# Overview

Build effective machine learning models, run data pipelines, build recommendation systems, and deploy solutions to the cloud with industry-aligned projects.

## Learning Objectives

**A graduate of this program will be able to:**

- Use Python and SQL to access and analyze data from several different data sources.

- Use principles of statistics and probability to design and execute A/B tests and recommendation enginesto assist businesses in making data-automated decisions.

- Deploy a data science solution to a basic flask app.

- Manipulate and analyze distributed datasets using Apache Spark.

- Communicate results effectively to stakeholders.

The Data Science Program Topics include:

- Introduction to Data Science

- Mathematical and Statistical Skills

- Machine Learning

- Artificial Intelligence

- Coding

- Applied Mathematics and Informatics

- Machine Learning Algorithms

- Data Warehousing

- Data Mining

- Data Visualization

- Cloud Computing

- Data Structures

- Scientific Computing

- Scholastic Models

- Project Deployment Tools

- Predictive Analytics and Segmentation

- Exploratory Data Analysis