

REAL ESTATE DATA ANALYTICS (REDA1-CE)

REDA1-CE 1000 Introduction to Real Estate Data Analytics (2 Credits)

Real estate has become a sophisticated industry that now relies on advanced data analysis to drive investment and other critical decisions. This course is designed to provide an understanding of the techniques of data analysis and quantitative methods used in the industry. Gain exposure to hands-on projects using data from major providers in the industry. Applied statistics will be presented using the open-source R statistical computing environment, together with Jupyter Notebook, an increasingly popular presentation environment. Get hands-on experience creating statistical models to drive informed decision-making in real estate investment.

Note: Registering at least two weeks prior to the start of the course date is highly recommended. Popular classes fill up quickly and more specialized classes need sufficient enrollment.

For general information about this course, please call 212-992-3336 or email sps.realestate@nyu.edu.

If you are registered for an online course and are not able to access/view your course in Brightspace, please note the following:

- It may take at least 24 hours from the time you registered for your information to be transferred into Brightspace.
- New students registering two days or LESS before the start date of the course may experience delayed access.

For additional technical support, contact the [IT Service Desk](http://www.nyu.edu/its/askits/helpdesk) (available 24/7/365) at [212-998-3333](tel:212-998-3333) or AskITS@nyu.edu.

Grading: SPS Non-Credit Graded

Repeatable for additional credit: Yes

REDA1-CE 1001 Advanced Topics in Real Estate Data Analytics (2 Credits)

Real estate has become a sophisticated industry that now relies on advanced data analysis to drive investment and other critical decisions. You gain exposure to advanced topics in data analytics used throughout real estate and be exposed to hands-on projects using data from major providers in the industry. Applied statistics will be presented using the open-source R statistical computing environment, together with Jupyter notebooks, an increasingly popular presentation environment. You will gain hands-on experience creating statistical models to drive informed decision-making in real estate investment.

Note: Registering at least two weeks prior to the start of the course date is highly recommended. Popular classes fill up quickly and more specialized classes need sufficient enrollment.

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Grading: SPS Non-Credit Graded

Repeatable for additional credit: Yes

REDA1-CE 1002 Data Visualization for Real Estate (1 Credit)

This course will provide participants an experiential opportunity to critically engage and participate in the assessment, production, and design of real estate information visualization as a tool of decision-making and internal and external communication. Utilizing a variety of variable types (e.g., numeric, percentage, categorical, date, coordinates) across real estate datasets, participants will learn the transformative techniques to visualize market and time-series data functionally. Participants will learn how to use R effectively from a beginner's perspective, then quickly progress to applying several packages, including tidyverse and quantmod, to wrangle data, calculate performance trends and other metrics as they would do in Excel, and visualize such insights through customized professional graphics that reflect their brand. Each class session will focus on the theory and concept behind each course topic, with greater emphasis placed on running code, strategically resolving errors, and creating reproducible working environments that can be integrated into future projects. Participants will be encouraged to bring both their own datasets and expertise from their backgrounds to discussion, practice, and assignments. Whether the participant aims to better understand data wrangling in R, metric calculation and variable creation with tidyverse, or sound practices in storytelling with polished and informative graphics, this course will provide a robust overview.

Grading: SPS Non-Credit Graded

Repeatable for additional credit: Yes

REDA1-CE 1003 Data Analysis and Visualization for Real Estate Decision-Making (1.5 Credits)

Real estate is a sophisticated industry that relies increasingly on advanced data analytics to drive development, investment, and lending decisions. This course introduces working professionals to data analysis software, key real estate data sources, and techniques of real estate data analysis and visualization. The course is divided into five modules, familiarizing participants with the Python programming language and Jupyter platforms and sources of real estate data before embarking upon applied case studies in data visualization and the use of economic, CMBS and REIT data. Each module is accompanied by an assignment or short case study.

Grading: SPS Non-Credit Graded

Repeatable for additional credit: Yes