Data 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

Visualization Skills

**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

Analytic Skills

**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

**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 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

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.