HEALTH INFORMATICS/ BUSINESS INTELLIGENCE MHI/MS

In the contemporary enterprise, the understanding of information systems, processes, and organizational knowledge is critical to success. The successful twenty-first century decision-maker will use this information for competitive advantage and for enterprise growth. The objective of the Master of Science in Business Intelligence & Analytics Program (MSBIA) in the Haub School of Business at Saint Joseph's University is to provide the student with an enhanced foundation in both information technology and quantitative decision-making tools.

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 dual degree of MS in Business Intelligence and Analytics and the Master of Health Informatics (MHI) is an innovative 48 credit hour applied graduate degree program that addresses the intersection of data analytics, healthcare and information technology to develop and analyze efficient systems and processes. It allows graduate students to obtain the specialized knowledge required for advanced analytics used in business and healthcare. This area of study is one of the next frontiers in industry and will be important for many years to come with an estimated growth of 25% over the next decade. The demand for Health IT employment is expected to grow by 15% adding over 29,000 jobs between 2014 and 2024 and the rate of employment of medical records and health information technicians to increase by 21 percent from 2010 to 2020, faster than the average growth rate for all occupations (14 percent).

Learning Goals and Outcomes

Goal 1: Stakeholder Value/Functional: Students will demonstrate understanding of the value of decision and systems technologies and be able to create business models for forecasting and business analysis. This requires the understanding of organizational flows of information and control and the impacts that these flows have on operations.

Goal 2: Stakeholder Value/Functional: Describe the history, goals, methods (including data and information used and produced), and current challenges of the major health science fields. Identify the effects of social, behavioral, legal, psychological, management, cognitive, and economic theories.

Goal 3: Problem Solving/Critical Thinking: Students will demonstrate critical thinking skills, that is, the process of conceptualizing, applying, analyzing, synthesizing, and/or evaluating information as the basis for solving problems and making decisions. Identify the applicable information science and technology concepts, methods, and tools, to solve health informatics problems.

Goal 4: Communication/Interpersonal Skills: Students will demonstrate the ability to correspond effectively and persuasively in a business format. This includes communicating quantitative information using both technical and non-technical terms, with individuals and within teams.

Goal 5: Ignatian Values: Students will be able to apply ethical decision making in the area of business intelligence and analytics and healthcare, and to understand the relationship between data, ethics, and the organizational framework.

Goal 6: Programming & Technical Skills: Students will be able to design and implement various health informatics methodologies correctly in a range of health care business applications. Students will also demonstrate the principles of a structured programming language and be able to describe, design, implement, and test programming code using current data analysis techniques and methodology to support business decision-making.

Requirements

Code	Title	Hours
DSS 610	Business Analytics	3
DSS 625	Fund of Database Mgmt Systems	3
HAD 559	Health Policy	3
MHI 550	Research Methods	3
MHI 560	Health Informatics	3
MHI 561	Digital and Connected Health	3
MHI 563	Data Analysis for Health Care	3
MHI 564	Privacy&Security: Health Care	3
or DSS 750	Fundamentals of Cyber Security	
MHI 565	Health Data Standards	3
MHI 700	Health Informatics Capstone	3
MHI Elective (Select one of the following)		**3**
HAD 552	Health Administration	
HAD 553	Health Care Organization	
HAD 557	Health Care Strat Plan & Mktg	
HAD 558	Mgt of Healthcare Org	
HAD 600	Ethics of Health Care	
MHI 670	Special Topics in MHI	
DSS Electives (Select five of the following)		**15**
DSS 605	Emerging Tech for Business	
DSS 615	Python Programming	
DSS 620	Con & Pract of DSS Modeling	
DSS 650	Process Simulation & Analysis	
DSS 655	Optimization Modeling	
DSS 660	Introduction to Data Mining	
DSS 665	R Statistical Language	
DSS 670	Data Visual & Perf Analyt	
DSS 675	Decision Analysis/Game Theory	
DSS 676	Data Wrangling & Adv Visualtn	
DSS 680	Predictive Analytics	
DSS 690	Special Topics Course	
DSS 720	Supply Chain Analytics	
DSS 730	Digital Analytics	
Total Hours		**48**