

Business Analytics, MS

The digital revolution has generated vast amounts of data, presenting challenges and opportunities for businesses to gain a competitive edge by mastering this data. Business analytics specialists bridge this gap, and the Master of Business Analytics program, offered in full-time and part-time formats, addresses the need to manage and analyze data for business decision-making.

The full-time STEM-designated program in Iowa City spans two semesters and includes core courses, a capstone, and electives in three subprogram areas: artificial intelligence and machine learning, artificial intelligence and technology management, and finance analytics. The part-time program offers online analytics and business elective courses, with occasional in-person business electives in Des Moines. Graduate certificates in artificial intelligence and machine learning or artificial intelligence and technology management can be embedded into the part-time program without taking any additional coursework through appropriate elective selection.

The program equips students with skills to transform raw data into actionable insights, moving beyond descriptive and diagnostic analytics to predictive and prescriptive analytics.

Learning Outcomes

Graduates will exhibit knowledge and skills relevant to data and its applications in business. They will demonstrate competence in the subareas of:

- descriptive analytics;
- predictive analytics; and
- prescriptive analytics.

Graduates will create and communicate solutions to data-related business problems that impact their organizations and communities. They will:

- approach, address, and solve a loosely defined business problem requiring the use, exploration, and analysis of data; and
- communicate effectively through oral, written, and visual forms.

Graduates will understand and explore ethical issues related to the use of data in the modern world. They will:

- contemplate ethical issues arising in their own work; and
- express a working knowledge of the major ethical issues facing the business analytics profession, supported with examples from current events.

Graduates will demonstrate the ability to be effective team members in a diverse and complex world. They will:

- engage in effective team processes; and
- lead and support others to achieve collective goals.