

USC Marshall

School of Business
MBA.PM

Summer 2025 PM Tech-Based Core Option DSO 510: Business Analytics, [Professor Cosimo Arnesano](#)

Course Meeting Dates:

- Monday, June 2: 6pm-9pm
- Monday, June 9: 6pm-9pm
- Monday, June 16: 6pm-9pm
- Monday, June 23: 6pm-9pm
- Monday, June 30: 6pm-9pm

Course Modality: Online 3 hours per week of synchronous/live content plus pre-recorded/asynchronous content.

Course Description:

This course introduces students to the fundamental concepts of business analytics, equipping them with tools to analyze data and inform strategic decision-making. Students will gain hands-on experience in Python programming to solve practical business problems. Topics include data wrangling, exploratory data analysis, regression and classification techniques, and decision modeling. A final project will synthesize these skills, applying them to a real-world business challenge.

Type(s) of Software and/or Technology Covered:

Python (via Google Colab)

Libraries: NumPy, Pandas, Matplotlib, Seaborn, SciPy

Tools for data wrangling, analysis, and visualization

Microsoft Excel Solver

Type(s) of Assigned Deliverables:

Weekly assignments with coding exercises and problem sets

Final project: Develop a Python-based analytics solution, culminating in a class presentation

Any Required Materials (If so, costs?):

No textbook needed

Online resources and tutorials will be provided.

Free access to Google Colab for Python programming.

Due date of final project, if applicable (this will help students plan accordingly, particularly if your final project is due after the last class):

Final project presentations will take place during the last class on Monday, June 30.

Final project report is due on July 3rd.