Master of Science in Data Analytics

College of Engineering and Computer Science
College of Sciences

www.ce.ucf.edu/data
Help companies use large amounts of data in innovative ways.

Become an expert in the fast-growing field of data analytics and big data. There is an increasing need to turn large and complex amounts of data into knowledge to drive business decisions. Companies are looking for people with the technical skills to manipulate, manage, and interpret data. The Big Data Report from McKinsey & Company stresses, “By 2018, the U.S. alone could face a shortage of 140,000-190,000 people with deep analytical skills.”

What is the UCF MS in Data Analytics?

The MS in Data Analytics is a 30 credit hour interdisciplinary program that prepares students to develop algorithms and computerized systems to facilitate the discovery of information from large amounts of data. It will utilize the technical aspects of big data analytics, including algorithm design, programming, acquisition, management, mining, analysis, and interpretation of data.

Job titles associated with this field:
Data Scientist, Data Analyst, Data Architect, Database Administrator, Data Engineer, Data Mining Specialist, Business Intelligence Analyst

Highlights

• 30 credit hours to completion
• Completion in 20 months
• Face to face instruction at UCF’s main campus
• Convenient evening and/or weekend classes
• High-demand/high-wage jobs
• Taught by UCF Faculty in the field of Data Analytics
• Cohort model for strong peer support
• Bridge courses available
By graduation, students will be able to:

- Use state-of-the-art software tools to perform data mining and analysis on large structured and unstructured data sets, and transform such data into knowledge.
- Design and implement new algorithms for data mining and analysis, and study their time, space, and energy efficiency.
- Perform data acquisition and management for extremely large and dynamic databases.
- Present and communicate knowledge derived from data in an unambiguous and convincing manner.

Learn employable technical skills on Big Data.

The curriculum includes several required courses that ensure that students have skills in algorithms and statistical techniques for extracting information.

Course of Study

- **Statistical Analysis**
  STA 5206

- **Machine Learning**
  CAP 5610

- **Parallel and Distributed Databases**
  COP 5711

- **Network Science**
  CNT 5805

- **Data Mining Methodology I**
  STA 5703

- **Data Mining Methodology II**
  STA 6704

- **Parallel and Cloud Computation**
  COP 6XXX

- **Project in Data Analytics**
  CAP 6XXX

- **Elective I**
  CAP or STA

- **Elective II**
  CAP or STA

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How do I apply?

Admission Requirements

• Bachelor’s degree from an accredited institution with a GPA of 3.0 or better
• GRE and TOEFL (if applicable) scores taken in the last 5 years
• Coursework or industry experience in Computer Science or Statistics
• Bridge courses offered by UCF for applicants who lack related experience (free for inaugural class)

Contact

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More program information and admissions criteria can be found by visiting www.ce.ucf.edu/data. Enrollment is limited to 34 students. Early applications are encouraged since admissions are anticipated to be highly competitive.