Project details

• Assessment is based on a Group OR Individual (your choice) Project (70%) and Homework Completion (30%). Maximum 3 people per group.
• The assessment bar will be raised for groups versus individual.
• Select a topic of your choice, e.g. credit modeling, Cryptocurrency/NFT trading, equity trading, economic
forecasting, ESG score prediction, Data Centric AI for finance etc.
• The Introduction to Financial Data Science topic should assist with selecting a project topic.

• An executive style project report and source code should be submitted for the project, with detailed implementation steps to be included in appendices.
• Section 1: Novel Data Set collection - e.g. through web scraping.
• Section 2: DB creation and querying - report data set summary statistics.
• Section 3: Outline the required steps in cleaning, checking and organisation of the data.
• Section 4: Data visualisation - include nice charts and plots of the data set and, if relevant, some visual analysis.
• Section 5: Incorporate a relevant information signal created from textual analysis, e.g. of social media feeds or news sources.
• Section 6: Predictive/explanatory modeling using ML and backtesting - report your methodology, analysis and results including in sample/validation/test results.
• Section 7: Business Analysis - what is the impact of your findings- e.g. an additional alpha of 1% in a fund with AUM of $1 billion equates to $10 million a year.

• You should submit a personal project journal, tracking hours worked on the project, the task and all resources found related to your task (blogs, code repsositories etc.).
• The project mark will include a peer evaluation component mirroring the one in the Derivative Securities module.
• You are encouraged to leverage any relevant resources that you find but must credit the source at all times.
• UCD Library launched an Academic Integrity Course as a resource for all staff and students, the course will be accessible to all via Brightspace Explore.