

# MSBA/College of Business 2022 Assessment Report

All areas shaded in gray are to be completed by the department/program.

This document will be posted online and must be accessible electronically (including appendices).

#### MISSION STATEMENT

The MS in Business Analytics prepares graduates for successful careers working with data across a wide range of organizations. Students build a strong foundation at the intersection of business, statistics, and computing. In addition to a firm grounding in analytical techniques and applications, students gain the ability to effectively communicate and use the results of data analytics for innovative solutions to catalyze business growth. Graduates are deeply engaged with the private and public sectors, acquiring relevant skills to provide immediate value to employers.

#### **MSBA Learning Goals:**

#### 1. Knowledge and Application:

- An understanding of a range of analytical and programming techniques.
- Ability to apply appropriate techniques to solve a variety of business/organizational problems.

#### 2. Communication:

- Ability to effectively communicate data analytics results and translate them into business decisions.
- Ability to effectively use data visualization techniques.

#### 3. Ethics/Data Stewardship:

• An understanding of the ethical implications of data stewardship and privacy.

#### 4. Innovation:

Ability to harness data analytics to identify new sources of value and to reveal innovative insights.

#### DEPARTMENT ALIGNMENT WITH PRIORITIES FOR ACTION

The MSBA's objectives are guided by the COB Strategic Plan, adopted in 2018 and updated in 2022

- 1. Keep Students at the Center of All We Do
  - a. All courses are offered in a flexible delivery format (in person, via zoom, or asynchronous), meeting students where they are professionally, personally and geographically
  - b. Provided career readiness for all students
  - c. Align program curriculum with core values and market demand
  - d. Management and Marketing Advisory Board
- 2. Make Every Moment Meaningful
  - a. Collected data and offered elective coursework in DEI
  - b. Integrated electives from various departments across campus
  - c. Certificate tracks to include Cybersecurity and Entrepreneurship
  - d. Experiential learning emphasis in all courses
  - e. International experiences Romania
- 3. Cultivate and Communicate Relevant New Ideas

- a. Create an environment for thought leadership through faculty research and resources
- b. Student capstone projects in working with live data from real-world opportunities
- 4. Steward Human, Financial, and Environmental Resources
  - a. Nationally-recognized teachers and researchers in the department
  - b. Faculty members who consult and teach in Executive Education and international exchange programs bring experiences and real examples into the classroom
  - c. Opportunity for sustainability electives

## STUDENT LEARNING OUTCOMES and MEASUREMENT TOOLS

| Student Learning Outcomes  | Class Project /<br>Presentations   | Exit Exam    | Capstone<br>Project |  |  |
|--|--|--------------|---------------------|--|--|
| Knowledge and Application: An understanding of a range of analytical and programming techniques. Ability to apply appropriate techniques to solve a variety of business/organizational problems. | BMIS 670, Fa21<br>BMKT 642, Fa22<br>BMIS 625, Fa21                                   | Sp21<br>Sp22 | Sp21<br>Sp22        |  |  |
| Communication: Ability to effectively communicate data analytics results and translate them into business decisions. Ability to effectively use data visualization techniques.                   | BMKT 680, Sp22<br>BMKT 642, Fa22<br>BMIS 601 Sp22                                    |              | Sp21<br>Sp22        |  |  |
| Ethics/Data Stewardship: An understanding of the ethical implications of data stewardship and privacy  | BMKT 680, Sp22<br>BMKT 670, F21  | Sp21<br>Sp22 | Sp21<br>Sp22        |  |  |
| Innovation: Ability to harness data analytics to identify new sources of value and to reveal innovative insights.  | BMKT 680, S22<br>BMKT 642, Fa22<br>BMIS 625, Fa21<br>BMKT 673, S22<br>BMIS 625, Fa21 | Sp21<br>Sp22 | Sp21<br>Sp22        |  |  |

#### **RESULTS and MODIFICATIONS**

| Student Learning Outcomes results  | Modifications made to enhance learning  |
|--|---|
| Class Projects and Presentations   | None - Students scored above the expected target of 80% of students scoring 80% or better |
| BMKT 670   | 00 % of students scoring 60 % of better   |
| reflection paper on "Weapons of Math   |   |
| Destruction", a book that extensively covers data  |   |
| science ethics.  |   |
| BMIS 625   |   |
| <ul> <li>long-term projects that ask for innovative</li> </ul>   |   |
| solutions to text-mining problems  |   |
| <ul> <li>long-term projects in natural language</li> </ul>   |   |
| processing.  |   |
| BMKT 673   |   |
| <ul> <li>assignments that ask for exploring innovative</li> </ul>  |   |
| modeling techniques using modern pipelines.  |   |
| <ul> <li>data visualization and written narratives</li> </ul>  |   |
| BMKT 642   |   |
| <ul> <li>waiting for faculty submission from Fall 2022</li> </ul>  |   |
| BMKT 680   |   |
| <ul> <li>Ability to harness data analytics to bring value &amp;</li> </ul>   |   |
| innovation to business organizations   |   |
| <ul> <li>Knowledge of ethical implications of data</li> </ul>  |   |
| stewardship & privacy  |   |
| <ul> <li>Privacy presentation</li> </ul>   |   |
| Timasy presentation  |   |
| BMIS 601   |   |
| communicate data analytics results and   |   |
| translate them into business decisions   |   |
| <ul> <li>effectively use data visualization techniques</li> </ul>  |   |
|  |   |
| Exit Exam  | The exit exam tests material from all required courses.                                   |
|  | Although scores were satisfactory, we have made changes to                                |
| See Exit Exam Appendix   | the administration to motivate students to take it more                                   |
| The state of the s | seriously as it is not a requirement for graduation or course                             |
|  | completion. The academic year 2023/24 curriculum changes                                  |
|  | will reflect a better course distribution, allowing time for                              |
|  | concentrated application and retention of course material.                                |
| Capstone Project   | None  |
| Students scored an average of 94.37 in Spring 21 and   |   |
| 93.2 in spring 22. This is well above the target of 80% of   |   |
| students scoring 80% or better   |   |
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## **FUTURE PLANS FOR CONTINUED ASSESSMENT**

- 1. Removal of the foundation barrier through curriculum integration
- 2. Program curriculum review of credit distribution per semester
- 3. Review and modification of MSBA learning goals based on recent curriculum changes.

- 4. Integration of Graduate Introduction to Business course to integrate all aspects of business aside from marketing into the program
- 5. Addition of Sequel and python coursework
- 6. Addition of capstone prep course to better prepare students.

## **APPENDICIES**

1. Exit exam results and Learning Goals Assessed

| Term                    | Average          |                    | Sub Areas                |                           |             |                       |                      |                          |
|-------------------------|------------------|--------------------|--------------------------|---------------------------|-------------|-----------------------|----------------------|--------------------------|
|                         | Average<br>Score | % Scores<br>>= 60% | Business<br>Intelligence | Applied Data<br>Analytics | Text Mining | Marketing<br>Research | Advanced<br>Modeling | Big Data &<br>Innovation |
| Spring 2021             | 72%              | 77%                | 64%                      | 84%                       | 80%         | 75%                   | 63%                  | 71%                      |
| Spring 2022             | 74%              | 71%                | 65%                      | 80                        | 85%         | 73%                   | 65%                  | 77%                      |
| Knowledge & Application |                  | X                  | X                        | х                         | Х           | X                     | х                    |                          |
| Ethics/Data Stewardship |                  | х                  |                          |                           |             |                       | х                    |                          |
| Innovation              |                  |                    | Х                        | х                         | Х           |                       | х                    |                          |

## 2. Curriculum Map to Learning Goals

| Learning Goal            | <b>BMKT 670</b> | BMIS<br>625 | BMKT<br>642 | <b>BMKT 680</b> | BMKT 601 | <b>BMKT 673</b> | Capstone | Exit<br>Exam |
|--------------------------|-----------------|-------------|-------------|-----------------|----------|-----------------|----------|--------------|
| Knowledge / Applications | Х               | Х           | X           | Х               | Х        | X               | X        | х            |
| Communication            |                 |             | Х           | х               | Х        |                 | Х        |              |
| Ethics / Stewardship     | х               |             |             | х               |          |                 | х        | Х            |
| Innovation               | Х               | Х           | Х           | Х               |          | Х               | Х        | Х            |