

DATA SCIENCES AND OPERATIONS

SPRING 2024 SEMESTER

DSO 547 — *Spreadsheet Modeling for Business Insights*

Sections – 16280/16281

Professor
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When
Mon/Wed, 12:30 PM – 1:50 PM

Office	Units
BRI 307 A	3.0



WHY TAKE THIS COURSE?

Aspiring finance professionals, business analysts, quant-savvy entrepreneurs, and management consultants need spreadsheet modeling skills to draw insights and build projections amidst uncertain conditions.

COURSE OBJECTIVES

Using Excel as the platform, this course trains professionals to become effective modelers: to translate industry challenges into well-formulated models, and then use those models to drive decision-making. This course also teaches various tools for data modeling and visualization using large data sets. Finally it introduces how to write VBA macros to increase the power of Excel.

KEY CONCEPTS

- Data tables & Pivot Tables
- Data Visualization
- Spreadsheet Modeling
- Optimization
- Monte Carlo simulation
- @Risk
- Scenario and Risk Analysis
- Tableau
- Think-cell Applications
- Writing VBA Macros

COURSE DESCRIPTION

The course teaches spreadsheet modeling skills as well as industry best practices and expectations. Modeling skills are developed throughout the course using examples from many functions and industries. In addition to general modeling skills, the course will teach a handful of frameworks and tools useful to drawing managerial insights.

Particular emphasis is placed on the understanding of the fundamental drivers to quantitative decision-making as well as the communication skills necessary to drive organizational change.