HEALTH INFORMATICS (MS)

Create data-driven solutions to improve patient care.

With the abundance of data, particularly in health care, a Master of Science (MS) in Health Informatics & Data Science from Loyola University Chicago's Parkinson School of Health Sciences and Public Health will prepare students to understand how to use data to improve patient care and population health. Learn how to unlock the power of data through a wealth of career paths such as: Healthcare Data Analyst or Informaticist.

In our 100% online program, you will access real-world data through an internship or capstone project. Become a part of the new health care workforce trained in informatics and data science to improve outcomes and delivery, minimize health inequities, and achieve better care.

Related Programs

Master's

- Exercise Science (MS) (https://catalog.luc.edu/graduate-professional/health-sciences/exercise-science-ms/)
- Public Health (MPH) (https://catalog.luc.edu/graduate-professional/health-sciences/master-public-health-mph/)

Certificate

- Health Informatics Certificate (https://catalog.luc.edu/graduate-professional/health-sciences/health-informatics-certificate/)

Curriculum

Loyola's MS in Health Informatics & Data Science is a two-year, 100% online program, with full- and part-time options available. You will start with foundational courses in health care informatics and data science, then hone in on your interests with elective courses. The program concludes with a capstone project and/or internship.

The program is 39 credit hours with a capstone project or 33 credit hours with an internship with capstone report and presentation.

Code	Title	Hours
Core Courses		
HIDS 401	Foundations of Health Informatics	3
HIDS 412	Translational Bioinformatics	3
HIDS 421	Security and Privacy in Healthcare	3
HIDS 422	Ontologies in Healthcare	3
HIDS 431	Introduction to Natural Language Processing in Health	3
Data Analysis Courses		
HIDS 411	Clinical Data Science	3
MPBH 409	Biostatistics I	3
Electives		
Technical Electives		*9*
Choose three (3) courses from the following: [1]		
COMP 406	Data Mining	
COMP 412	Open Source Computing	
COMP 453	Database Programming	
ENVS 480	Introduction to Geographic Information Systems	
MPBH 403	Introduction to Epidemiology	
MPBH 421	Biostatistics II	
MPBH 423	Intermediate Epidemiology	
Social Electives		*3*
Choose one (1) of the following:		
BEHL 401	Clinical Topics in Bioethics	
BEHL 402	Justice & Health Care	
BEHL 405	Research Ethics	
BEHL 406	Principles of Health Care Ethics	
BEHL 407	Social Determinants of Health and Bioethics	
BEHL 408	Ethics, Genetics and Health Policy	
PHIL 444	Studies in Logic	
SOWK 500	Life Span Development, Human Behavior, Trauma, & Theory	
SOWK 602	Health and Behavioral Health Policy and Systems	
Capstone		
HIDS 499	Health Informatics Capstone (Taken twice)	
Total Hours		**33**

[1] Or other relevant courses, with mentor's approval.

Capstone Project/Internship

Two-semester capstone project or internship with capstone report and presentation.

Suggested Sequence of Courses

The below sequence of courses is meant to be used as a suggested path for completing coursework. An individual student's completion of requirements depends on course offerings in a given term as well as the start term for a major or graduate study. Students should consult their advisor for assistance with course selection.

Course	Title	Hours
Year 1		
Fall		
HIDS 401	Foundations of Health Informatics	3
HIDS 411	Clinical Data Science	3
Technical Elective		3
	Hours	**9**
Spring		
HIDS 412	Translational Bioinformatics	3
HIDS 422	Ontologies in Healthcare	3
MPBH 409	Biostatistics I	3
	Hours	**9**
Year 2		
Fall		
HIDS 421	Security and Privacy in Healthcare	3
Technical Elective		3
Technical Elective		3
HIDS 499	Health Informatics Capstone	
	Hours	**9**
Spring		
Social Elective		3

HIDS 499	Health Informatics Capstone	3
	Hours	**6**
	Total Hours	**33**

Graduate & Professional Standards and Regulations

Students in graduate and professional programs can find their Academic Policies in Graduate and Professional Academic Standards and Regulations (https://catalog.luc.edu/academic-standards-regulations/graduate-professional/) under their school. Any additional University Policies supersede school policies.

Learning Outcomes

- Evaluate existing research studies and their methodologies in the field of health informatics
- Apply computing, information science, and communication in solving real-world health problems
- Integrate social equity and ethical principles to improve health informatics processes and outcomes
- Demonstrate knowledge of database design to manage and analyze health data