

# HEALTH INFORMATICS MHI

The Health Informatics program prepares students to implement and utilize information technology to support any healthcare organization. Our students are guided by a philosophy of inquiry, insight, and innovation. Students will be challenged to think boldly and to seek out and answer difficult questions using healthcare data. The learning environment will prepare students for the challenges of a professional career in a healthcare setting. The program will help students to develop the competencies and acquire the practical tools to succeed in today's digital healthcare environment.

The Master of Health Informatics (MHI) is an innovative 33 credit hour applied graduate degree program that addresses the intersection of healthcare and information technology to develop efficient systems and processes. Students are challenged to analyze health data across the continuum of healthcare delivery to improve patient care and advance individual and population health outcomes. The MSHI is designed for physicians, nurses, therapists, and information technology and health information technology professionals. The degree is also well suited for individuals with no prior healthcare or information technology experience. The MHI program offers the ability for students to gain applied experience with clinical information technology systems. Students will gain over 50 hours of hands-on experience using clinical grade informatics technology in an educational setting.

## Learning Goals and Outcomes

**Goal 1:** Describe the history, goals, methods (including data and information used and produced), and current challenges of the major health science fields. Identify theories or models that explain and modify patient or population behaviors related to health and health outcome.

**Goal 2:** Identify the effects of social, behavioral, legal, psychological, management, cognitive, and economic theories. Identify possible biomedical and health information science and technology methods and tools for solving a specific biomedical and health information problem. Draw on socio#technical knowledge regarding the social behavioral sciences and human factors engineering to apply to the design and implementation of information systems and technology. Identify the theories, models, and tools from social, business, human factors, behavioral, and information sciences and technologies for designing, implementing, and evaluating health informatics solutions.

**Goal 3:** Identify the applicable information science and technology concepts, methods, and tools, to solve health informatics problems.

**Goal 4:** Define and discuss ethical principles and the informatician's responsibility to the profession, their employers, and ultimately to the stakeholders of the informatics solutions they create and maintain.

**Goal 5:** Define and discuss the scope of practice and roles of different health professionals and stakeholders including patients, as well as the principles of team science and team dynamics to solve complex health and health information problems. Articulate the methods, concepts, tools, and characteristics of leading and leadership.

## Requirements

Code	Title	Hours
HAD 559	Health Policy	3
MHI 550	Research Methods	3
or HSV 550	Health Services Research	

MHI 560	Health Informatics	3
MHI 561	Digital and Connected Health	3
MHI 562	Database for Health Care	3
or DSS 625	Fund of Database Mgmt Systems	
MHI 563	Data Analysis for Health Care	3
MHI 564	Privacy&Security: Health Care	3
MHI 565	Health Data Standards	3
MHI 700	Health Informatics Capstone	3
<b>Choose two of the following:</b>		<b>6</b>
CSC 549	Computing Essentials	
CSC 667	Info Govern, Risk & Compliance	
DSS 630	Database Mgmt Theory & Pract	
DSS 660	Introduction to Data Mining	
DSS 670	Data Visual & Perf Analyt	
DSS 680	Predictive Analytics	
HAD 552	Health Administration	
HAD 557	Health Care Strat Plan & Mktg	
MHI 670	Special Topics in MHI	
CSC 611	Human Computer Interaction	
HAD 558	Mgt of Healthcare Org	
CSC 622	Advanced Database Concepts	

**Total Hours** **33**