

Course Duration: 2 Days

About This Course

The Introduction to Data Science class will survey the foundational topics in data science, namely:

- Data Manipulation
- Data Analysis with Statistics and Machine Learning
- Data Communication with Information Visualization
- Data at Scale -- Working with Big Data

The class will focus on breadth and present the topics briefly instead of focusing on a single topic in depth. This will give you the opportunity to sample and apply the basic techniques of data science.

Prerequisites

The ideal students for this class are prepared individuals who have:

- Strong interest in data science
- Background in intro level statistics

Why Take This Course

You will have an opportunity to work through a data science project end to end, from analyzing a dataset to visualizing and communicating your data analysis.

Through working on the class project, you will be exposed to and understand the skills that are needed to become a data scientist yourself.

Course Outline

Data Science Overview

- What can Data Science do for the Business?
- Applications of Data Science
- Data-Driven Decisions
- What does a Data Scientist do?
- Data Science Skills
- Collaboration
- Data Science Cycle
- Organizational Models for Data Science Teams

Machine Learning Overview

- Machine Learning Workflow
- Learning Process
- Model Performance
- Supervised and Unsupervised Learning

- Classification
- Regression
- Decision Tree

Big Data Overview

- Big Data Characteristics
- Big Data Implementation

Exploratory Data Analysis (EDA)

- What is EDA?
- EDA Process