

HEALTHCARE ANALYTICS, MASTER OF SCIENCE

The Master of Science (M.S.) in Healthcare Analytics program is a 30-credit, online program that provides students with strategic approaches to healthcare decision-making within public and private institutions. These strategic approaches will be used to develop frameworks for solving analytical problems in the healthcare field. The tools and methods will also be used to make decisions on which data needs to be collected, what information systems can be effectively used to collect the data, and what analyses should be performed in order to inform healthcare decision-making.

PROGRAM DESIGN

The six core courses (18 credits) will enhance students' data analytics and technology skills. These core courses are supplemented by three specialized courses (9 credits), in which students will apply the knowledge and skills learned in the core courses to the healthcare industry. The experiential learning capstone course (3 credits) allows students to integrate their learning throughout the program and apply it in a real-world healthcare setting.

PROGRAM DELIVERY AND TUITION RATE

This program is delivered through online instruction, providing flexibility and convenience for working professionals and adult learners. Students may complete the program on a full-time or part-time schedule. It is billed at the non-MBA rate.

ADMISSION

Admission to this program is selective. This program enrolls new students in the fall and spring terms. To be considered for admission candidates should possess a bachelors degree and the following prerequisites or the equivalent of:

- statistics
- information technology

A candidate who has not completed these prerequisites may be accepted into the program but acceptance will be contingent upon completing the courses within the first year.

APPLICATION

Please see the **Graduate Admission** section of this catalog for a complete listing of materials required to complete a graduate application.

Code	Title	Credits
INFT 6015	Database Design and Management	3
APAN 6015	Data Models and Structured Analysis	3
APAN 6010	Computer Aided Multivariate Analysis	3
APAN 6020	Data Mining & Machine Learning for AI	3
MGMT 6095	E-Commerce Marketing Strategies	3
MGMT 6185	Quantitative Methods for Decision Making	3
PPOL 6020	Research Methods	3
HCLM 6015	Health Information Management and Informatics	3
HCLM 6065	High Performance Leadership	3
HCAN 7010	Healthcare Analytics Capstone	3
Total Credits		30

Upon successful completion of the program, students will be able to:

- **Leadership:** Evaluate large stores of data as part of database design to discover patterns and trends that go beyond simple analysis to new and industry leading insights;
- **Critical Thinking Problem Solving:** Apply analytic tools such as machine learning and artificial intelligence to critically evaluate applied research;
- **Disciplinary Knowledge:** Analyze descriptive and inferential statistics and interpret the computer-generated statistical results with data visualization in healthcare applications using programming languages such as R and Python;
- **Ethical Reasoning:** Develop ethical decision-making competencies through statistical methods and the application of analytical tools such as Microsoft Power BI;
- **Strategic Thinking:** Strategize how the issues facing leaders and decision makers, in the healthcare field, can be resolved ethically;
- **Managerial Communication:** Analyze and present big data in order to make strategic decisions including resource allocation. Bridge the communication gap between technical and traditional healthcare managers; and
- **Teamwork:** Collaborate and contribute effectively to the achievement of organizational goals in a team environment.