

**100% ONLINE**

# APPLIED DATA ANALYTICS TECHNOLOGY GRADUATE CERTIFICATE

The Applied Data Analytics Technology Graduate Certificate will provide professionals the knowledge to effectively and efficiently apply data analysis and visualization techniques to drive data-based decision making. Gain the skills to identify and design analytic processes to improve the overall flow of information and the quality of decision-making within an organization. Become more proficient in applying data technology and analytics skills when interacting with business analysts or use these skills to take on business analyst-related responsibilities.

This program is 100% online, so you can get your graduate certificate at your own pace, from anywhere in the world, choosing times for class work and study that fit your lifestyle. Classrooms are strategically designed to enhance the instruction and interaction between industry and academic leaders.

The curriculum will establish a solid foundation



in order to create an informed and curious approach to data science. You will demonstrate the ability to source, cleanse, and join a set of data yielding dataset insights. Enhance your knowledge of Descriptive Analytics (what is happening), Predictive Analytics (what is likely to happen in the future), and Prescriptive Analytics (what should be done). Gain the ability to interact with existing datasets to create useful and interesting visualizations, and develop an understanding of the storytelling with visualization.

## LEARNING OBJECTIVES

The learning objectives include:

- Understand concepts, models and methods useful for applying data analytics in technical environments
- Analyze data sets to improve decision making
- Provide data visualization techniques for informing trends in data

## PLAN OF STUDY

PLAN OF STUDY AREA	CREDITS
Data Literacy	3
Data Analysis	3
Data Visualization	3

## COURSES

This 9 credit-hour certificate will take three (3) semesters to complete. Courses are 8 weeks each fall and spring and 12 weeks during the summer. Courses are strategically designed to enhance the instruction and interaction between industry and academic leaders.

### *Data Literacy*

This course examines concepts, models and methods useful for applying data analytics in technical environments. Focusing on Hypothesis generation, the capturing, storage and expression of data for research analysis. This course will utilize a highly interactive, action-oriented agenda engaging students in hands on competency-based assignments.

### *Data Analysis*

This course examines Data Analytics tools useful for analyzing data sets to 1) ask better questions regarding the data and 2) find answers to those questions in order to improve decision making. Inherent in this process, students will gain an understanding of the uncertainty that exists whenever decisions about an entire population are made based upon a sample drawn from the population. This course will utilize a highly interactive, action-oriented series of assignments to engage students and help them develop the skills and confidence needed to analyze their own data sets.

### *Data Visualization*

This course introduces modern visualization, techniques and methods useful for applying data analytics in technical environments. This will be achieved by focusing on a storytelling methodology to drive students to form effective communication styles for their data.