DSO 559 - Introduction to Python for Business Analytics

Section - 16327

Professor
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When
Monday, 11:00 AM – 1:50 PM

Office
BRI 401 O

Units
3.0

WHO SHOULD TAKE THIS COURSE?

Motivated graduate students with little or no prior programming experience who would like to develop essential competencies in the Python programming language and the Pandas package for data analytics. These skills are foundational for every business manager in today's data-rich economy.

COURSE OBJECTIVES

Upon successful completion, students will be able to:

- Write Python code to clean, manipulate, plot, and analyze business data
- Convert raw data into business insights for guiding business decision making
- Formulate and communicate actionable business recommendations based upon exploratory business data analysis

KEY CONCEPTS

- Algorithmic thinking
- Data structures
- Python and Jupyter notebook
- Functions and packages
- Iterations and conditional statements
- Automating mundane tasks
- Pandas DataFrame and Series
- Plotting
- Data assembly
- Data cleaning
- Data munging
- Efficiently analyzing large and messy datasets

COURSE DESCRIPTION

This course is concerned with the nuts and bolts of manipulating, processing, cleaning, and crunching data in Python. The primary goal of the course is to offer a guide to the parts of the Python programming language and its data-oriented library ecosystem and tools that will equip you to become an effective data analyst. It aims to provide students with an understanding of the role computation can play in solving real-world business problems and to help business students feel justifiably confident of their ability to write Python programs that allow them to creatively solve business problems and formulate actionable business recommendations based upon the data analysis.