# BUSINESS ANALYTICS, MS

The MS in Business Analytics is designed for students who are interested in pursuing careers related to business analytics, data analytics, and data science. This program equips students with the technical knowledge and skills to assist organizations in managing their data, analyzing it for insights, and implementing those insights to improve the organization. The program features deep technical content via an "analytical core" that builds knowledge/skills in data structures, data preparation, analytical strategies and processes, statistical analysis, and communication of analytical conclusions. The program also features several different concentrations that allow students to specialize in different business disciplines, providing flexibility so that students can tailor their education to their needs.

**Featured Technology Tools**

The program will feature R as the primary technology tool, woven into multiple courses. Students will also be exposed to other technology tools such as MS Excel, Tableau, and potentially additional Microsoft and IBM technologies. Students wanting to learn Python programming language can take coursework in the Computer Science department, specifically CST 436 COMPUTING WITH DATA IN PYTHON.

To earn the MS in Business Analytics, students must successfully complete at least 33 credit hours: eight core courses (24 credit hours) and three electives (9 credit hours).

Minimum 3.0 overall gpa. No more than two grades of C (not C-) may be applied towards the degree.

**Prerequisite courses (2 Courses/6 Credit Hours) these courses or relevant experience are part of the admission policy and not part of the formal degree program.** These courses can be waived if student has relevant prior coursework (undergraduate or graduate) or relevant work experience.

| Code | Title | Credit Hours |
|---|---|---|
| INFS 401 | INFORMATION RESOURCE MANAGEMENT | 3 |
| MGMT 403 | STATISTICS FOR BUSINESS DECISIONS | 3 |
| **Total Credit Hours** | | **6** |

| Code | Title | Credit Hours |
|---|---|---|
| **Analytics Core Courses** | | |
| INFS 412 | DATABASE SYSTEMS | 3 |
| INFS 413 | DATA ANALYTICS AND MANAGEMENT | 3 |
| INFS 414 | DATA PREPARATION & CLEANSING | 3 |
| INFS 415 | BUSINESS ANALYTICS AND STATISTICAL INFERENCING MODELS | 3 |
| INFS 417 | PREDICTIVE BUSINESS DATA ANALYTICS | 3 |
| INFS 420 | DATA VISUALIZATION | 3 |
| INFS 422 | BUSINESS ANALYTICS CAPSTONE | 3 |
| INFS 410 | INTRODUCTION TO BUSINESS ANALYTICS AND INTELLIGENCE | 3 |
| **Total Credit Hours** | | **24** |

| Code | Title | Credit Hours |
|---|---|---|
| **Data Science Concentration** | | **9** |
| **Select three of the following:** | | |
| CST 406 | BIG DATA | |
| CST 410 | NETWORK SCIENCE | |
| CST 421 | DATA MINING | |
| CST 436 | COMPUTING WITH DATA IN PYTHON | |
| CST 461 | DEEP LEARNING | |
| CST 486 | INFORMATION RETRIEVAL | |
| **Total Credit Hours** | | **9** |

| Code | Title | Credit Hours |
|---|---|---|
| **Financial Technology Concentration** | | **9** |
| FIN 408 | FINANCE FOR DECISION MAKERS | |
| **Select two of the following:** | | |
| FIN 450 | FINANCIAL RISK MANAGEMENT | |
| FIN 454 | INTERNATIONAL FINANCIAL ANALYSIS | |
| FIN 482 | THEORY & CASES FINANCIAL MANAGEMENT | |
| FIN 485 | INVESTMENT THEORY | |
| **Total Credit Hours** | | **9** |

| Code | Title | Credit Hours |
|---|---|---|
| **Marketing Concentration** | | **9** |
| MKTG 406 | MARKETING STRATEGY: THEORY & PRACTICE | |
| **Select two of the following:** | | |
| MKTG 425 | COMMUNICATION & CONSUMER BEHAVIOR | |
| MKTG 426 | RESEARCH FOR MARKETING DECISIONS | |
| IMC 440 | MARKETING COMMUNICATIONS RESEARCH | |
| IMC 462 | DIGITAL AND SOCIAL MEDIA MARKETING | |
| **Total Credit Hours** | | **9** |

| Code | Title | Credit Hours |
|---|---|---|
| **Real Estate Concentration** | | **9** |
| REES 401 | REAL ESTATE PROCESS | |
| REES 405 | URBAN LAND ECONOMICS | |
| **Select one of the following:** | | |
| REES 411 | REAL ESTATE FINANCE AND INVESTMENT | |
| REES 415 | REAL ESTATE VALUATION | |
| **Total Credit Hours** | | **9** |

| Code | Title | Credit Hours |
|---|---|---|
| **Health, Ethics, Analytics, and Law (HEAL)** | | **12** |
| **Select three of the following:** | | |
| HEAL 460 | CRIMINOLOGY & HEALTH CARE LAW | |
| HEAL 470 | HEALTH CARE ANALYTICS | |
| HEAL 480 | HEALTH CARE ETHICS | |

| | | |
|---|---|---|
| HEAL 490 | CAPSTONE RESEARCH PROJECT | |
| **Total Credit Hours** | | **12** |

Your degree map is a general guide suggesting courses to complete each term on the academic pathway to your degree. It is based on the most current scheduling information from your academic program. Your program's degree map is reviewed annually and updated as schedules change (although you retain the same course requirements as long as you are continuously enrolled in your degree program).

Always work closely with your academic advisor to understand curriculum requirements and scheduling, as each student's academic plan can look slightly different. No more than two grades of C (not C-) may be applied toward the 33 hours used for the degree. A graduate course can only be repeated once; no more than two courses can be repeated. The minimum GPA requirement is 3.0.

**Year 1**

| Fall | Credit Hours | Spring | Credit Hours |
|---|---|---|---|
| INFS 451 or 410 | 3 | INFS 414 | 3 |
| INFS 412 | 3 | INFS 415 | 3 |
| INFS 413 | 3 | INFS 417 | 3 |
| | **9** | | **9** |

**Year 2**

| Fall | Credit Hours | Spring | Credit Hours |
|---|---|---|---|
| INFS 420 | 3 | Concentratoin Course | 3 |
| INFS 422 | 3 | Concentration Course | 3 |
| Concentration Course | 3 | | |
| | **9** | | **6** |

**Total Credit Hours 33**