# BUSINESS DATA ANALYTICS (MSBDA)

Position yourself as a data-driven business leader—and your company's data scientist—with an MS in Business Data Analytics.

This one-year, full-time graduate degree program will prepare you to make informed business decisions based on a targeted analysis of the data available to business today.

This program is no longer accepting applicants. Interested students should review the Business Analytics (MS) (https://catalog.luc.edu/graduate-professional/business/business-analytics-ms/).

Learn which of our analytics programs best fits your needs through our analytics degree program comparison (https://www.luc.edu/quinlan/academics/graduatedegrees/ms/choosingabusinessdataanalyticsprogram/).

## **Related Programs**

#### Master's

 Business Analytics (MS) (https://catalog.luc.edu/graduateprofessional/business/business-analytics-ms/)

#### Certificate

 Business Analytics Certificate (https://catalog.luc.edu/graduateprofessional/business/business-analytics-certificate/)

#### Combined

 Business Analytics (MBA/MS) (https://catalog.luc.edu/graduateprofessional/dual-degree-programs/business-analytics-mba-ms/)

### **Curriculum**

This program is no longer accepting new applicants. Students should instead review the Business Analytics (https://catalog.luc.edu/graduate-professional/business/business-analytics-ms/) Master's program.

The Master of Science in Business Data Analytics 12-course curriculum prepares you to be a responsible leader in the fast-growing field of business data analytics—in just one year.

| Code                 | Title                                       | Hours |  |  |
|----------------------|---|-------|--|--|
| MBA Prerequisites    |   |       |  |  |
| ISSCM 400N           | Quantitative Methods I                      | 0     |  |  |
| ISSCM 402N           | Quantitative Methods II - Statistics Primer | 0     |  |  |
| MBA Introductory     | courses                                     |       |  |  |
| ACCT 400             | Financial Accounting for Business Decisions | 3     |  |  |
| ECON 420             | Managerial Economics                        | 3     |  |  |
| FINC 450             | Financial Management                        | 3     |  |  |
| MARK 460             | Marketing Management                        | 3     |  |  |
| SCMG 480             | Intro to Operations Management              | 3     |  |  |
| MBA Required Courses |   |       |  |  |
| FINC 470N            | Business Finance                            | 3     |  |  |
| HRER 417N            | Managing and Motivating in the Workplace    | 3     |  |  |
| ISSCM 596N           | Data Driven Decision Making                 | 3     |  |  |
| MARK 425N            | Business Communication                      | 1.5   |  |  |
| MGMT 426N            | Leadership Development                      | 1.5   |  |  |

| MARK 470N   | Research, Insights and Storytelling        | 3 |  |
|---|--|---|--|
| MGMT 430N   | Strategy and Leadership                    | 3 |  |
| MGMT 431N   | Business Consulting Course                 | 3 |  |
| MSBDA Required courses  |  |   |  |
| QUIN 499  | Special Topics                             | 3 |  |
| BSAD 699  | Capstone Master of Business Data Analytics | 3 |  |
| FINC 620  | Financial Mathematics and Modeling I       | 3 |  |
| INFS 492  | Database Systems                           | 3 |  |
| INFS 494  | Data Mining                                | 3 |  |
| ISSCM 491   | Managerial Statistics                      | 3 |  |
| ISSCM 495   | Forecasting Methods                        | 3 |  |
| or FINC 625   | Applied Econometrics                       |   |  |
| Ethics course   |  | 3 |  |
| Select one of the following:  |  |   |  |
| INFS 795  | Ethics and Data Analytics                  |   |  |
| ETHC 441N   | Business Ethics                            |   |  |
| MGMT 446  | International Business Ethics              |   |  |
| Elective Courses  |  |   |  |
| Choose four electives from the following three areas, with at least |  |   |  |

Choose four electives from the following three areas, with at least one elective from each of the areas.

| Economics/Finance    |   |  |  |  |
|----------------------|---|--|--|--|
| ECON 421             | Business Fluctuations                         |  |  |  |
| ECON 522             | Game Theory & Strategy                        |  |  |  |
| ECON 622             | Derivative Securities                         |  |  |  |
| FINC 452             | Investment Management                         |  |  |  |
| FINC 553             | Applied Portfolio Management                  |  |  |  |
| FINC 624             | Interest Rate Risk Management                 |  |  |  |
| FINC 626             | Credit Risk Management and Structured Finance |  |  |  |
| FINC 628             | Valuation                                     |  |  |  |
| Marketing Management |   |  |  |  |

| Total Hours                                     |                    |                                 |  |
|---|--------------------|---------------------------------|--|
|   | SCMG 489           | Supply Chain Analytics          |  |
|   | SCMG 488           | Inventory Management            |  |
|   | SCMG 487           | Purchasing Management           |  |
|   | SCMG 486           | Global Logistics                |  |
|   | SCMG 480           | Intro to Operations Management  |  |
|   | ISSCM 484N         | Project Management              |  |
|   | INFS 796           | Data Warehousing <sup>1</sup>   |  |
|   | INFS 592           | Data Visualization <sup>1</sup> |  |
| Information Systems and Supply Chain Management |                    |                                 |  |
|   | HRER 490           | Analytical Problem Solving      |  |
|   | MARK 662           | Marketing Metrics <sup>1</sup>  |  |
|   | MARK 661           | Customer Analytics <sup>1</sup> |  |
|   | MARK 461           | Research Methods in Marketing   |  |
| N   | rketing Management |                                 |  |

<sup>&</sup>lt;sup>1</sup> Recommended courses.

#### **Suggested Sequence of Courses**

The below sequence of courses is meant to be used as a suggested path for completing coursework. An individual student's completion of requirements depends on course offerings in a given term as well as the

start term for a major or graduate study. Students should consult their advisor for assistance with course selection.

| Course                    | Title  | Hours |
|---------------------------|--|-------|
| Master's                  |  |       |
| Term 1                    |  |       |
| Prerequisite Courses      |  |       |
| ECON 420                  | Managerial Economics                                 | 3     |
| FINC 450                  | Financial Management                                 | 3     |
| MARK 460                  | Marketing Management                                 | 3     |
|                           | Hours  | 9     |
| Term 2                    |  |       |
| FINC 620                  | Financial Mathematics and Modeling I                 | 3     |
| ISSCM 491                 |  | 3     |
| Select one from Elec      | tives  | 3     |
|                           | Hours  | 9     |
| Term 3                    |  |       |
| QUIN 499                  | Special Topics                                       | 3     |
| INFS 492                  | Database Systems                                     | 3     |
| Select one from Elec      | tives  | 3     |
|                           | Hours  | 9     |
| Term 4                    |  |       |
| INFS 494                  | Applied Data Mining and Artificial Intelligence (AI) | 3     |
| ISSCM 495                 |  | 3     |
| Select one from Electives |  | 3     |
|                           | Hours  | 9     |
| Term 5                    |  |       |
| BSAD 699                  |  | 3     |
| ETHC 441N                 | Business Ethics                                      | 3     |
| Select one from Electives |  |       |
|                           | Hours  | 9     |
|                           | Total Hours  | 45    |

## **Learning Outcomes**

- Gain a deep understanding of some of the tools and software that are used in modern day analytics
- Be able to transform large data sets into insightful and actionable information in an easy-to understand format to assist organizational decision making using advanced analytical tools
- · Develop skills in forecasting, modeling and problem solving
- Develop experience tackling industry-specific problems and challenges using advanced analytics and computational methods