The Business Intelligence & Analytics program provides the analytical and professional skills necessary to incorporate data-driven findings in making decisions. This interdisciplinary program offers a deep dive into the concepts and tools at the forefront of the data revolution, with coursework emphasizing programming languages as well as business and leadership skills. As a capstone experience, you’ll work on a major project, using real data, under the guidance of an industry mentor.

**CURRICULUM OVERVIEW**

The curriculum offers a blend of analytics, computer science and business skills, preparing data scientists to do meaningful work that directly supports the enterprise.

**PREREQUISITE COURSES**

Students are required to have taken one year of calculus and one course covering basic probability, hypothesis testing and estimation.

**MANAGEMENT**

Courses in this block offer a suite of business skills that will help you frame problems and apply analytical methods.

- Financial Decision Making
- Marketing Analytics*
- Supply Chain Analytics*
- Big Data Technologies

**OPTIMIZATION**

Courses in this block are highly technical in nature, and focus on managing risk and optimizing processes, as well as data’s role in social and online platforms.

- Risk Management and Simulation*
- Process Optimization and Analytics
- Social Network Analytics
- Web Mining*

**DATA**

Technology-intensive data courses will teach you the latest tools.

- Data Management
- Data Streams Analytics*
- Data Warehousing and Business Intelligence
- Data Analytics and Machine Learning
- Data and Information Quality*
- Cognitive Computing*

**STATISTICS**

Statistical techniques are an important tool for any data scientist or analyst exploring how to best create value through information.

- Multivariate Data Analytics
- Advanced Data Analytics and Machine Learning*
- Experimental Design

**CAPSTONE**

All students complete a capstone course that gives them an opportunity to use real data from an industry partner in analyzing a complex problem and suggesting an evidence-based course of action.

* Choose any two

**HANLON FINANCIAL SYSTEMS CENTER**

Classes in the Business Intelligence & Analytics program make generous use of the high-tech Hanlon Financial Systems Center and its two labs, which offer the latest in data analysis and visualization tools. The Hanlon Center allows for the analysis of real-time and historical data sets, with the computing and processing power required to assess vast amounts of information with speed. Courses teach students to go beyond advanced techniques and emphasize how data allows managers to create knowledge.

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**BUSINESS INTELLIGENCE & ANALYTICS**

36 credits (18 months) | STEM | Full or part time | On campus or online