Master of Science in Business Analytics

About This Program

The Master of Science in Business Analytics is designed to prepare graduates to identify and implement opportunities for the strategic use of business analytics with an emphasis on business. Students gain knowledge of a broad range of disciplines and functions in the business as well as specialized knowledge of business analytics and its accompanying skill set. An intensive curriculum covering business intelligence, data mining, econometrics, marketing research, statistical techniques prepares students for careers in the field of business analytics.

Competencies

- 1. Upon completion, students will be able to perform feature engineering, including preprocessing both structured and unstructured data.
- 2. Upon completion, students will demonstrate an understanding of supervised and unsupervised algorithms, including the ability to build, tune, evaluate, and interpret various machine-learning models.
- 3. Upon completion, students will be able to align analytics solutions with business objectives.
- 4. Upon completion, students will be able to craft compelling data-driven narratives for business stakeholders.
- 5. Upon completion, students will be aware of the ethical implications of data use, including governance, fairness, bias, and transparency.

Admissions Criteria

Admission to the MS in Business Analytics (MSBA) program is based on completion of the general admission requirements of the Graduate School as specified under the Graduate Admissions Requirements and Procedures in the Catalog.

UNCONDITIONAL ADMISSION WITHOUT COMMITTEE REVIEW

Applicants qualify for unconditional admission without the need for review by the Graduate Studies Committee if they meet the following two criteria.

- Applicant holds an earned bachelor's degree from an AACSB-accredited college or university, or equivalent, with a minimum GPA of 3.00 on the last 60 hours of undergraduate work, and
- GMAT/GRE must have verbal and quantitative scores at the 50th percentile or higher.

ADMISSION WITH COMMITTEE REVIEW

Applicants who require committee review are considered for admission using the following factors, with no single factor used as the primary criterion for making admission decisions.

- Undergraduate and graduate GPA (overall, major, and last 60 hours) and program accreditation status of the applicant's degree granting institution;
- Score on the GMAT/GRE (including separate scores on the verbal and quantitative portions);
- · Applicant's professional work experience and professional certification/licensure; and
- Letters of reference and personal statement provided by the applicant.

By considering the totality of the applicant's circumstances, including the factors listed above, the Graduate Studies Committee will evaluate an applicant's readiness to successfully complete the graduate program. Depending on the judgment of the committee, the decision may be to grant unconditional admission, probationary admission, provisional admission, deferred admission, or to deny admission. The decision of the committee is final. An applicant whose native language is not English must demonstrate a sufficient level of skill with the English language to assure success in graduate studies as defined under Admissions Requirements and Procedures in the Catalog. International applicants must submit a TOEFL score or IELTS score that meets the standards as listed in the admission requirements.

Curriculum

Foundations

| BSTAT 5325 | ADVANCED METHODS FOR ANALYTICS | 3 |
|--------------|---|---|
| ECON 5337 | BUSINESS & ECONOMIC FORECASTING | 3 |
| ACCT 5307 | MEASUREMENT AND ANALYSIS FOR BUSINESS DECISION-MAKING | 3 |
| MANA 5344 | EVIDENCE-BASED MANAGEMENT | 3 |
| INSY 5336 | PYTHON PROGRAMMING | 3 |
| INSY 5337 | DATA WAREHOUSING AND BUSINESS INTELLIGENCE | 3 |
| INSY 5339 | PRINCIPLES OF BUSINESS DATA MINING | 3 |
| INSY 5344 | BUILDING RESPONSIBLE AND ETHICAL AI APPLICATIONS | 3 |
| or INSY 5376 | BIG DATA ANALYTICS | |
| or INSY 5377 | WEB AND SOCIAL ANALYTICS | |

| or INSY 5380 | SOCIAL NETWORK ANALYSIS | |
|--|--|----|
| or INSY 5345 | CLOUD COMPUTING - THEORY AND PRACTICE | |
| or MARK 5337 | MARKETING ANALYTICS AND INFORMATION MANAGEMENT | |
| INSY 5378 | DATA SCIENCE: A PROGRAMMING APPROACH | 3 |
| INSY 5379 | BUSINESS ANALYTICS CAPSTONE | 3 |
| Electives | | |
| Select one 5000-level Analytics course approved by the Graduate Advisor. | | 3 |
| Total Hours | | 33 |

Program Completion

The Master of Science in Business Analytics (MSBA) is a non-thesis program consisting of 33 semester hours to include the following required courses in the areas of business acumen and communication, data acquisition and architecture, and statistics and analytics. Electives sufficient to complete the program are selected with approval of the MSBA Graduate Advisor. When there is equivalent work/course experience, the student must meet with the MSBA Graduate Advisor to select alternate coursework.

Advising Resources

Contact the Information Systems & Operations Management Department for graduate program inquiries and academic advising.

Location:

College of Business, Room 535

Email:

isom@uta.edu

Phone:

817-272-3502

Web:

Inquiries & Advising (https://www.uta.edu/academics/schools-colleges/business/departments/information-systems-and-operations-management/)