Master of Science in
DATA ANALYTICS

Dr. Ivan Garibay
Program Director
90% of all data in the world has been generated over the last two years (IBM)

“Every two days we create as much information as we did from the dawn of civilization up until 2003”
-Eric Schmidt, Google CEO
1,500,000
Shortage (by 2018) of managers and analysts who understand how to use big data to make decisions (McKinsey & Company)

190,000
Shortage (by 2018) of Data Scientist (McKinsey & Company)

116,840$
Median Base Salary for Data Scientists (Glassdoor-2016)
Data Scientist: The Sexiest Job of the 21st Century

by Thomas H. Davenport and D.J. Patil

FROM THE OCTOBER 2012 ISSUE

When Jonathan Goldman arrived for work in June 2006 at LinkedIn, the business networking site, the place still felt like a start-up. The company had just under 8 million accounts, and the number was growing quickly as existing members invited their friends and colleagues to join. But users weren’t seeking out connections with the people who were already on the site at the rate executives had expected.
Master of Science in Data Analytics

College of Engineering and Computer Science
College of Sciences

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. Become an expert in the fast-growing field of analytics to see the big (data) picture.

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.
The curriculum emphasizes the technical aspects of big data analytics including algorithm design, programming, acquisition, management, mining, analysis, and interpretation of data.
INTERDISCIPLINARY PROGRAM
SPECIALIZED FOR INDUSTRY

- Strong Faculty
- Cohort Model
- Industry Advisory Board

MSDA
INTERDISCIPLINARY PROGRAM DESIGNED FOR PROFESSIONALS

Concise
Opportunity for qualified professionals to complete the degree in 20 months (30 credit-hours).

Convenient
To accommodate the schedules of working professionals, MSDA has evening classes in two weekdays.

MASTER OF SCIENCE in DATA ANALYTICS
COHORT BASED MODEL

Focuses on core skills that will provide a competitive advantage in any sector requiring data analytics

FOCUS
- Cohort of maximum 34 students each Fall term
- Allows professors to cover advanced topics in depth

NETWORK
- Increased sense of community
- Enhanced opportunities for networking
CURRICULUM

Two three credit hour courses each semester.

▸ Seven required courses
▸ One project course
▸ Two elective courses
COURSES

• Network Science
• Statistical Analysis
• Machine Learning
• Data Mining Methodology I & II
• Parallel & Distributed Databases
• Parallel and Cloud Computation
• Project in Data Analytics (Internship)
• Social Media and Network Analysis
• Computational Analysis of Social Complexity
• Interactive Data Visualization
• Machine Learning Methods for Biomedical Data
INDUSTRY ADVISORY BOARD

- Influence the program curricula direction towards your industry needs

- Early access to data science graduate students: capstone projects, internships, early recruitment, data science student incubation house (Lean Launchpad).

- Vehicle to collaborate with faculty experts in Data Science and Big Data
Recruiting Industry Advisory Board Members

Contact: Ivan.Garibay@ucf.edu

Recruiting 34 students for inaugural cohort (Fall 2016)

Application deadline: June 15, 2016
Thank you, any questions?

Apply by June 15th!

Complete in 20 months

Convenient evening & weekend classes

What will you learn?
- 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.

Highlights
- 30 credit hours to completion
- Completion in 5 semesters or 20 months
- Face to Face instruction, offering convenient evening and weekend classes
- Taught by UCF Faculty with strong connections to Data Analytics
- Cohort model for strong peer support
- Courses are offered two per semester

Course of Study
- Parallel and Distributed Database Systems (COP 5711)
- Machine Learning (CAP 5610)
- Text Mining I (CAP 6307)
- ST: Network Science (COT 6938)
- Data Mining Methodology I (STA 5703)
- Data Mining Methodology II (STA 6704)
- Project in Data Analytics (CAP 6942)
- Statistical Analysis (STA 5206)

Electives (must choose 2):
- Parallel and Cloud Computation (COP 6526)
- Social Media and Network Analysis (CAP 6315)
Any questions?

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ivan.garibay@ucf.edu
407-882-1163