Master of Science in Data Science and Analytics

Program information

College	Business		
Department or school	ITOM		
Degree abbreviation	M.S.	**CIP code**	e.g., 54.0101
Program website	https://business.fau.edu/masters-phd/data-science-analytics/program-information/		

Our commitment to you

This Academic Learning Compact describes the program's mission, what students who complete the program will know and be able to do and how faculty assess that learning. Florida Atlantic University publishes a compact for every degree program and standalone certificate so students, families, employers and the community can see what each program commits to providing its graduates.

Program mission

The program aims to prepare students with essential skill sets needed to analyze small, fast, big, massive and complex data.

Florida Atlantic University's mission

Florida Atlantic University is recognized as an opportunity university and R1 research institution dedicated to transforming lives through education, discovery, and innovation. We empower students to achieve economic mobility, advance knowledge that creates meaningful impact, and forge partnerships that drive prosperity and connection in the communities we serve.

How the program supports the university mission

Florida Atlantic University’s interdisciplinary programs capitalize on the advancements and knowledge of various academic disciplines to offer students unique programs of study. By combining related and sometimes unrelated disciplines across FAU colleges, these programs prepare students for multifaceted careers.

About the program

This program aims to prepare students with the essential skill sets across disciplines needed for data-driven applications in industry, business and government.

Student learning outcomes

By graduation, students will be able to demonstrate outcomes in three core areas: content/discipline knowledge and skills (Outcome 1), communication skills (Outcome 2) and critical thinking skills (Outcome 3). Faculty assess all three core outcomes every year.

A. Content/Discipline Knowledge and Skills

What graduates will know and be able to do in their field

Areas this program addresses (check at least two)

- ☒ **Declarative knowledge:** key vocabulary, history, theories and concepts of the field
- ☒ **Research skills:** finding, gathering, analyzing and reporting information the way the field does
- ☐ **Technical skills:** hands-on tools and methods of the field, such as software, instruments, lesson plans or business reports

Outcome 1: students will demonstrate the use of business intelligence and business analytics processes and techniques used in transforming data to knowledge

How students show it

Final Exam

Where it is assessed

ISM 6404: Introduction to Business Analytics and Big Data

B. Communication Skills

How graduates will share ideas and work with others

Areas this program addresses (check at least two)

- ☒ **Written communication:** clear, well-organized writing suited to the audience and purpose
- ☒ **Oral communication:** well-organized presentations that connect with an audience
- ☐ **Other forms of communication:** visual, media, performance or exhibit work
- ☐ **Team/collaborative communication:** contributing to group projects and shared goals

Outcome 2: students will demonstrate effective oral and written communication in information technology and management.

How students show it

Project will be both written and presented

Where it is assessed

ISM 6404

C. Critical Thinking Skills

How graduates will analyze, create and solve problems

Areas this program addresses (check at least one)

☒ **Analytical skills:** weighing evidence, comparing ideas and judging arguments

☐ **Creative skills:** combining knowledge to create something new, such as a design, performance or proposal

☐ **Practical skills:** applying knowledge to real situations, such as a business proposal, lesson plan or grant

Outcome 3: students will be able to determine how to transform data into valuable knowledge

How students show it

project

Where it is assessed

ISM 6404 Introduction to Business Analytics and Big Data

Assessment approaches

Every year, faculty review samples of student work to see how well students are meeting all three outcomes, and they use what they learn to improve the program.

Assessment methods may change over time.