

# HEALTH MANAGEMENT, MASTER OF INFORMATION SYSTEMS

The Master of Information Systems in Health Management is a unique program designed to prepare students for professional roles in the design and management of information systems and services in healthcare organizations.

While Qatar has already started the digitization of health records and implementation of digital-based data collection and storage systems, there is limited access to expertise in implementation and management of such health information systems.

For more information, click here (<https://www.hbku.edu.qa/en/cse/ma-info-sys-health-management/>).

## Requirements

Minimum hours required to complete program 33 CH

| Code  | Title  | Hours |
|---|--|-------|
| <b>Core Courses</b>   |  |       |
| ICT 670   | Information Technology Project Management                  | 3     |
| ICT 671   | Information Systems Management                             | 3     |
| ICT 675   | Healthcare Information Systems                             | 3     |
| ICT 676   | Information Systems Analysis and Design                    | 3     |
| Subtotal  |  | 12    |
| <b>Elective Courses</b>   |  |       |
| Select five of the following:                                     |  | 15    |
| Free elective: Students can take one course from any HBKU program |  |       |
| CSE 602   | Statistics for Science and Engineering                     |       |
| CSEG 710  | Advanced Algorithms and Data Structures                    |       |
| CYSE 630  | Computer and Network Security                              |       |
| CYSE 640  | Security Risk Analysis                                     |       |
| CYSE 720  | Data Privacy   |       |
| DSEG 733  | Advanced Data Management System                            |       |
| DSEG 735  | Learning from Data   |       |
| ICT 632   | Advanced Applications of the Web and Internet              |       |
| ICT 660   | Principles of Health Informatics                           |       |
| ICT 665   | Artificial Intelligence and Machine Learning in Healthcare |       |
| ICT 666   | Computational Bioinformatics                               |       |
| ICT 668   | Medical Image Processing                                   |       |
| ICT 690   | Special Topics   |       |
| ICT 705   | Applied Data Analytics                                     |       |
| ICT 706   | Independent Studies  |       |
| ICT 716   | Data Science Tools and Applications                        |       |
| ICT 736   | Interactive Design for Health care                         |       |
| Subtotal  |  | 15    |
| <b>Seminar</b>  |  |       |
| Must pass one time  |  |       |
| ICT 701   | Graduate Research Seminars                                 | 0     |
| Subtotal  |  | 0     |
| <b>Project</b>  |  |       |
| ICT 698   | Industrial/ Project  | 6     |

|                    |           |
|--------------------|-----------|
| Subtotal           | 6         |
| <b>Total Hours</b> | <b>33</b> |

## Study Plan

| Course                 | Title                                     | Hours     |
|------------------------|---|-----------|
| <b>First Year</b>      |   |           |
| <b>First Semester</b>  |   |           |
| ICT 670                | Information Technology Project Management | 3         |
| ICT 675                | Healthcare Information Systems            | 3         |
| ICT 701                | Graduate Research Seminars                | 0         |
| Elective 1             |   | 3         |
| <b>Semester Hours</b>  |   | <b>9</b>  |
| <b>Second Semester</b> |   |           |
| ICT 671                | Information Systems Management            | 3         |
| ICT 676                | Information Systems Analysis and Design   | 3         |
| Elective 2             |   | 3         |
| <b>Semester Hours</b>  |   | <b>9</b>  |
| <b>Second Year</b>     |   |           |
| <b>First Semester</b>  |   |           |
| Elective 3             |   | 3         |
| Elective 4             |   | 3         |
| Elective 5             |   | 3         |
| <b>Semester Hours</b>  |   | <b>9</b>  |
| <b>Second Semester</b> |   |           |
| ICT 698                | Industrial/ Project                       | 6         |
| <b>Semester Hours</b>  |   | <b>6</b>  |
| <b>Total Hours</b>     |   | <b>33</b> |