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 Catalog.

Program Mission

To Prepare Emirati national students to practice competently and effectively as medical imaging professionals in diverse healthcare environments and meet the continuously thriving UAE stakeholder's demands for medical imaging human resources

Program Description

Medical Imaging Science Program

The Bachelor of Medical Imaging Science (BMIS) program includes a knowledge base that examines specializations of general, emergency and specialized Medical Imaging best practices. This is in alignment with the industrial multimodality medical imaging professionals characteristics.

The BMIS program offers students in Year 4 an option to follow one of three tracks in MRI, advanced CT applications or clinical mammography. Each track consists of 9 credits where students select specialized imaging modality. The track option will distinguish graduates from other competitor programs ones by equipping each BMIS graduate with a strong background to become ready for the high end specialized imaging job on the first day of employment.

The program provides a mix of education and training that equips graduates with the skills, knowledge and competencies to work within the UAE healthcare services system to effectively fulfil health care needs from the medical imaging perspective.

 BMIS program credentials incorporate extensive supervised professional clinical placement in relevant healthcare settings.

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

Program Goals

1. Develop a competent professional with innovative knowledge and skills required for Medical Imaging.
2. Enables the student to think critically and solve problems in their clinical work environment.
3. Prepare graduate with the necessary communication skills to interact with patients and healthcare providers that fulfilling the future demands of the UAE healthcare industry and societal needs.
4. Prepare graduates with applied skills in management and leadership, independently and in a supervisory capacity within the health care team.
5. Prepare the graduate to interact with the Professional Council as a healthcare worker in a compassionate, ethical, and professional manner
6. Promote life-long learning and research activities, allowing graduates to anticipate the medical imaging needs and to deliver optimal and timely diagnoses.

Program Learning Outcomes

Bachelor of Medical Imaging Science (NQF Level 7)

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

PLO1. Apply advanced knowledge, management and critical decision-making as a member or technical leader within the national and global medical imaging context during the provision of quality healthcare services in both clinical and non-clinical settings.

PLO2. Apply theoretical, practical and evidence based techniques during the implementation of strategies and protocols that addresses challenges in undertaking general, emergency and specialized imaging procedures and patient care.

PLO3. Evaluate radiographic images produced to ensure optimum image quality and quality assurance procedures, while promoting patient safety within sound ethical standards, ALARA principles and best practice frameworks.

PLO4. Demonstrate technical leadership attributes and the ability to collaborate effectively within a multidisciplinary team in a diverse range of general, emergency and specialized medical imaging settings. (Technical leadership)

PLO5. Apply professional competencies and innovative solutions through independent learning while fostering a lifelong learning culture and a continuous rigorous applied research attitude to learners.

PLO6. Apply entrepreneurial and innovation skills to help contribute to the improvement of general and emergency medical imaging practice. (Graduating Companies).

Requirements
Completion Requirements

Bachelor of Medical Imaging Science

Students must successfully complete a minimum of 126 credits as follows:

Code	Title	Credit Hours
Health Science Core Courses		24
Medical Imaging Core Courses		51
Medical Imaging Preceptorship Courses		18
General Studies		33
Total Credit Hours		**126**

Bachelor of Medical Imaging Science

Code	Title	Credit Hours
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 Core Courses

Required Credits: 51

HMI 2002	Medical Imaging Technology I	3
HMI 2003	Patient Care in Medical Imaging I	3
HMI 2102	Medical Imaging Technology II	3
HMI 2303	Medical Imaging Positioning and Procedures I	3
HMI 2403	Medical Imaging Anatomy and Pathology I	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	Specialised 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 4013	Specialised 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

Required Credits: 12

Humanities or Art

Required Credits: 3

Information Technology or Mathematics

Required Credits: 6

The Natural Sciences

Required Credits: 3

The Social or Behavioral Sciences

Required Credits: 9

Description	Data
Total Required Credits	126
Maximum Duration of Study	6 years
Minimum Duration of Study	4 years
Cost Recovery Program	No
Program Code	BHMIU
Major Code	HMI

Ideal Study Plan
Recommended Sequence of Study

Year 1

Semester 1

		Credit Hours
HSC 1013	Human Biology	3
HSC 1113	Introduction to Healthcare Systems and Professional Practice	3
HSC 1803	Medical Terminology for Health Sciences	3
LSC 1103	Professional Communication and Reporting	3
LSM 1113	Statistical Mathematics	3
	Credit Hours	**15**

Semester 2

HSC 1023	Chemistry for Health Sciences	3
HSC 1033	Anatomy and Physiology	3
HSC 1123	Work Health and Safety	3
LSS 1003	Life and Future Skills	3
LSS 1123	Basic Research Methods	3
	Credit Hours	**15**

Year 2

Semester 3

AES 1013	Arabic Communications	3
HMI 2002	Medical Imaging Technology I	3
HMI 2003	Patient Care in Medical Imaging I	3
HMI 2303	Medical Imaging Positioning and Procedures I	3
HMI 2403	Medical Imaging Anatomy and Pathology I	3
LSC 2223	Future Skills Capstone	3
	Credit Hours	**18**

Semester 4

AES 1003	Emirati Studies	3
HMI 2102	Medical Imaging Technology II	3
HMI 2503	Medical Imaging Positioning and Procedures II	3
HMI 2603	Medical Imaging Anatomy and Pathology II	3
HMI 2613	Clinical Preceptorship I	3
	Credit Hours	**15**

Year 3

Semester 5

AES 1033	Islamic Culture	3
BUS 2403	Innovation and Entrepreneurship	3
HMI 3002	Medical Imaging Technology III	3
HMI 3003	Patient Care in Medical Imaging II	3
HMI 3013	Clinical Preceptorship II	3
HMI 3103	Medical Imaging Positioning and Procedures III	3
	Credit Hours	**18**

Semester 6

ICT 2013	Computational Thinking and Coding	3
HMI 3113	Specialised Imaging I	3
HMI 3213	Radiation Safety and Biology	3
HMI 3223	Cross Sectional Anatomy	3
HMI 3233	Clinical Preceptorship III	3
	Credit Hours	**15**

Year 4

Semester 7

HMI 4003	Quality Management in Medical Imaging	3
HMI 4013	Specialised Imaging II	3
HMI 4023	Clinical Preceptorship IV	3
HMI 4203	Professional Practice	3
HSC 4003	Research Methods for Health Sciences	3
	Credit Hours	**15**

Semester 8

HMI 4106	Clinical Preceptorship V	6
HMI 4113	Specialized Imaging III	3
HSC 4006	Capstone Research Project for Health Sciences	6
	Credit Hours	**15**
	Total Credit Hours	**126**

Faculty and Academic Staff

Hussam Khalid Beituni, Masters (Medical Imaging Interpretation), Charles Sturt University,Australia

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