

Business Analytics and Artificial Intelligence Programs and Courses: The dedicated faculty at the Information Technology and Operations Management (ITOM) department in the College of Business offer high quality research and teaching in AI and Business Analytics and can help students learn core analytics skills that empowers them to extract actionable intelligence from the copious digital data relevant to the businesses. Through hands-on teaching, we offer a variety of courses, that teach not only just the concepts but also the applied skills to work directly with the data to analyze business issues and trends. We offer a variety of [programs](#) including a Master’s Degree in Business Analytics, a Graduate Certificate in Big Data Analytics, an Undergraduate Certificate & Minor in Business Analytics, an Undergraduate Certificate & Minor in Artificial Intelligence, and an MBA & MSITM Concentration in Business Analytics.

Data Skills

Visualization Skills

Analytic Skills

[ISM 6405](#)

Graduate Course Name:

- Advanced Business Analytics

Applied Activities:

- Data scraping from Internet and Social Media, cleaning, manipulating

Tools:

- Python, R & MySQL Workbench

[ISM 6217](#)

Graduate Course Name:

- Database Management Systems

Applied Activities:

- Data access, retrieval, insert, manipulation, table creation, joins

Tools:

- Oracle 12c SQL, MySQL Workbench, MongoDB

[ISM 6427C](#)

Graduate Course Name:

- Business Innovation with Artificial Intelligence

Applied Activities:

- Working with the AI platform (IBM Watson) for business transformation

Tools:

- IBM Watson Studio & Cloud

[ISM 6404](#)

Graduate Course Name:

- Intro to Business Analytics and Big Data

Applied Activities:

- Visualization of the data for creating a dashboard and storytelling

Tools:

- Tableau, Power BI, RapidMiner

[QMB 6303](#)

Graduate Course Name:

- Data Management & Analysis with Excel

Applied Activities:

- Report generation with the pivot tables and charts; Data analysis with scenario manager and solver add-ins

Tool:

- Excel

[ISM 6136](#)

Graduate Course Name:

- Data Mining and Predictive Analytics

Applied Activities:

- Data mining using Classification, Regression, Neural Networks, KNN, Clustering, Decision Trees algorithms

Tools:

- Excel, XLMiner, Rapid Miner

[ISM 6555](#)

Graduate Course Name:

- Social Media and Web Analytics

Applied Activities:

- Web and Social Media analytics metrics, use of Web 2.0, dashboard creation, competitor analysis

Tools:

- Google Analytics, Similarweb, Emplifi (Facebook, Instagram, Twitter, YouTube analytics), Tableau