Overview

This course provides an introduction to a variety of tools and techniques used in the field of data analytics. Students will summarize data, review statistical models, explore data mining techniques, and contemplate ethical considerations associated with the field of data analytics. This course presents a survey of concepts which will be explored more in-depth in subsequent courses in the MS Data Analytics program.

Competencies

- **Introduction to Data Analytics and Data Visualization**
  The graduate summarizes data by means of applying descriptive statistics and data visualization techniques.

- **Data Models and Making Predictions**
  The graduate applies statistical models to make predictions in real-world situations.

- **Data Mining Activities**
  The graduate analyzes data mining activities including data preparation, data summary, and modeling.

- **Introduction to Data Simulations**
  The graduate analyzes simulation modeling and simulation outputs.

- **Ethical Principles and Data Analytics**
  The graduate summarizes ethical principles specific to data analytics.

Learning

**Getting Started**

Welcome to Fundamentals of Data Analytics. This course uses Zybooks learning resources which contain all of the reading materials, interactive learning activities, and knowledge checks needed to successfully complete this course. For the best understanding of the course content, complete each chapter of the course. To help you track your progress in the course, follow the Pacing Guide identified within the Welcome chapter of the course to keep you in the suggested course completion timeframe. Competency will be demonstrated by the successful completion of a performance assessment.

Note: Use the Data Analytics Lab Sandbox link located within the Course Information section below. This link will take you directly to the MSDA Program lab environment. Select the “Go to Course Materials” button to begin the coursework.