information Management	3
HIM 1203	Health Information Coding I	3
HIM 2003	Health Information Coding II	3
HIM 2113	Applied Pathophysiology I	3
HIM 2203	Health Information Management Studies	3
HIM 2313	Applied Pathophysiology II	3
HIM 2323	Legal and Ethical Aspects in HIM	3
HIM 2403	Introduction to Management in Healthcare	3
HIM 3003	Biostatistics	3
HIM 3013	Health Information Coding III	3
HIM 3103	Health Informatics I	3
HIM 3113	Health Information Coding IV	3
HIM 3303	Epidemiology	3
HIM 4013	Quality Management in Healthcare	3
HIM 4023	Health Informatics II	3
HIM 4033	Finance Management in Healthcare	3
HIM 4103	Health Data Analysis	3
HIM 4303	Health Care Economics and Health Insurance	3
HIM 4413	Strategic Management in Health Care	3

Health Information Management Preceptorship Courses		
Required Credits: 12		
HIM 2902	HIM Hospital Preceptorship I	2
HIM 3912	Coding Preceptorship I	2
HIM 3914	Coding Preceptorship II	4
HIM 4904	HIM Hospital Preceptorship II	4

General Studies		
Required Credits: 33		
English, Arabic or other Languages		15
Humanities or Art		3
Information Technology or Mathematics		3
The Natural Sciences		3
The Social or Behavioural Sciences		9

# Higher Diploma in Health Information Coding Exit Option

## Program Learning Outcomes

*Students exiting with the Higher Diploma will be able to:*

- Apply basic management concepts, skills and decision making in order to manage accurate and timely coded health information.
- Demonstrate knowledge of healthcare policy and regulatory environments that pertains to health information coding systems requirements.
- Apply appropriate classification system in evaluating and assigning diagnostic and procedural codes in a timely manner whilst maintaining the completeness and accuracy of data.
- Manage healthcare data by applying principles of health information technology and policies in compliance with Ministry of Health, local authorities and accreditation agency requirements.
- Demonstrate the ability to work independently as well as part of a team in a diverse range of clinical coding settings to ensure safe management of health information practice.
- Develop, and maintain professional competence in health information coding.
- Demonstrate professional attributes relevant to their role and apply reflective practice in health information coding

## Completion Requirements

Students must successfully complete all Year 1, 2 and 3 courses with a minimum of 98 credits including:	
Health Sciences Core Courses:	15 credits
Health Information Coding Core Courses:	42 credits
Health Information Coding Preceptorship Courses:	8 credits
General Studies:	33 credits

# Recommended Sequence of Study

## Bachelor of Health Information Management

Course Code	Course Title	Course Credits	Course Code	Course Title	Course Credits
<b>Year 1 Semester 1</b>			<b>Year 1 Semester 2</b>		
<b>Required Credits: 15</b>			<b>Required Credits: 15</b>		
HSC 1013	Human Biology	3	HSC 1033	Anatomy & Physiology	3
HSC 1803	Medical Terminology	3	HSC 1023	Chemistry for Health Sciences	3
HSC 1113	Intro to Healthcare Systems & Professional Practice	3	HSC 1123	Work Health & Safety	3
LSC 1103	Academic Reading & Writing I	3	LSM 1113	Statistical Mathematics	3
LSS 1003	Life and Study Skills	3	AES 1013	Arabic Communication I	3
<b>Year 1 Summer Semester*</b>			<b>Year 2 Semester 4</b>		
<b>Required Credits:</b>			<b>Required Credits: 18</b>		
<b>Year 2 Semester 3</b>			<b>Year 2 Semester 4</b>		
<b>Required Credits: 17</b>			<b>Required Credits: 18</b>		
HIM 1203	Health Information Coding I	3	HIM 2003	Health Information Coding II	3
HIM 2113	Applied Pathophysiology I	3	HIM 2313	Applied Pathophysiology II	3
HIM 2203	Health Information Management Studies	3	HIM 2323	Legal & Ethical Aspects in HIM	3
HIM 2902	HIM Hospital Preceptorship I	2	CIS 1303	Data & Information Management	3
LSC 2103	Academic Reading & Writing II	3	HIM 2403	Introduction Management in Healthcare	3
LSS 1123	Basic Methods of Scientific Research & Development	3	AES 1003	Emirati Studies	3
<b>Year 2 Summer Semester*</b>			<b>Year 3 Semester 6</b>		
<b>Required Credits:</b>			<b>Required Credits: 16</b>		
<b>Year 3 Semester 5</b>			<b>Year 3 Semester 6</b>		
<b>Required Credits: 17</b>			<b>Required Credits: 16</b>		
HIM 3013	Health Information Coding III	3	HIM 3113	Health Information Coding IV	3
HIM 3003	Biostatistics	3	HIM 3303	Epidemiology	3
CIA 3103	Database Design & Administration	3	HIM 3103	Health Informatics I	3
HIM 3912	Coding Preceptorship I	2	HIM 3914	Coding Preceptorship II	4
AES 3003	Professional Arabic	3	LSS 2403	Innovation and Entrepreneurship	3
LSC 2183	English for Specific Purposes	3			
<b>Year 3 Summer Semester*</b>			<b>Year 4 Semester 8</b>		
<b>Required Credits:</b>			<b>Required Credits: 15</b>		
Higher Diploma in Health Information Coding Exit Option					
<b>Year 4 Semester 7</b>			<b>Year 4 Semester 8</b>		
<b>Required Credits: 16</b>			<b>Required Credits: 15</b>		
HIM 4023	Health Informatics II	3	HSC 4006	Capstone Research Project for Health Sciences	6
HIM 4013	Quality Management in Healthcare	3	HIM 4303	Healthcare Economics & Health Insurance	3
HIM 4033	Finance Management in Healthcare	3	HIM 4413	Strategic Management in Healthcare	3
HSC 4003	Research Methods for Health Sciences	3	HIM 4103	Health Data Analysis	3
HIM 4904	HIM Hospital Preceptorship II	4			

\* Additional courses may be offered in each Summer Semester at the discretion of the Academic Division.

## Academic Staff

**Alinoor Yunis** MPA (Healthcare) Grand Valley State University, Grand Rapids Michigan

**Benjamin Poku**, PH Public Health, Georgia Southern University, USA

**Ina Kamaludin**, Masters in Health Services Management, Curtin University of Technology

**Lateef Olayanju**, PhD Computing (Health Informatics), Coventry University

**Loay Othman**, MSc in eHealthcare, University of Queensland

**Maryam Alhousani**, Executive Master Healthcare Administration, Zayed University, Abu Dhabi

**Scott Weber**, EdD Education, Boston University

# Bachelor of Medical Imaging Science

## Admission to program

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

## Program Mission

The Bachelor of Medical imaging Sciences at the Higher Colleges of Technology aims to produce skilled Emirati professionals in medical imaging sciences to meet the needs of the UAE healthcare industry, who are prepared for international credentialing examinations and are work ready as medical imaging technology professionals delivering diagnostic, emergency, and specialised medical imaging care to a wide variety of patients/clients and be cutting edge applied medical imaging researchers.

The Higher Diploma of Medical imaging Technology at the Higher Colleges of Technology aims to produce skilled Emirati professionals in medical imaging technology to meet the basic needs of the UAE healthcare industry, who are work ready as medical imaging technology professionals delivering diagnostic general and emergency medical imaging care to a wide variety of patients/clients.

## Program Description

The Bachelor of Science in Medical Imaging Science programme is a four-year professional programme of undergraduate study to prepare graduates for entry into the UAE healthcare industry as diagnostic radiographers. Students will study a wide range of subjects to include biological sciences, radiographic anatomy and pathology, general radiography positioning and procedures, patient care and, medical imaging technology. In addition, students will study the core elements of specialist medical imaging modalities such as computed tomography (CT), magnetic resonance imaging (MRI), mammography and ultrasound (US).

To meet the demanding standards of the profession, the program combines supervised clinical practice in the clinical sites with theory to make students training more valuable for the transition from trainee stage to becoming a qualified Medical Radiology Technologist.

Employment opportunities for Bachelor's graduates are varied and exciting, ranging from diagnostic imaging in Primary Healthcare and specialised civil and military hospitals to forensics diagnostic imaging. Graduate employment rates are high as there is a continual demand for medical radiology

technologists throughout the UAE.

Students will have the option to graduate with a Higher Diploma in Medical Imaging Technology upon the successful completion of all required courses and preceptorships after 3 years of study.

## Program Learning Outcomes

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

- Apply advanced knowledge, management and decision-making aspects within the national and global medical imaging context to provide quality healthcare services in clinical and non-clinical settings.
- Apply theoretical and operational medical imaging protocols to develop strategies that address challenges in undertaking general, emergency and specialized medical imaging procedures.
- Provide competent and evidence-based patient care in general, emergency and specialized medical imaging procedures based on best international and ethical practices.
- Evaluate diagnostic images produced to ensure diagnostic quality and to promote patient safety within the ALARA and best practice frameworks.
- Work within a framework of evidence-based practice and continuing quality assurance, evaluate medical imaging systems, and undertake management solutions to ameliorate identified problems.
- Demonstrate the ability to work independently as well as part of a team, in a diverse range of general, emergency and specialized medical imaging settings.
- Develop and maintain professional competence and incorporate new solutions into general, emergency and specialized medical imaging practice.
- Demonstrate professional attributes relevant to their role in the field of general, emergency and specialized medical imaging practice.

## Completion Requirements

Students must successfully complete a minimum of 126 credits as follows:	
Health Science Core Courses:	24 credits
Medical Imaging Sciences Courses:	51 credits
Medical imaging Preceptorship Courses:	18 credits
General Studies:	33 credits

Course Credits

**Health Science Core Courses****Required Credits: 24**

HSC 1023	Chemistry for Health Sciences	3
HSC 1033	Anatomy and Physiology	3
HSC 1113	Introduction to Healthcare Systems and Professional Practice	3
HSC 1123	Work Health and Safety	3
HSC 1803	Medical Terminology for Health Sciences	3
HSC 4003	Research Methods for Health Sciences	3
HSC 4006	Capstone Research Project for Health Sciences	6

**Medical Imaging Sciences Courses****Required Credits: 51**

HMI 2002	Medical Imaging Technology 1	3
HMI 2003	Patient care in medical imaging 1	3
HMI 2102	Medical Imaging Technology II	3
HMI 2303	Medical Imaging Positioning and Procedures 1	3
HMI 2403	Medical Imaging Anatomy and Pathology 1	3
HMI 2503	Medical Imaging Positioning and procedures II	3
HMI 2603	Medical Imaging Anatomy and Pathology II	3
HMI 3002	Medical Imaging Technology III	3
HMI 3003	Patient care in medical imaging II	3
HMI 3103	Medical Imaging Positioning and Procedures III	3
HMI 3113	Specialized Imaging I	3
HMI 3213	Radiation Safety and Biology	3
HMI 3223	Cross Sectional Anatomy	3
HMI 4003	Quality Management in medical imaging	3
HMI 4103	Specialized Imaging II	3
HMI 4113	Specialized Imaging III	3
HMI 4203	Professional Practice	3

**Medical imaging Preceptorship Courses****Required Credits: 18**

HMI 2613	Clinical Preceptorship I	3
HMI 3013	Clinical Preceptorship II	3
HMI 3233	Clinical Preceptorship III	3
HMI 4023	Clinical Preceptorship IV	3
HMI 4106	Clinical Preceptorship V	6

**General Studies****Required Credits: 33**

English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics	3
The Natural Sciences	3
The Social or Behavioural Sciences	9

# Higher Diploma in Medical Imaging Technology Exit Option

## Program Learning Outcomes

*Students exiting with the Higher Diploma will be able to:*

- Apply relevant principles and theories to a national and global medical imaging context to provide quality healthcare services in clinical and non-clinical settings.
- Apply theoretical and operational medical imaging protocols to address challenges in undertaking general and emergency medical imaging procedures.
- Provide competent patient care in general and emergency medical imaging procedures based on best international and ethical practices.
- Evaluate general and emergency diagnostic images produced to ensure diagnostic quality and to promote patient safety within the ALARA and best practice frameworks.
- Work within a framework of evidence-based practice and continuing quality assurance, evaluate general and emergency medical imaging systems, and undertake solutions to ameliorate identified problems.
- Demonstrate the ability to work independently as well as part of a team, in a diverse range of general and emergency medical imaging settings.
- Develop and maintain professional competence and incorporate new solutions into general and emergency medical imaging practice.
- Demonstrate professional attributes relevant to their role in the field of general and emergency medical imaging practice.

## Completion Requirements

Students must successfully complete all Year 1, 2 and 3 courses with a minimum of 96 credits including:	
Health Science Core Courses:	15 credits
Medical Imaging Sciences Courses:	39 credits
Medical imaging Preceptorship Courses:	9 credits
General Studies:	33 credits

# Recommended Sequence of Study

## Bachelor of Medical Imaging Science

Course Code	Course Title	Course Credits	Course Code	Course Title	Course Credits
<b>Year 1 Semester 1</b>			<b>Year 1 Semester 2</b>		
<b>Required Credits: 15</b>			<b>Required Credits: 15</b>		
HSC 1013	Human Biology	3	HSC 1033	Anatomy and Physiology	3
HSC 1803	Medical Terminology	3	HSC 1023	Chemistry for Health Sciences	3
HSC 1113	Intro to Healthcare Systems & Professional Practice	3	HSC 1123	Work Health & Safety	3
LSC 1103	Academic Reading & Writing I	3	LSM 1113	Statistical Mathematics	3
LSS 1003	Life and Study Skills	3	AES 1013	Arabic Communication I	3
<b>Year 1 Summer Semester*</b>			<b>Year 2 Semester 4</b>		
<b>Year 2 Semester 3</b>			<b>Required Credits: 15</b>		
<b>Required Credits: 18</b>			<b>Required Credits: 15</b>		
HMI 2003	Patient Care in Medical Imaging 1	3	HMI 2102	Medical Imaging Technology II	3
HMI 2002	Medical Imaging Technology 1	3	HMI 2503	Medical Imaging Positioning and Procedures II	3
HMI 2303	Medical Imaging Positioning and Procedures 1	3	HMI 2603	Medical Imaging Anatomy and Pathology II	3
HMI 2403	Medical Imaging Anatomy and Pathology 1	3	HMI 2613	Clinical Preceptorship I	3
LSC 2013	Academic Reading and Writing II	3	AES 1003	Emirati Studies	3
LSS 1123	Basic Methods of Scientific Research and Development	3			
<b>Year 2 Summer Semester*</b>			<b>Year 3 Semester 6</b>		
<b>Year 3 Semester 5</b>			<b>Required Credits: 18</b>		
<b>Required Credits: 15</b>			<b>Required Credits: 18</b>		
HMI 3003	Patient Care in Medical Imaging II	3	HMI 3113	Specialized Imaging I	3
HMI 3002	Medical Imaging Technology III	3	HMI 3213	Radiation Safety and Biology	3
HMI 3103	Medical Imaging Positioning and Procedures III	3	HMI 3223	Cross Sectional Anatomy	3
HMI 3013	Clinical Preceptorship II	3	HMI 3233	Clinical Preceptorship III	3
LSS 2403	Innovation and Entrepreneurship	3	AES 3003	Professional Arabic	3
			LSC 2183	English for Specific Purposes	3
<b>Year 3 Summer Semester*</b>			<b>Year 4 Semester 8</b>		
<b>Year 4 Semester 7</b>			<b>Required Credits: 15</b>		
<b>Required Credits: 15</b>			<b>Required Credits: 15</b>		
HMI 4003	Quality Management in medical imaging	3	HMI 4113	Specialized Imaging III	3
HMI 4013	Specialized Imaging II	3	HMI 4106	Clinical Preceptorship V	6
HMI 4023	Clinical Preceptorship IV	3	HSC 4006	Capstone Research Project For HS	6
HSC 4003	Research Methods for Health Sciences	3			
HMI 4203	Professional Practice	3			

\* Additional courses may be offered in each Summer Semester at the discretion of the Academic Division.

## Academic Staff

**Hind Binjaffar**, MSc Hospital Management. Hamdan Bin Mohammed Smart University, UAE.

**Hussam Beituni**, MSc Medical Imaging Interpretation, Charles Sturt University, Canada

**Majed Hiasat**, MSc Radiation And Environmental Protection. Surrey University, UK.

**Saleh Abuzeitoon**, PhD Technical Vocational Education. Amman Arab University, Jordan

**Samar El-Farra** MSc Computerised Tomography. Charles Strut University, Canada.

# Bachelor of Medical Laboratory Technology (Medical Technologist)

## Admission to program

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

## Program Mission

The Bachelor in Medical Laboratory Technology at the Higher Colleges of Technology aims to produce skilled Emirati professionals in medical laboratory sciences to meet the needs of the UAE healthcare industry, who are prepared for international credentialing examinations and are work ready as medical laboratory technology professionals delivering diagnostic care to a wide variety of patients/clients and be cutting edge applied biomedical researchers.

## Program Description

The Bachelor in Medical Laboratory Technology is a four-year professional programme. Graduates are trained biomedical scientists who possess a broad range of knowledge in medical laboratory diagnostics with the ability to work proficiently and are culturally competent to deliver care to a wide range of clients/patients. The four years of undergraduate study integrates biomedical science theory, laboratory skills and supervised professional practice in a variety of clinical settings. Medical laboratory technologists are specialised in the area of clinical diagnostics, producing accurate results required by physicians and health care team members for treatment and management of patients and clients.

Graduates possess professional knowledge in the areas of haematology, immunology, transfusion science, clinical chemistry, microbiology, molecular and cellular pathology, with the potential to specialise and advance their skills in specialist areas. These skills can be easily transferred to work competently in public health labs, municipality and forensic labs and in the biotechnology industry.

Graduates who are successful in their programme can take the credentialing exam for the American Society of Clinical Pathologists International (M.T ASCPi), which provides access to society activities and programme recognition for those students who wish to advance their education into graduate studies.

Students will have the option to graduate with a Diploma in Laboratory Technology (Laboratory Technician) upon the successful completion of all required courses and preceptorships after 2 years of study.

## Program Learning Outcomes

### Bachelor in Medical Laboratory Technology (Medical Laboratory Technologist)

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

- Interpret and apply knowledge, management and decision making aspects to provide quality medical laboratory diagnostic services in variety of healthcare settings.
- Demonstrate knowledge of healthcare regulations and integrate deep knowledge of relevant technological advances and evidence-based practice to address challenges in the field of laboratory medicine.
- Demonstrate effective cognitive and technical skills to analyse clinical specimens, formulate solutions and identify risks in order to deliver laboratory decisions to support and enhance clinical care.
- Demonstrate skills in using equipment and advanced technologies, information systems, and communication devices that support safe medical laboratory practice in a variety of healthcare settings.
- Apply research skills to investigate problems in the medical laboratory discipline and to assess and evaluate quality procedures as relevant.
- Demonstrate the ability to work independently as well as part of a team in a diverse range of clinical laboratories to ensure safe medical laboratory practice.
- Develop, and maintain professional competence and incorporate new solutions into medical laboratory practice
- Demonstrate professional attributes relevant to their role as medical laboratory technologists in the clinical laboratories

## Completion Requirements

Students must successfully complete a minimum of 126 credits as follows:	
<b>Health Science Core Courses:</b>	24 credits
<b>Medical Laboratory Sciences Core Courses:</b>	54 credits
<b>Medical Laboratory Sciences Preceptorship Courses:</b>	15 credits
<b>General Studies:</b>	33 credits



Health Science Core Courses			Course Credits
Required Credits: 24			
HSC 1023	Chemistry for Health Sciences	3	
HSC 1033	Anatomy and Physiology	3	
HSC 1113	Introduction to Healthcare Systems and Professional Practice	3	
HSC 1123	Work Health and Safety	3	
HSC 1803	Medical Terminology for Health Sciences	3	
HSC 4003	Research Methods for Health Sciences	3	
HSC 4006	Capstone Research Project for Health Sciences	6	

Medical Laboratory Sciences Courses			Course Credits
Required Credits: 54			
HML 2013	General Microbiology	3	
HML 2033	Histotechnology	3	
HML 2043	Clinical Chemistry I	3	
HML 2053	Haematology I	3	
HML 2103	Systematic Bacteriology	3	
HML 2133	Cytotechnology	3	
HML 2143	Hematology II	3	
HML 2203	Clinical Chemistry II	3	
HML 3003	Hemostasis	3	
HML 3013	Parasitology, Virology and Mycology	3	
HML 3033	Clinical Biochemistry	3	
HML 3043	Transfusion Medicine	3	
HML 3302	Immunology	3	
HML 4003	Biology of Diseases	3	
HML 4004	Laboratory Management	3	
HML 4016	Clinical Correlations	6	
HML 4303	Techniques in Molecular Biology	3	

Medical Laboratory Sciences Preceptorship Courses			Course Credits
Required Credits: 15			
HML 2213	Clinical Preceptorship I	3	
HML 3016	Clinical Preceptorship II	6	
HML 4006	Clinical Preceptorship III	6	

  

General Studies			Course Credits
Required Credits: 33			
English, Arabic or other Languages		15	
Humanities or Art		3	
Information Technology or Mathematics		3	
The Natural Sciences		3	
The Social or Behavioural Sciences		9	

# Diploma in Laboratory Technology (Laboratory Technician) Exit Option

## Program Learning Outcomes

*Students exiting with the Diploma will be able to:*

- Apply knowledge and decision making aspects to provide quality medical laboratory diagnostic services in a variety of healthcare settings.
- Demonstrate knowledge of medical laboratory information assembly and retrieval, professional practice guidelines and underlying technological principles and concepts.
- Demonstrate effective cognitive and technical skills to analyze clinical specimens and formulate solutions in order to deliver laboratory results to support and enhance clinical care.
- Demonstrate skills in using equipment and technologies, information systems, and communication devices that support safe medical laboratory practice in a variety of healthcare settings.
- Demonstrate the ability to work independently as a medical laboratory technician as well as part of a team in a range of clinical laboratories to ensure safe medical laboratory practice.
- Develop, and maintain professional competence and incorporate new solutions into medical laboratory practice.
- Demonstrate professional attributes relevant to their role as a medical laboratory technician in the clinical laboratories.

## Completion Requirements

Students must successfully complete all Year 1 and 2 courses with a minimum of 66 credits including:	
Health Sciences Core:	15 credits
General Studies:	24 credits
Medical Laboratory Sciences Courses:	24 credits
Medical Laboratory Sciences Preceptorship Courses:	3 credits

# Recommended Sequence of Study

## Bachelor of Medical Laboratory Technology

Course Code	Course Title	Course Credits	Course Code	Course Title	Course Credits
<b>Year 1 Semester 1</b>			<b>Year 1 Semester 2</b>		
<b>Required Credits: 15</b>			<b>Required Credits: 15</b>		
HSC 1013	Human Biology	3	HSC 1033	Anatomy and Physiology	3
HSC 1803	Medical Terminology	3	HSC 1023	Chemistry for Health Sciences	3
HSC 1113	Intro to Healthcare Systems & Professional Practice	3	HSC 1123	Work Health & Safety	3
LSC 1103	Academic Reading & Writing I	3	LSM 1113	Statistical Mathematics	3
LSS 1003	Life and Study Skills	3	AES 1013	Arabic communication I	3
<b>Year 1 Summer Semester*</b>			<b>Year 2 Semester 3</b>		
<b>Required Credits:</b>			<b>Required Credits: 15</b>		
<b>Year 2 Summer Semester*</b>			<b>Year 2 Semester 4</b>		
<b>Required Credits: 3</b>			<b>Required Credits: 18</b>		
HML 2053	Hematology I	3	HML 2143	Hematology II	3
HML 2013	General Microbiology	3	HML 2103	Systemic Bacteriology	3
HML 2043	Clinical Chemistry I	3	HML 2203	Clinical Chemistry II	3
HML 2033	Histotechnology	3	HML 2133	Cytotechnology	3
LSS 1123	Basic Methods of Scientific Research and Development	3	AES 1003	Emirati Studies	3
<b>Year 2 Summer Semester*</b>			<b>Year 3 Semester 5</b>		
<b>Required Credits: 3</b>			<b>Required Credits: 15</b>		
HML 2213	Clinical Preceptorship I	3	HML 3302	Immunology	3
Diploma in Laboratory Technology Exit Option			AES 3003	Professional Arabic	3
<b>Year 3 Summer Semester*</b>			<b>Year 3 Semester 6</b>		
<b>Required Credits:</b>			<b>Required Credits: 15</b>		
<b>Year 4 Semester 7</b>			<b>Year 4 Semester 8</b>		
<b>Required Credits: 15</b>			<b>Required Credits: 15</b>		
HSC 4003	Research Methods for Health Sciences	3	HML 4004	Laboratory Management	3
HML 4016	Clinical Correlations	6	HML 4303	Techniques in Molecular Biology	3
HML 4006	Clinical Preceptorship III	6	HSC 4006	Capstone Research Project For HS	6
			HML 4003	Biology of Diseases	3

\* Additional courses may be offered in each Summer Semester at the discretion of the Academic Division.

## Academic Staff

**Ahmed Sharah Eldin**, PhD Experimental Medicine, Karolinska Institute.

**Anjali Bantwal**, Masters Pathology, Kuvempu University.

**Ban Altoumah**, Masters Clinical Biochemistry, University of Technology Sydney.

**John Van Der Graaf**, PhD Food Biochemistry, University of Reading.

**Lama Muslamm**, Masters Hematology and Blood Banking, Jordan University of Science and Technology.

**Meytham Majeed**, PhD Clinical/Medical Microbiology, Linkoping University.

**Muhammad Zaman**, PhD Biochemistry, Brown University.

**Nishi Singh**, FRCPath, Royal College of Pathologists, UK.

**Teresa Stuart**, Masters Medical Laboratory Science, Charles Sturt University.

**Zakeya Baalawy**, PhD Pharmaceutical Sciences Research (Biochemistry), King's College, London.

# Bachelor of Nursing

## Admission to program

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

## Program Mission

The Bachelor of Nursing program aims to equip UAE National graduates with the knowledge, skills and competencies that meet national and international nursing standards to deliver safe, quality care and optimize health for individuals, families and communities. Upon completion of the program UAE National graduates will be prepared to meet industry and professional expectations and will be offered employment.

## Program Description

The Bachelor of Nursing degree is a four year post-foundation, 134 credit program that prepares the student for entry into professional practice as a generalist nurse. It includes a mix of theoretical knowledge in nursing, human and behavioral sciences, as well as other areas such as investigatory, managerial and communication knowledge and skills, all of which are required for competent, safe practice as a professional registered nurse. The program includes a knowledge base that examines the fields of: acute and chronic medical/surgical nursing; maternal and newborn health; child and adolescent health; care of the patient with complex and high dependency health needs; and community health. The program incorporates extensive supervised professional clinical education in selected and relevant clinical healthcare settings.

## Program Learning Outcomes

- Apply nursing knowledge from the nursing, health, behavioral sciences, best practice and other relevant sources to provide quality healthcare services in clinical and non-clinical settings
- Utilize the nursing process framework to provide care for individuals, families, and communities in different settings to optimize health
- Demonstrate effective cognitive, technical, critical thinking and communication skills to establish, implement and evaluate nursing care plans within healthcare settings
- Utilize evidence-based practice research to improve patient outcomes to meet the changing healthcare needs of individuals, families and communities

- Demonstrate the ability to work independently and within a team in a diverse range of clinical healthcare and non-clinical settings
- Develop and sustain professional competencies to meet changing healthcare needs, professional standards of nursing practice and licensure requirements
- Demonstrate leadership and management skills to provide safe, quality care in a variety of healthcare settings
- Demonstrate professional moral, legal and ethical attributes relevant to their role as registered general nurses in their practice areas nationally and internationally

## Completion Requirements

Students must successfully complete a minimum of 134 credits as follows:	
Health Science Core Courses:	21 credits
Nursing Core Courses:	52 credits
Nursing Practicum Courses:	28 credits
General Studies:	33 credits

Course Credits

**Health Science Core Courses****Required Credits: 21**

HSC 1023	Chemistry for Health Sciences	3
HSC 1033	Anatomy and Physiology	3
HSC 1113	Introduction to Healthcare Systems and Professional Practice	3
HSC 1123	Work Health and Safety	3
HSC 1803	Medical Terminology for Health Sciences	3
HSC 4006	Capstone Research Project for Health Sciences	6

**Nursing Core Courses****Required Credits: 52**

HNR 2003	Fundamentals of Nursing (Theory)	3
HNR 2014	History Taking and Physical Assessment	4
HNR 2022	Communication and Health Education Skills	2
HNR 2033	Pathophysiology	3
HNR 2102	Microbiology	2
HNR 2113	Clinical Pharmacology	3
HNR 2124	Adult Health Nursing I (Theory)	4
HNR 2143	Social and Behavioral Sciences for Nursing	3
HNR 3023	Adult Health Nursing II (Theory)	3
HNR 3043	Maternal Health Nursing and Care of the Newborn	3
HNR 3103	Mental Health Nursing (Theory)	3
HNR 3123	Child and Adolescent Health Nursing (Theory)	3
HNR 3142	Ethical and Legal Issues in Nursing	2
HNR 4003	Management of Individuals with Complex Health (Theory)	3
HNR 4013	Community Health Nursing (Theory)	3
HNR 4023	Evidence-Based Practice	3
HNR 4113	Leadership and Quality Management in Nursing	3
HNR 4122	Nursing Informatics	2

Course Credits

**Nursing Practicum Courses****Required Credits: 28**

HNR 2013	Fundamentals of Nursing (Practice)	3
HNR 2154	Adult Health Nursing I (Practice)	4
HNR 3033	Adult Health Nursing II (Practice)	3
HNR 3052	Maternal Health Nursing and Care of the Newborn (Practice)	2
HNR 3112	Mental Health Nursing (Practice)	2
HNR 3133	Child and Adolescent Health Nursing (Practice)	3
HNR 4022	Community Health Nursing (Practice)	2
HNR 4033	Management of Individuals with Complex Health Needs (Practice)	3
HNR 4126	Consolidated Nursing Practice	6

**Required Credits: 33****General Studies**

English, Arabic or other Languages	15
Humanities or Art	3
Information Technology or Mathematics	3
The Natural Sciences	3
The Social or Behavioural Sciences	9

# Recommended Sequence of Study

## Bachelor in Nursing

Course Code	Course Title	Course Credits	Course Code	Course Title	Course Credits
<b>Year 1 Semester 1</b>			<b>Year 1 Semester 2</b>		
<b>Required Credits: 15</b>			<b>Required Credits: 15</b>		
HSC 1013	Human Biology	3	HSC 1033	Anatomy and Physiology	3
HSC 1803	Medical Terminology	3	HSC 1023	Chemistry for Health Sciences	3
HSC 1113	Intro to Healthcare Systems & Professional Practice	3	HSC 1123	Work Health & Safety	3
LSC 1103	Academic Reading & Writing I	3	LSM 1113	Statistical Mathematics	3
LSS 1003	Life and Study Skills	3	AES 1013	Arabic Communication I	3
<b>Year 1 Summer Semester*</b>					
<b>Required Credits:</b>					
<b>Year 2 Semester 3</b>			<b>Year 2 Semester 4</b>		
<b>Required Credits: 18</b>			<b>Required Credits: 16</b>		
HNR 2003	Fundamentals of Nursing -Theory	3	HNR 2102	Microbiology	2
HNR 2013	Fundamentals of Nursing - Practice	3	HNR 2113	Clinical Pharmacology	3
HNR 2014	History Taking and Physical Assessment	4	HNR 2124	Adult Health Nursing I - Theory	4
HNR 2022	Communication and Health Education Skills	2	HNR 2154	Adult Health Nursing I - Practice	4
AES 1003	Emirati Studies	3	HNR 2143	Social and Behavioral Studies for Nursing	3
HNR 2033	Pathophysiology	3			
<b>Year 2 Summer Semester*</b>					
<b>Required Credits: 3</b>					
LSS 1123	Basic Research Methods	3			
<b>Year 3 Semester 5</b>			<b>Year 3 Semester 6</b>		
<b>Required Credits: 17</b>			<b>Required Credits: 16</b>		
HNR 3023	Adult Health Nursing II - Theory	3	HNR 3103	Mental Health Nursing - Theory	3
HNR 3033	Adult Health Nursing II - Practice	3	HNR 3112	Mental Health Nursing - Practice	2
HNR 3043	Maternal Health Nursing and Care of the Newborn – Theory	3	HNR 3123	Child and Adolescent Health Nursing -Theory	3
HNR 3052	Maternal Health Nursing and Care of the Newborn – Practice	2	HNR 3133	Child and Adolescent Health Nursing -Practice	3
LSC 2013	Academic Reading and Writing II	3	HNR 3142	Ethical and Legal Issues in Nursing	2
LSC 1503	Academic Spoken Communication	3	LSS 2403	Innovation and Entrepreneurship	3
<b>Year 3 Summer Semester*</b>					
<b>Required Credits:</b>					
<b>Year 4 Semester 7</b>			<b>Year 4 Semester 8</b>		
<b>Required Credits: 17</b>			<b>Required Credits: 17</b>		
HSC 4023	Evidence-Based Practice	3	HSC 4006	Capstone Research Project For HS	6
HNR 4003	Management of Individuals with Complex Health Needs – Theory	3	HNR 4113	Leadership and Quality Management in Nursing	3
HNR 4033	Management of Individuals with Complex Health Needs – Practice	3	HNR 4122	Nursing Informatics	2
HNR 4013	Community Health Nursing - Theory	3	HNR 4126	Consolidated Nursing Practice	6
HNR 4022	Community Health Nursing - Practice	2			
AES 3003	Professional Arabic	3			

\* Additional courses may be offered in each Summer Semester at the discretion of the Academic Division.

## Academic Staff

**Catherine Alnajjar**, Master of Nursing, University of Southern Queensland

**Hania Dawani**, Doctorate in Nursing Boston University, Master of Nursing in Public Health and Community Mental Health Nursing, Boston University

**Jehad Adwan**, PhD Nursing, University of Minnesota

**Ligy Thandiackal**, Master of Nursing, Topper of SJNAHS, College of Nursing

**Mohammed Kasasbeh**, PhD Nursing, Trinity College Dublin

**Sarah Sanad**, Clinical Nurse Specialist, Master of Science in Critical Care Nursing, University of Jordan

# Bachelor of Pharmacy

## Admission to program

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

## Program Mission

The mission of the **Bachelor of Pharmacy** program is to produce graduates, in response to the stakeholders' demand, who are work-ready to operate as Pharmacists in various areas of the technology driven pharmaceutical care, research, education and pharmaceutical industries.

## Program Description

The Bachelor of Pharmacy program is a four year post foundations program preparing graduates as Pharmacists for professional practice in different areas of Pharmacy. Graduates are educated to provide quality pharmaceutical care with a patient centered focus.

The program stresses knowledge of the biological, chemical, pharmaceutical, clinical and social sciences that underpins pharmacy, an understanding of the relevance of that knowledge to patient care and pharmaceutical problem solving and the skills to apply that knowledge to specific pharmaceutical care circumstances. The program provides students with a firm foundation for lifelong learning by promoting the development of analytical thinking, problem-solving abilities, communication skills, technical skills, intellectual leadership potential and a commitment to professional ethics, social responsibility, professional citizenship and the ability to adapt to changes and respond to challenges in pharmaceutical healthcare delivery.

Graduates of this program will be competent to provide quality pharmaceutical care, current information and products in different areas of pharmacy with a patient centred focus.

Students will have the option to graduate with a Diploma in Pharmacy upon the successful completion of all required courses and preceptorships after 2 years of study.

## Program Learning Outcomes

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

- Apply knowledge, management and decision making aspects to provide quality pharmacy services to

meet patients' drug related needs with the objective of achieving optimal patient outcomes and patient safety in clinical and non-clinical settings.

- Demonstrate a broad and coherent body of knowledge of the major principles of physical-chemical, life, bio-medical, administrative and pharmaceutical sciences to successfully solve problems both in disciplinary and interdisciplinary areas of pharmacy.
- Demonstrate effective cognitive and technical skills within the framework of evidence-based practice and continuing quality assurance to develop, implement and enhance processes and actions that ensure the safety, accuracy and high standards of pharmaceutical services and supplied products.
- Demonstrate skills in using relevant advanced technologies, information systems, and communication devices that support quality professional practice routine as well as complex problems in a variety of pharmacy settings.
- Demonstrate the ability to work independently or as part of a team and take responsibility in managing interactions with others in a diverse range of clinical and non-clinical settings.
- Demonstrate professional attributes relevant to their role as pharmacist in their general as well as specialized field of practice.
- Develop, and maintain professional competence and acquire new knowledge and skills with optimal incorporation of those into pharmacy practice.

## Completion Requirements

Students must successfully complete a minimum of 132 credits as follows:	
Health Science Core Courses:	24 credits
Pharmacy Core Courses:	57 credits
Pharmacy Preceptorship Courses:	18 credits
General Studies:	33 credits

Health Science Core Courses			Course Credits
Required Credits: 24			
HSC 1023	Chemistry for Health Sciences	3	
HSC 1033	Anatomy and Physiology	3	
HSC 1113	Introduction to Healthcare Systems and Professional Practice	3	
HSC 1123	Work Health and Safety	3	
HSC 1803	Medical Terminology for Health Sciences	3	
HSC 4003	Research Methods for Health Sciences	3	
HSC 4006	Capstone Research Project for Health Sciences	6	

Pharmacy Core Courses			Course Credits
Required Credits: 57			
HPH 2003	Biological Organic Chemistry	3	
HPH 2013	General Pharmacology	3	
HPH 2023	Pharmaceutics I	3	
HPH 2123	Microbiology and Immunology	3	
HPH 2133	Pharmaceutics II	3	
HPH 2153	Medicinal Chemistry I	3	
HPH 2113	Systems Pharmacology	3	
HPH 3003	Pathophysiology and Therapeutics I	3	
HPH 3043	Medicinal Chemistry II	3	
HPH 3053	Pharmaceutics III	3	
HPH 3133	Clinical Biochemistry and Toxicology	3	
HPH 3143	Pharmaceutical Analysis	3	
HPH 3163	Pathophysiology and Therapeutics II.	3	
HPH 4003	Biotechnology	3	
HPH 4013	Complementary Medicine	3	
HPH 4033	Pharmaceutical Care Practice Skills	3	
HPH 4073	Pathophysiology and Therapeutics III	3	
HPH 4103	Pharmacy Law and Ethics	3	
HPH 4123	Pharmacoeconomics	3	

Pharmacy Preceptorship Courses			Course Credits
Required Credits: 18			
HPH 2033	Community Pharmacy Preceptorship I	3	
HPH 2143	Clinical Pharmacy Preceptorship I	3	
HPH 3063	Community Pharmacy Preceptorship II	3	
HPH 3153	Clinical Pharmacy Preceptorship II	3	
HPH 4043	Industrial Pharmacy Preceptorship	3	
HPH 4113	Advanced Pharmacy Practice	3	

General Studies			Course Credits
Required Credits: 33			
English, Arabic or other Languages			15
Humanities or Art			3
Information Technology or Mathematics			3
Natural Sciences			3
Social or Behavioural Sciences			9



# Diploma in Pharmacy

## Program Learning Outcomes

*Students exiting with Diploma in Pharmacy will be able to:*

- Demonstrate a comprehensive knowledge of fundamental concepts of mathematics, bio-medical and pharmaceutical sciences including an understanding of the underlying theoretical and abstract concepts with significant depth in pharmacy and interdisciplinary areas.
- Demonstrate knowledge and familiarity with brand and generic drug names, appearance, manufacturer, dosage forms(s), and route of administration for the most commonly used drugs.
- Uphold legal and ethical standards to accurately implement international best pharmacy practice in interpreting prescriptions, preparing, labelling, packaging, processing and distributing medications while working under the supervision of a licensed pharmacist.
- Demonstrate cognitive and psychomotor skills in using relevant advanced technologies, information systems, and communication devices in a variety of pharmacy practice settings.
- Function, professionally, safely, and competently with little support as well as part of a team and take responsibility for developing appropriate approaches to managing complex work procedures and processes.
- Demonstrate professional attributes while functioning in technical and non-technical contexts and take responsibility to develop the performance of their own and others.
- Demonstrate responsibility for planning own life-long learning in order to improve competencies while actively observing ethical professional standards.

## Completion Requirement

Students must successfully complete all Year 1 and 2 courses with a minimum of 63 credits including:	
Health Science Core Courses:	15 credits
Pharmacy Core Courses:	15 credits
Pharmacy Preceptorship Courses:	12 credits
General Studies:	21 credits

# Recommended Sequence of Study

## Bachelor of Pharmacy

Course Code	Course Title	Course Credits	Course Code	Course Title	Course Credits
<b>Year 1 Semester 1</b>			<b>Year 1 Semester 2</b>		
Required Credits: 15			Required Credits: 15		
HSC 1803	Medical Terminology	3	HSC 1033	Anatomy and Physiology	3
HSC 1113	Intro to Healthcare Systems & Professional Practice	3	HSC 1023	Chemistry for Health Sciences	3
HSC 1013	Human Biology	3	HSC 1123	Work Health & Safety	3
LSC 1103	Academic Reading & Writing I	3	LSM 1113	Statistical Mathematics	3
LSS 1003	Life and Study Skills	3	AES 1013	Arabic Communication I	3
<b>Year 1 Summer Semester*</b>			<b>Year 2 Semester 4</b>		
Required Credits:			Required Credits: 18		
<b>Year 2 Semester 3</b>			<b>Year 2 Semester 4</b>		
Required Credits: 15			Required Credits: 18		
HPH 2003	Biological Organic Chemistry	3	HPH 2113	Systems Pharmacology	3
HPH 2013	General Pharmacology	3	HPH 2153	Medicinal Chemistry I	3
HPH 2023	Pharmaceutics I	3	HPH 2123	Microbiology and Immunology	3
HPH 2033	Community Pharmacy Preceptorship I	3	HPH 2133	Pharmaceutics II	3
LSC 2103	Academic Reading & Writing II	3	AES 1003	Emirati Studies	3
<b>Year 2 Summer Semester*</b>			HPH 2143		
Required Credits:			Clinical Pharmacy Preceptorship I		
Required Credits:			3		
Diploma in Pharmacy Exit Option					
<b>Year 3 Semester 5</b>			<b>Year 3 Semester 6</b>		
Required Credits: 18			Required Credits: 15		
HPH 3003	Pathophysiology and Therapeutics I	3	HPH 3163	Pathophysiology & Therapeutics II	3
HPH 3043	Medicinal Chemistry II	3	HPH 3133	Clinical Biochemistry & Toxicology	3
HPH 3053	Pharmaceutics III	3	HPH 3143	Pharmaceutical Analysis	3
HPH 3063	Community Pharmacy Preceptorship II	3	HPH 3153	Clinical Pharmacy Preceptorship II	3
LSS 1123	Basic Methods of Scientific Research and Development	3	LSS 2403	Innovation and Entrepreneurship	3
LSC 2183	English for Specific Purposes	3			
<b>Year 3 Summer Semester*</b>			<b>Year 4 Semester 8</b>		
Required Credits:			Required Credits: 18		
<b>Year 4 Semester 7</b>			<b>Year 4 Semester 8</b>		
Required Credits: 18			Required Credits: 18		
HPH 4073	Pathophysiology and Therapeutics III	3	HPH 4103	Pharmacy Law and Ethics	3
HPH 4013	Complementary Medicine	3	HPH 4003	Biotechnology	3
HPH 4033	Pharmaceutical Care Practice Skills	3	HPH 4123	Pharmacoeconomics	3
HSC 4003	Research Methods for Health Sciences programs	3	HSC 4006	Capstone Research Project For HS	6
HPH 4043	Industrial Pharmacy Preceptorship	3	HPH 4113	Advanced Pharmacy Practice	3
AES 3003	Professional Arabic	3			

\* Additional courses may be offered in each Summer Semester at the discretion of the Academic Division.

## Academic Staff

**Amged Mustafa**, PhD Pharmacology, Uppsala University, Sweden

**Christianne Rizkalla**, PhD Pharmaceutical Sciences, Cairo University, Egypt

**Lamia AlHajri**, Pharm.D. United Arab Emirates University, UAE

**Sima Jabbari**, Pharm.D. Purdue University, USA

**Steven Zay**, PhD Chemistry, Eotvos Lorand University; PhD Pharmaceutical Sciences, Semmelweis University, Budapest, Hungary

# Bachelor of Social Work

## Admission to program

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

## Program Mission

The Bachelor of Social Work program prepares Emirati nationals for professional social work employment to meet stakeholder needs in the UAE. The program provides a mix of education and training that equips graduates with the skills, knowledge and competencies to work effectively with UAE individuals, families, groups and communities to effectively address problems and improve social functioning.

## Program Description

Successful completion of the four-year, social work program will provide graduates with the knowledge, skills and competencies to work with individuals, families, groups and communities to solve problems and enhance social functioning.

Graduates will be able to work in a variety of health and human service settings, and apply varied intervention methods to address problems such as child abuse, old age, disabilities, family and child relationships, family violence, mental illness and crisis management.

Students will have the option to graduate with a Diploma in Child Protection upon the successful completion of all required courses and preceptorships after 2 years of study. Successful completion of the two year Child Protection Diploma will provide graduates with the knowledge, skills and competencies to work with children at risk for abuse and neglect.

## Program Learning Outcomes

*Upon successful completion of the program, graduates of Higher Colleges of Technology (HCT) Social Work Bachelor's Program will be able to:*

- Apply the principles, theoretical and technical knowledge and management and leadership concepts from social work and related fields to provide quality health and human services in clinical and non-clinical settings.
- Demonstrate effective generalist social work practice through the ability to critically assess and systematically apply the professional knowledge, practice methods and ethical and legal standards of practice.
- Evaluate and apply research and knowledge from multiple fields to support social work practice that promotes social justice in the local and global context.
- Evaluate and apply problem solving and technical skills for social work practice with individuals, families, groups and communities.

- Create and implement and approaches and techniques for social work practice across complex systems at all levels of culturally appropriate practice from the individual to the community.

## Autonomy and Responsibility

- Develop approaches to managing and supervising complex practice within local and global contexts respecting socio-cultural norms and relationships.

## Role and Context

- Demonstrate the ability to maintain autonomy within supervisory contexts taking responsibility for managing team relationships and mentoring others in social work practice.

## Self-Development:

- Demonstrate the ability to self-evaluate and exhibit responsibility for contributing to and managing professional development and ethical standards of practice within complex and unfamiliar settings.

## Completion Requirements

Students must successfully complete a minimum of 122 credits as follows:	
<b>Social Work Core Courses:</b>	75credits
<b>Social Work Field Work Education Courses:</b>	14 credits
<b>General Studies:</b>	33 credits

Course Credits

<b>Social Work Core Courses</b>		
<b>Required Credits: 75</b>		
HSC 2203	Psychology	3
HSW 1003	Introduction to Social Work	3
HSW 1023	Basic Counselling Skills	3
HSW 1033	Social Diversity and Justice	3
HSW 1223	Social Work Practice I: Assessment and Documentation	3
HSW 1233	Social Work and Child Protection in the UAE	3
HSW 1313	Human Behavior in the Social Environment I - Children and Adolescents	3
HSW 2013	Vulnerable Populations: Children and Families	3
HSW 2033	Laws and Ethics in Social Work in the UAE	3
HSW 2133	Social Work with Families	3
HSW 2143	Social Work Practice II: Advanced Communication and Counseling	3
HSW 2323	Vulnerable Populations: Children and Adults with Disabilities	3
HSW 3013	Social Work Practice III: Interventions and Case Management	3
HSW 3023	Human Behavior in the Social Environment II	3
HSW 3033	Advanced Group Work	3
HSW 3103	Social Work with Groups	3
HSW 3223	Social Work Action and Advocacy	3
HSW 4013	Research Methodologies for Social Work	3
HSW 4033	Social Policy and Social Development	3
HSW 4216	Capstone Research Project	6
HSW 4223	Social Work Administration	3
HSW 4233	International Social Work	3
HSW 4243	Psychological Health and Issues	3
HSW 4303	Social Work with Communities	3

Course Credits

<b>Social Work Field Work Education Courses</b>		
<b>Required Credits: 14</b>		
HSW 2324	Child Protection Field Work Education	4
HSW 3943	Social Work Field Work Education II	3
HSW 4927	Social Work Field Work Education III	7
<b>General Studies</b>		
<b>Required Credits: 33</b>		
English, Arabic or other Languages		15
Humanities or Art		3
Information Technology or Mathematics		3
The Natural Sciences		3
The Social or Behavioural Sciences		9

# Diploma in Child Protection Exit Option

## Program Learning Outcome

Upon successful completion of the program, graduates of Higher Colleges of Technology (HCT) Diploma in Child Protection will be able to:

- Apply specialized knowledge to provide quality social services in clinical and non-clinical child protection settings.
- Demonstrate effective relationships with children and families through integration of social work theory with ethical and legal standards of practice.
- Assess and apply knowledge and methods for effective practices in child protection that promotes social justice in the local context.
- Plan and implement child welfare interventions to promote the positive development of children and families.
- Develop and maintain professional relationships through the application of culturally appropriate communication skills, problem solving methods and ethical standards

## Autonomy and Responsibility:

- Coordinate the implementation of child protection processes, helping to guide teams in designing practices that support the development of healthy socio-cultural relationships.

## Role in Context

- Under Guidance, demonstrate the ability to work both independently as well as part of a team to develop the performance of self and others within a diverse range of settings.

## Self-Development:

- Demonstrate development as a child protection worker responsible for comprehending and applying ethical standards.

## Completion Requirement

Students must successfully complete all Year 1 and 2 courses with a minimum of 61 credits as follows:	
Social Work Core Courses	36 credits
Social Work and Child Protection Field Education	4 credits
General Studies	21 credits

# Recommended Sequence of Study

## Bachelor Social Work

Course Code	Course Title	Course Credits	Course Code	Course Title	Course Credits
<b>Year 1 Semester 1</b>			<b>Year 1 Semester 2</b>		
Required Credits: 15			Required Credits: 15		
HSW 1003	Introduction to Social Work	3	HSW 1223	Social Work Practice I: Assessment and Documentation	3
HSW 1023	Basic Counseling Techniques	3	HSW 1233	Social Work and Child Protection in the UAE	3
HSW 1033	Diversity and Social Justice	3	HSW 1313	Human Behavior in the Social Environment I	3
LSC 1103	Academic Reading and Writing I	3	HSC 1233	Human Growth and Development	3
LSS 1003	Life and Study Skills	3	AES 1013	Arabic Communication I	3
<b>Year 1 Summer Semester*</b>			<b>Year 2 Semester 4</b>		
Required Credits:			Required Credits: 16		
<b>Year 2 Semester 3</b>			<b>Year 3 Semester 6</b>		
Required Credits: 15			Required Credits: 15		
HSW 2013	Vulnerable Populations: Children and Families	3	HSW 2143	Social Work Practice II: Advanced Communication and Counseling	3
HSW 2033	Law and Ethics in Social Work	3	HSW 2323	Vulnerable Populations II: Persons with Disabilities	3
HSW 2133	Social Work with Families	3	HSW 2324	Child Protection Preceptorship	4
HSC 2203	Introduction to Psychology	3	LSM 1113	Statistical Math	3
LSC 2103	Academic Reading and Writing II	3	AES 1003	Emirate Studies	3
<b>Year 2 Summer Semester*</b>			<b>Year 3 Semester 5</b>		
Required Credits:			Required Credits: 15		
Diploma in Child Protection Exit Option					
<b>Year 3 Summer Semester*</b>			<b>Year 4 Semester 8</b>		
Required Credits: 6			Required Credits: 16		
<b>Year 4 Semester 7</b>			<b>Year 3 Semester 6</b>		
Required Credits: 15			Required Credits: 15		
HSW 4013	Research Methodologies for Social Work	3	HSW 3033	Advanced Group-work	3
HSW 4033	Social Policy and Social Development	3	HSW 3223	Social Work Action and Advocacy	3
HSW 4233	International Social Work	3	HSW 3943	Social Work Preceptorship II	3
HSW 4223	Social Work Administration	3	LSS 2403	Innovation and Entrepreneurship	3
HSW 4243	Psychological Health and Issues	3	LSS 1123	Basic Methods of Scientific Research and Development	3

\* Additional courses may be offered in each Summer Semester at the discretion of the academic division

## Academic Staff

**Beverly Wagner**, Masters in Social Work, University of South Carolina, USA

**Hassan Elshazali**, Masters in Social Work, University of Toronto, Canada

**John Roberts**, Master of Social Work, Exeter University, UK

**Nawal Majeed**, Masters of Science in Education and Training, Surrey University, UK

**Vasinth Veeran**, PhD Social Work, University of Natal, Durban (UND), South Africa

**Vinod Kozhisser**, Masters in Arts in Medical and Psychiatric Social Work, University of Madras, India

# Bachelor of Veterinary Science

## Admission to program

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

## Program Mission

The Bachelor of Veterinary Science program produces national veterinary bioscientists who have expertise in the following areas: animal and food biosecurity, public health, livestock production and health, and veterinary laboratory support services, as prioritized by Federal and Local UAE Authorities.

## Program Description

The Bachelor of Veterinary Science program aims to produce Emirati national graduates to work as veterinary bioscientists to fulfill the need identified by the UAE government. The 4-years program provides graduates with expertise in the following areas: animal and food biosecurity, public health, livestock production and health, and veterinary laboratory support services, prioritized by federal and local UAE Authorities. This program allows full articulation of the existing Associate Degree in Veterinary Science.

**Students will have the option to graduate with a Higher Diploma in Veterinary Laboratory Technology upon the successful completion of all required courses and preceptorships after 3 years of study.**

## Program Learning Outcomes

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

- Demonstrate knowledge and policies and regulatory environments applicable to veterinary diagnostic laboratories, meat inspection, food safety, livestock health and production, and animal quarantine.
- Apply knowledge regarding animal disease detection, management, prevention and surveillance, to enhance the quality of livestock production, and animal and food biosecurity.

- Demonstrate effective cognitive and technical skills needed to advance animal and food biosecurity, public health, livestock health and production, and veterinary laboratory support services.
- Demonstrate skills in using equipment, applying technologies and information systems that support and enhance animal and food biosecurity, public health, livestock health and production, and veterinary laboratory support services.
- Demonstrate the ability to work independently and as part of a team in a diverse range of animal related, food safety related and laboratory based settings.
- Commitment to a process of life-long learning aimed to enhance skills as a veterinary bioscientists.
- Demonstrate professional attributes relevant to their roles as a veterinary bioscientists in animal and food biosecurity, public health, livestock health and production, and veterinary laboratory support services or pursuit of other career opportunities in the UAE.

## Completion Requirements

Students must successfully complete a minimum of 132 credits as follows:	
<b>Veterinary Science Core Courses:</b>	<b>78 credits</b>
<b>Veterinary Science Practicum Courses:</b>	<b>21 credits</b>
<b>General Studies:</b>	<b>33 credits</b>

Course Credits

<b>Veterinary Science Core Courses</b>		
<b>Required Credits: 78</b>		
HSC 4003	Research Methods for Health Sciences	3
VET 1103	Veterinary Anatomy and Physiology I	3
VET 1123	General Chemistry	3
VET 1203	Veterinary Anatomy and Physiology II	3
VET 1223	Animal Science and Husbandry	3
VET 1313	Physics for VET Sciences	3
VET 1403	Veterinary Terminology	3
VET 1413	Inorganic Chemistry	3
VET 2003	Veterinary Pathology	3
VET 2123	Animal Nutrition and Feeding	3
VET 2133	Systemic Pathology	3
VET 2213	Organic Chemistry	3
VET 2323	Biochemistry	3
VET 2423	Veterinary Microbiology	3
VET 3003	Veterinary Parasitology	3
VET 3033	Principles of Genetics and Animal Reproduction	3
VET 3103	Meat Inspection and Food Safety	3
VET 3113	Animal and Disease Prevention I	3
VET 3143	Veterinary Professional Practice	3
VET 3423	Clinical Pathology and Diagnostic Laboratory Tests	3
VET 4003	Pharmacology and Toxicology for Veterinary Science	3
VET 4033	Animal Disease and Prevention II	3
VET 4113	Infectious Diseases and Animal Quarantine	3
VET 4123	Veterinary Epidemiology and Public Health	3
VET 4133	Wildlife and Aquaculture	3
VET 4223	Veterinary Legislations and Animal Welfare	3

Course Credits

<b>Veterinary Science Practicum Courses</b>		
<b>Required Credits: 21</b>		
VET 1904	Veterinary Practicum I	4
VET 2904	Veterinary Practicum II	4
VET 3904	Veterinary Practicum III	4
VET 4909	Veterinary Practicum IV – specialised area Capstone Project	9

**General Studies****Required Credits: 33**

English, Arabic or other Languages	15
Humanities or Art	6
Information Technology or Mathematics	3
The Natural Sciences	3
The Social or Behavioural Sciences	6

<i>Total Required Credits</i>	<i>132</i>
<i>Maximum Duration of Study</i>	<i>6 years</i>
<i>Cost Recovery Programme</i>	<i>Yes</i>
<i>Minimum Duration of Study</i>	<i>4 Years</i>
<i>Programme Code</i>	<i>VETAB</i>
<i>Major Code</i>	



# Higher Diploma in Veterinary Laboratory Technology

## Program Learning Outcome

*Students exiting with the Higher Diploma will be able to:*

- Incorporate knowledge and skills earned to demonstrate critical thinking and problem solving skills in animal health sector.
- Collaborate with members of the veterinary medical teams at different governmental and private practices.
- Demonstrate abilities and skills in the delivery of veterinary health services both in clinical and non-clinical settings.
- Support veterinarian and animal health professionals with skills in livestock production, medical techniques, laboratory diagnostic services, animal and food biosecurity.
- Pursue professional qualifications and postgraduate studies in veterinary sciences and medicine.

## Completion Requirements

Students must successfully complete all Year 1, 2 and 3 courses with a minimum of 99 credits including:	
Veterinary Core Courses:	54 credits
Veterinary Practicum Courses:	12 credits
General Studies:	33 credits

# Recommended Sequence of Study

## Bachelor in vet sciences

Course Code	Course Title	Course Credits	Course Code	Course Title	Course Credits
<b>Year 1 Semester 1</b>			<b>Year 1 Semester 2</b>		
Required Credits: 15			Required Credits: 19		
LSC 1103	Academic Reading and Writing I	3	AES 1013	Arabic I	3
LSSS 1003	Life Study Skills	3	VET 1203	Anatomy & Physiology II (incl. Histology)	3
VET 1103	Anatomy & Physiology I	3	VET 1223	Animal Science and Husbandry	3
VET 1123	General Chemistry	3	VET 1313	Physics for VET Sciences	3
VET 1403	Veterinary Terminology	3	VET 1413	Inorganic Chemistry	3
<b>Year 1 Summer Semester*</b>			VET 1904	Veterinary Preceptorship I	4
Required Credits:					
<b>Year 2 Semester 3</b>			<b>Year 2 Semester 4</b>		
Required Credits: 15			Required Credits: 19		
LSS 1123	Basic Methods of Scientific Research and Development	3	AES 1003	Emirati Studies	3
LSC 2103	Academic Reading and Writing II	3	LSM 1113	Statistical Math	3
VET 2003	Veterinary Pathology	3	VET 2323	Biochemistry	3
VET 2123	Animal Nutrition & Feeding	3	VET 2423	Veterinary Microbiology	3
VET 2213	Organic Chemistry	3	VET 2133	Systemic Pathology	3
<b>Year 2 Summer Semester*</b>			VET 2904	Veterinary Preceptorship II	4
Required Credits:					
<b>Year 3 Semester 5</b>			<b>Year 3 Semester 6</b>		
Required Credits: 15			Required Credits: 19		
LSS 2403	Innovation and Entrepreneurship	3	LSC 2183	English for Specific Purposes	3
AES 3003	Professional Arabic	3	LSN 1113	Introduction to sustainability	3
VET 3003	Veterinary Parasitology	3	VET 3103	Meat Inspection and Food Safety	3
VET 3033	Principles of Genetics and Animal Reproduction	3	VET 3113	Animal Disease and Prevention I	3
VET 3423	Clinical Pathology and Diagnostic Laboratory Tests	3	VET 3143	Veterinary Professional Practice	3
<b>Year 3 Summer Semester*</b>			VET 3904	Veterinary Preceptorship III	4
Required Credits:					
<b>Year 4 Semester 7</b>			<b>Year 4 Semester 8</b>		
Required Credits: 15			Required Credits: 15		
HSC 4003	Research Methods for Health Sciences	3	VET 4223	Veterinary Legislations & Animal Welfare	3
VET 4003	Pharmacology & Toxicology for Veterinary Science	3	VET 4123	Veterinary Epidemiology & Public Health	3
VET 4102	Wildlife and Aquaculture	3	VET 4906	Veterinary Preceptorship IV – specialized area Capstone Project	9
VET 4113	Infectious Diseases and Animal Quarantine	3			
VET 4033	Animal Disease and Prevention II	3			

\* Additional courses may be offered in each Summer Semester at the discretion of the academic division

## Academic Staff

**Dr. Claudia Sofia Antunes Ferreira**, PhD Microbiology, University of Lisbon

**Dr. Muhammad Asif Raza**, PhD Animal Science, University of Kensel, Post –Doctorate Animal Science, Universidad Autónoma de Yucatan

**Dr. Rabiha Seboussi**, PhD Post-Doctorate: Department of Animal Science, Laval University, PhD, SUPAGRO. Montpellier

**Dr. Sudhakar Bhandare**, PhD Animal Science, University of Nottingham