

# DATA SCIENCES AND OPERATIONS

Spring 2023

**DSO 427** — *Spreadsheet Modeling for Business Insights*

Section 16214

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**When**  
Tuesdays/Thursdays 8:00-9:50am

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401N                              4.0



## WHY TAKE THIS COURSE?

The simple spreadsheet is one of the most powerful data analysis tools that exists, and it's available to almost anyone. Major corporations and small businesses alike use spreadsheet models to determine where key measures of their success are now, and where they are likely to be in the future. As such, many job descriptions nowadays require professionals who understand business concepts and are able to use intermediate to advanced data modeling tools in Excel to formulate business decisions. This course will help you learn harnessing Excel power to facilitate data-driven decision making in a variety of business problems. A very basic knowledge of Excel and a keen interest in making sense of large business data sets will be prerequisites for success in this course.

## COURSE OBJECTIVES

- Demystify the concepts of business analytics and apply them to your work
- Identify Excel's business analytics and modeling capabilities
- Use Excel formatting to improve consistency and readability of information
- Use formulas and functions to calculate and analyze your data
- Learn basic VBA and simple macros to reduce redundant tasks

## KEY CONCEPTS

- How to build spreadsheets for business data
- Formulas and Functions in Excel
- A survey of a variety of business problems such as optimization, simulation, data mining and decision analysis
- Introduction to VBA and Macros

## COURSE DESCRIPTION

Introduces advanced quantitative modeling techniques for business decision-making. Covers a variety of modeling techniques, business analytics concepts, forecasting and data mining/analysis tools. Students learn to implement these techniques in spreadsheet models that assist businesses in understanding and managing risk and improving decision-making. Applications cover a broad range of functional areas, including accounting, finance, marketing, and operations.