HEALTH INFORMATICS (MS)

 The master's degree program will provide students with the necessary skills and knowledge needed to implement and support information technology solutions for health sector organizations. Graduates will obtain technical knowledge and management skills for the design and support of IT systems and will develop a deep understanding of health IT processes to support health care delivery management. Graduates will also gain knowledge in areas of health information management including health information processing and exchange, health care analytics, enterprise management and information storage and security management.

Program Requirements	Quarter Hours
Introductory Courses	0-8
Degree Requirements	48
Total Hours Required	**48-56**

Learning Outcomes

Students will be able to:

- Identify and analyze elements of a sociotechnical health system.
- Define and evaluate the quality and effectiveness of a health informatics technology.
- Accurately identify and analyze elements of the U.S. health care financial system.
- Conduct a systems analysis for a healthcare problem.
- Identify errors that affect patient safety and develop solutions to promote safer systems.
- Identify features of a functioning health information exchange.

Degree Requirements

Course Requirements

No Introductory Course may be substituted for any other course at any level.

Introductory Courses

Course	Title	Quarter Hours
IT 403	STATISTICS AND DATA ANALYSIS	4
CSC 401	INTRODUCTION TO PROGRAMMING	4

Introductory courses may be waived for any of the following conditions:

- The student has the appropriate course work to satisfy an Introductory Course.
- The student has appropriate and verified professional experience to satisfy an Introductory Course.
- If an exam is available, the student passes a Graduate Assessment Examination (GAE) in the Introductory Course area.

Foundation Courses

Course	Title	Quarter Hours
DSC 510	HEALTH DATA SCIENCE	4
HIT 421	INTRODUCTION TO HEALTH INFORMATICS	4
HIT 422	HEALTHCARE SYSTEMS & DATA	4

HIT 423	DIGITAL HEALTH	4
IS 451	DATABASE DESIGN FOR INFORMATION SYSTEMS	4
MGT 559	HEALTH SECTOR MANAGEMENT	4

Major Elective Courses

Students must take 24 credit hours of Major Elective courses selected from the list of selected areas below. Students must choose at least one elective course in each of the three groups Databases and Systems, Analytics, and Innovations in Healthcare, for a total of 12 credit hours; the remaining 12 credit hours can be chosen from any group.

Databases and Systems

Course	Title	Quarter Hours
DSC 450	DATABASE PROCESSING FOR LARGE-SCALE ANALYTICS	
CSEC 440	INFORMATION SECURITY MANAGEMENT	
HIT 430	ELECTRONIC HEALTH RECORDS	
IS 421	SYSTEMS ANALYSIS AND DESIGN	

Analytics

Course	Title	Quarter Hours
DSC 423	DATA ANALYSIS AND REGRESSION	
DSC 441	FUNDAMENTALS OF DATA SCIENCE	
DSC 465	DATA VISUALIZATION	
DSC 430	PYTHON PROGRAMMING	
DSC 445	MACHINE LEARNING I (FORMERLY DSC 540)	

Innovations in Health Care

Course	Title	Quarter Hours
HIT 451	ACCOUNTING AND FINANCIAL MANAGEMENT IN HEALTHCARE	
HIT 590	TOPICS IN HEALTH INFORMATICS	
HCI 440	INTRODUCTION TO USER-CENTERED DESIGN	
HTHC 515	INTRO TO HEALTH COMMUNICATION	
HIT 575	AI HEALTH ENTREPRENEURSHIP	
HIT 535	MOBILE HEALTH (MHEALTH)	
HIT 540	ROBOTS IN HEALTHCARE	
HIT 517	PUBLIC HEALTH INFORMATICS	

Practicum Courses

Course	Title	Quarter Hours
CSC 599	INDEPENDENT STUDY [1]	
CSC 697	GRADUATE INTERNSHIP	

[1] CSC 599 should be taken in two consecutive quarters, 2 credit hours each quarter.

Degree Requirements

Students in this degree program must meet the following requirements:

- Complete a minimum of 48 graduate credit hours in addition to any required introductory courses of the designated degree program.
- Complete all graduate courses and requirements listed in the designated degree program.
- Earn a grade of C- or better in all courses of the designated degree program.
- Maintain a cumulative GPA of 2.5 or higher.
- Students pursuing a second (or more) graduate degree may not double count or retake any course that applied toward the completion of a prior graduate degree. If a required course in the second degree was already completed and applied toward a previous degree, the student must meet with a faculty advisor to discuss a new course to be completed and substituted in the new degree. This rule also applies to cross-listed courses, which are considered to be the same course but offered under different subjects.
- Students pursuing a second master's degree must complete a minimum of 48 graduate credit hours beyond their first designated degree program in addition to any required introductory courses in their second designated degree program.

Students with a GPA of 3.9 or higher will graduate with distinction.

For DePaul's policy on repeat graduate courses and a complete list of academic policies, see the DePaul Graduate Handbook.