**HEALTH INFORMATICS & DATA SCIENCE (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 healthcare 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.

**Core Courses (15 Credits)**
- Foundations of Health Informatics
- Introduction to Natural Language Processing
- Security and Privacy in Health Care
- Translational Bioinformatics
- Ontologies in Health

**Data Analysis Courses (6 Credits)**
- Biostatistics I
- Machine Learning

**Electives (12 Credits)**

**Technical Electives (9 Credits)**
Choose from the following:
- Health care Organizations
- Data Mining
- Free and Open-Source Computing
- Database Programming
- Clinical Decision Systems
- Introduction to Epidemiology
- Epidemiology II
- Biostatistics II
- Geographic Information Systems

or other relevant courses, with mentor’s approval.

**Social Electives (3 Credits)**
Choose from the following:
- Research Ethics
- Principles of Health care Ethics
- Social Determinants of Health and Bioethics
- Ethics, Genetics, and Health Policy

**Capstone Project/Internship**

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

**Total:** at least 39 credits (capstone project) or 33 credits (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.