MS IN BUSINESS ANALYTICS (MS)

Program Director: James C. Goldstein, PhD

The purpose of the Master’s program in Business Analytics at Canisius College is to prepare highly competent professionals in a growing field of analytics. Through courses offering interdisciplinary approaches to business and data analysis, the students will obtain a graduate-level education that prepares them to fill critical roles in regional organizations. The overarching goal is to develop graduates who solve problems and identify opportunities derived from data but guided by keen business insights. The Business Analytics program draws upon courses in Accounting, Economics, Management, Marketing, Finance, Computer Science, and Data Analytics. The Western New York region offers extensive opportunities for employment. The need for employees with the skill set developed in this program is quite high, as confirmed by a market analysis and an advisory group representing key employer stakeholders.

GRADUATE BUSINESS LEADERSHIP & PROFESSIONAL DEVELOPMENT PROGRAM (LPD)

In addition to a graduate degree from Canisius’ Wehle School of Business, students also will earn a Leadership & Professional Development Certificate and digital badge. This unique program offers students personal and professional development experiences to evaluate their competencies as well as personalized coaching to define their personal brand and chart a career path.

The LPD Program consists of three courses: My Personal Brand, My Leadership Plan, and My Path Forward. These are not academic in the traditional sense as there are no textbooks, exams, or weekly class meetings. Students will earn one academic credit for the certificate. The LPD has a significant impact on students both during their studies and after graduation, whether a young professional or an emerging executive. Completion of the LPD is a requirement for degree completion and conferral.

Curriculum

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 505</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ECO 503</td>
<td>Statistics for Managers with Excel</td>
<td>3</td>
</tr>
<tr>
<td>ECO 511</td>
<td>Macroeconomics</td>
<td>1.5</td>
</tr>
<tr>
<td>MGT 512</td>
<td>Principles of Management</td>
<td>1.5</td>
</tr>
<tr>
<td>BAN 707</td>
<td>Business Systems and Analytics</td>
<td>3</td>
</tr>
<tr>
<td>BAN 731</td>
<td>Business Analytics, Data Visualization &amp; Modeling</td>
<td>3</td>
</tr>
<tr>
<td>BAN 752</td>
<td>Strategic Performance Analytics</td>
<td>3</td>
</tr>
<tr>
<td>BAN 609</td>
<td>Business Analytics</td>
<td>3</td>
</tr>
<tr>
<td>MKT 604</td>
<td>Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>CSC 511</td>
<td>Introduction to Programming</td>
<td>3</td>
</tr>
<tr>
<td>&amp; 511L</td>
<td>and Introduction to Programming Lab</td>
<td></td>
</tr>
<tr>
<td>CSC 512</td>
<td>Data Structures and Algorithms</td>
<td>3</td>
</tr>
<tr>
<td>&amp; 512L</td>
<td>and Data Structures and Algorithms Lab</td>
<td></td>
</tr>
<tr>
<td>DAT 511</td>
<td>Data Stewardship: Preparation, Exploration and Handling of Big Data</td>
<td>3</td>
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</table>

Total Credits 40

1 These four foundation classes can be waived depending on prior coursework. Please work with the Program Director.

Learning Goals & Objectives

Upon the completion of the MS in Business Analytics, graduates will develop the following skills and knowledge:

Quantitative and Analytical Skills:

- the ability to analyze, interpret, and communicate information for effective decision support (in both written and oral form);
- the ability to identify problems, diagnose causes, and develop positive solutions

Technical Skills:

- the ability to use at least one general programming language
- the ability to work with a range of data structures
- familiarity with databases and the programming techniques needed to work with Big Data

Ethical Data Stewardship

- Develop a strong awareness of the ethical and moral issues that arise in work with large data sets and the steps needed to be taken to protect rights and privacy of individuals

Decision Support

- Develop a solid understanding of business processes and how they contribute to organizational goals and objectives
- Understand and apply enterprise risk management concepts
- Identify critical data and analyze and communicate information in an appropriate format to the decision maker

Majors

First Year

Summer

ACC 505
ECO 503
BUS 601
### First Year

#### Fall
- ECO 511
- MGT 512
- CSC 511
- CSC 511L
- BAN 707
- MKT 604
- BUS 602

#### Spring
- DAT 511
- CSC 512
- CSC 512L
- BAN 731
- BAN 752
- BAN 609
- BUS 603

### Second Year

#### Summer
- BAN 698

Or
- BAN 697

Elective