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

ISM 4403

Undergraduate Course Name:
- Advanced Business Analytics

Applied Activities:
- Data scraping from Internet and Social Media

Tools:
- Python, R & MySQL Workbench

ISM 4212

Undergraduate Course Name:
- Database Management Systems

Applied Activities:
- Data access, retrieval, insert, manipulation, table creation & joins

Tools:
- Oracle 12c SQL

ISM 4421

Undergraduate Course Name:
- Artificial Intelligence and Digital Transformation for Business

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

Tools:
- IBM Watson Studio & Cloud

Visualization Skills

ISM 3116

Undergraduate Course Name:
- Intro to Business Analytics and Big Data

Applied Activities:
- Visualization of the data for creating a dashboard and storytelling

Tools:
- Tableau

QMB 3302

Undergraduate 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

Analytic Skills

ISM 4117

Undergraduate Course Name:
- Data Mining and Predictive Analytics

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

Tools:
- Excel, XLMiner

ISM 4420

Undergraduate 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, Google Data Studio, Similarweb, Emplifi (Facebook, Instagram, Twitter, YouTube analytics)