

HEALTHCARE DATA SCIENCE, MS

Students are required to complete 12 courses to earn the degree.
The curriculum covers 10 core courses including a capstone course.
Students are able to select any 2 electives from the list below.

Curriculum

Course	Title
Core Courses (10 units)	
MHDS 401-DL	Foundation of Healthcare Programming with Python and R
MHDS 403-DL	Introduction to U.S. Healthcare, Digital Health & Analytics
MHDS 405-DL	Data Literacy and Analytics in Healthcare
MHDS 407-DL	Data Governance, AI Ethics & Cybersecurity
MHDS 409-DL	Foundations of Health Statistics and Data Exploration
MHDS 412-DL	Feature Engineering and Unstructured Data
MHDS 422-DL	Practical Machine Learning and AI in Healthcare
MHDS 455-DL	Data Visualization and Storytelling
MHDS 480-DL	Healthcare Strategy, Operations, and AI Leadership
MHDS 498-DL	Capstone
Electives (2 units)	
MSHA 410-DL	Regression and Multivariate Analysis
MHI 426-DL	Applications of AI in Healthcare
MHI 427-DL	Enabling AI in Healthcare: Cloud Platforms, Data Architecture, and Scalable Systems
MHI 428-DL	Digital Twin Intelligence in Healthcare: Foundations, Agents, and Strategy

About the Final Project

As their final course in the program, the Capstone is intended to be the culmination of coursework towards the MHDS degree. In the Capstone, students will

- Apply tools learned during MHDS coursework to define a problem in healthcare
- Define the data needed to resolve the problem
- Perform the analysis
- Communicate the results and conclusion of the analysis in written form