

## In the Name of God

### Islamic Republic of Iran Ministry of Health and Medical Education Deputy for Education

## Health Information Technology Degree: Master of Science (MSc)

### Total Course Credits

- Core: 20
- Non-core (Electives): 6
- Dissertation (PhD): 6

### Program Description

Candidates for a master degree in Health Information Technology (HIT) should first take part in an Entrance Exam administered by Iran's Ministry of Health and Medical Education few months before the commencement of the course in autumn. Those accepted should register for and pass the necessary course credits in a minimum of two years. The graduates, possessing the knowledge and skills of the field, should be able to acquire the necessary health information from various sources, perform quality control of health data, do data analyses, release ethically and legally approved information and design health information systems for quality healthcare provision. They do their work in collaboration with physicians, nurses, healthcare managers and IT professionals.

### Aims

The main objective of the program is to train qualified and committed individuals who can identify and successfully sort out the information needs of various healthcare users in terms of treatment, education and research. The graduates should be able to create and apply IT tools and techniques for gathering, classifying, and analyzing data in any media format, both manually and electronically. They are expected to disseminate the notion of "healthcare-based information" in healthcare organizations. They would develop and publicize research-based healthcare informatics. The graduates would possess enough knowledge and skills for gathering and analyzing health data and informatics according to the professional, ethical, legal, medical and organizational requirements of the field. They are also responsible for the information needs of the healthcare system. The curriculum in this field is also aimed at providing the fundamental knowledge and skills necessary for graduates to successfully deal with numerous issues in the care system as a dynamic environment with numerous changes underway.

### Admission Requirements

The applicants should take part in an Entrance Exam, administered by the Ministry of Health, before they could enter the course which is formulated based on educational rules and regulations of the Development Council of Iran's Ministry of Health. The applicants should already possess a bachelor of science (BSc) in one of the fields of medical sciences which is approved by ministry of health.

Exam materials	weight
Health Information technology	3
Classification of diseases	3

Information systems and their management	3
General English	2
Total	11

## **Expected Competencies at the End of the Program**

### **General Competencies\***

#### **Specific Competencies and Skills**

- At the end of the program learners will be competent in the following skills:

### **Educational Strategies, Methods and Techniques\***

#### **Student Assessment (Methods and Types)**

- Formative
- Summative
- Comprehensive exam

### **Ethical Considerations\***

\*Note: The related document(s) can be found at <http://hcmep.behdasht.gov.ir/>.

## Tables of the Courses

The candidates should pass a total of 50 credits as follows:

In addition to the above credits, the students should also pass all or part of the credits in table 1, based on their background knowledge and a decision made by their affiliate department and faculty.

**Table 1: Compensatory course credits for a master degree (MSc) in Health Information Technology**

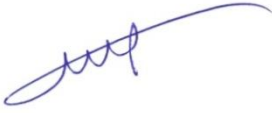


Code of the course	Course name	Total	Theoretical	Practical
01	Mathematics	2	1	1
02	Electronic health record	2	1	1
03	Health information technology	2	1	1
04	International classification and nomenclature systems	2	1	1
05	Data structure& computer programming	4	2	2
06	Health information management(1)	2	1	1
07	Health information management(2)	2	1	1
08	Network and systems security	2	1	1
09	Data quality and Health information system	2	1	1
10	Health information systems	3	3	–
11	Medical informatics systems	1	0.5	0.5
<b>Total</b>		24	13.5	10.5

**Table 2: Core course credits for a master degree (MSc) in Health Information Technology**

Code of the course	Course name	Total	Theoretical	Practical
12	Advanced biostatistics	2	1	1
13	Methodology in health sciences	2	2	
14	International classification and nomenclature systems	3	3	
15	Health Information management	3	3	
16	Management of Health information systems	2	2	
17	Evaluation of health systems	2	2	
18	information technology Applications in healthcare	2	2	
19	Health communication technology	2	1	1
20	methodology seminar	2	1	1
21	thesis	6		
<b>total</b>		26	17	3

**Table 3: Non-core (elective) course credits for a master degree (MSc) in Health Information Technology**

Code of the course	Course name	Total	Theoretical	Practical
22	Management and planning of education	2	2	
23	Use of computer in data analysis	2	1	1
24	Management theories	2	2	
25	Advanced academic language	2	2	
26	Health economics	2	2	
27	Medical informatics	2	2	
<b>Total</b>		12	11	1

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<p>  <b>Bagher Larijani MD</b>                  Deputy for Education                  Ministry of Health and Medical Education</p>		