

BUSINESS ANALYTICS

The Master of Science-Business Analytics trains students to create business strategies using data and statistics. Professionals in this rapidly expanding field use algorithms and formulas to uncover patterns and trends in aggregate data, then apply that knowledge to real-world business problems. Students will develop programming and data management skills. The degree is open to students with strong quantitative and analytical skills, regardless of their undergraduate major. The program includes a large number of courses involving statistical analysis.

The program is offered on campus, and a few of the courses are also occasionally available on-line. You may enroll on a full- or part-time basis during the fall and winter semesters, and some courses are often available during the summer. The program usually can be completed within 12 months of full-time study.

Admission is rolling, and you may begin the program in September or January. May admission is also usually possible for part-time students.

University of Michigan-Dearborn students who have been admitted to the MS-Business Analytics may take up to 6 graduate credits during the final semester of their undergraduate program.

MS-Business Analytics Program Goals and Objectives

Goal 1: Students will acquire discipline-specific knowledge in business analytics.

Objectives: MS-Business Analytics students will:

- Evaluate business analytics approaches.
- Evaluate relevant business analytics tools and techniques.

Goal 2: Students will develop analytical skills for business problems.

Objectives: MS-Business Analytics students will:

- Formulate business analytics problems.
- Synthesize relevant business analytics information.
- Evaluate business analytics solution alternatives.

MS-Business Analytics Admission Prerequisites

- Mathematics admission prerequisite

MS-Business Analytics Curriculum

Code	Title	Credit Hours
Core Courses		
BA 520	AI Fundamentals for Business	3
BA 530	Programming and Data Structures with Python	3
DS 520	Applied Statistical Modeling	3
DS 570	Prescriptive Business Analytics	3
DS 630	Applied Forecasting with Python	3
DS 631	Decision Analysis and Simulation	3
DS 633	Machine Learning for Business Intelligence	3

DS 635	Business Analytics Experience	3
Electives		
Any six credit hours of College of Business graduate courses.		6
Total Credit Hours		30

Courses may not be taken off campus except by prior permission of the Academic Standards Committee. Permission is granted only in the case of unusual, extenuating circumstances.

Previous coursework deemed substantially similar to ACC 505, BE 530, DS 520, FIN 531, ISM 525, MKT 515, OB 510 and OM 521 may qualify to exempt students from those courses. Exempt courses must be replaced with other approved courses in the degree program.

In addition, up to 9 transfer credits for previous equivalent graduate coursework can be applied to the degree if those credits have not been counted toward a degree.

Exemptions and transfer credits are granted at the discretion of the program faculty.

Learning Goals

Goal 1—Students will acquire discipline-specific knowledge in business analytics.

- 1a. Students will evaluate business analytics approaches
- 1b. Students will evaluate relevant business analytics tools and techniques.

Goal 2—Students will develop analytical skills for business problems.

- 2a. Students will formulate business analytics problems.
- 2b. Students will synthesize relevant business analytics information
- 2c. Students will evaluate business analytics solution alternatives.