

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.

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		
MPBH 409	Biostatistics I	3
HIDS 411	Clinical Data Science	3
Electives		
<i>Technical Electives</i>		9
Choose three (3) courses from the following: ¹		
COMP 406	Data Mining	
COMP 412	Open Source Computing	
COMP 453	Database Programming	
MPBH 403	Introduction to Epidemiology	
MPBH 423	Intermediate Epidemiology	
MPBH 421	Biostatistics II	
ENVS 480	Introduction to Geographic Information Systems	
<i>Social Electives</i>		3
Choose one (1) of the following:		
BEHL 401	Clinical Topics in Bioethics	
BEHL 402	Justice & Health Care	
BEHL 405	Research and 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 399 Health Informatics Capstone (Taken twice)

Total Hours 33

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
HIDS 431	Introduction to Natural Language Processing in Health	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 #1		3
Technical Elective #2		3
HIDS 399	Health Informatics Capstone	
Hours		9
Spring		
Technical Elective #3		3
Social Elective		3
HIDS 399	Health Informatics Capstone	
Hours		6
Total Hours		33

Capstone Project/Internship

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

Learning Outcomes

- You will be able to analyze problems, assess solutions against specific measures, and generate new bodies of knowledge from initial data, while understanding the ethical considerations of data usage, specifically as they relate to patient safety and privacy.
- You will also develop new frameworks and models to solve health informatics and data science problems.