

# REAL ESTATE FINANCE AND INVESTMENT (REFI1-CE)

## REFI1-CE 4000 Financial Modeling Essentials for Real Estate (0 Credits)

Learn how to develop a reconstructed property operating statement to determine net operating income (NOI) and to convert a single-year's NOI into an estimate of property value. Topics covered include risk vs return concepts; property types and classifications; lease basics; market rent vs contract rent; estoppel certificates; potential gross income (PGI); vacancy and loss; miscellaneous income; effective gross income (EGI), fixed and variable operating expenses (OE); confirming expenses with due diligence; capital expenditures (CAPX); net operating income (NOI); overall or going-in capitalization rates; direct market extraction method using comparable property sales; direct capitalization and income multipliers. Cases and Excel will be used throughout the course.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

## REFI1-CE 4001 Real Estate Financial Analysis I: Direct Capitalization (CE) (0 Credits)

Learn how to develop a reconstructed property operating statement to determine net operating income (NOI) and to convert a single-year's NOI into an estimate of property value. Topics covered include risk vs return concepts; property types and classifications; lease basics; market rent vs contract rent; estoppel certificates; potential gross income (PGI); vacancy and loss; miscellaneous income; effective gross income (EGI), fixed and variable operating expenses (OE); confirming expenses with due diligence; capital expenditures (CAPX); net operating income (NOI); overall or going-in capitalization rates; direct market extraction method using comparable property sales; direct capitalization and income multipliers. Cases and Excel will be used throughout the course.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 4002 Investing in Distressed Real Estate Situations (1 Credit)**

This course provides broad-based exposure to a complex aspect of commercial real estate investing, providing a basic framework of evaluating stressed and distressed real estate investing, also known as special situations. Basic elements of distressed analysis will include understanding market dynamics, cash flow disruptions, and capital structure. More advanced components such as bankruptcy procedures and related legal parameters will be discussed, with a specific focus on those issues most pertinent to CRE workouts or recapitalizations.

Additionally, common characteristics of and factors that lead to distress also will be addressed. Students will sharpen their skills in fundamental real estate analysis and learn to spot special-situation investment opportunities. This asynchronous course is geared for entry-level through mid-level real estate professionals, including non-real estate investment professionals who want to explore rapidly emerging opportunities across the real estate landscape.

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](mailto: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:

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**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 4005 Real Estate Debt Finance (CE) (1.5 Credits)**

Learn the principles of real estate investment property finance. Course topics include permanent debt financing of income-producing properties such as office buildings, industrial buildings, apartment buildings, and shopping centers; types of commercial mortgage instruments and notes; mortgage underwriting; credit analysis; the term sheet; the lease as a form of financing; construction loans, the second mortgage, and other interim loans; the three approaches to value; sources of capital; and an introduction to the secondary mortgage market and securitization.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 4007 Real Estate Financial Modeling Essentials (CE) (1.5 Credits)**

Learn the fundamentals of building a real estate financial investment model using Excel. Discover how to organize and to present data in order to analyze real estate investments more efficiently. Topics include income and expense assembly; multiple lease analysis, including effective rent; sizing debt with lender parameters and calculating levered and unlevered net present values (NPV) and internal rates of return (IRR); pro forma forecasting; and discounted cash flow (DCF) analysis. Multifamily, interest only (I/O), and office models are presented. Excel functions, tools, and formulas covered include SUM, ROUND, IF, AND, OR, PV, FV, RATE, NPER, NPV, XNPV, IRR, XIRR, PMT, PPMT, IPMT, VLOOKUP, HLOOKUP, and SUMIF; relative and absolute cell references; conditional statements; Boolean logic (true/false); formatting; and keyboard shortcuts.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 4132 Real Estate Private Equity Structures (CE) (1.5 Credits)**

Real estate is the world's oldest and most versatile asset class. It has identifiable cash flow, provides tangible security, can be leveraged, and today can be accessed through liquid instruments like Real Estate Investment Trusts and Mortgage Backed Securities. Yet private structures, both equity and debt, remain the major investment vehicles. Understanding the investment proposition and challenges of real estate investing was, until recently, not widely understood. Over the last 20 years, the expanded institutional interest in commercial real estate has brought increased rigor and discipline to real estate financial analysis to help investors decipher the factors influencing real estate valuations and returns.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 5000 REIT Investment Fund (5 Credits)**

This course is sponsored by Schack's REIT Center. The REIT Investment Fund (the "Fund") will enable NYU Schack Institute of Real Estate ("Schack") students to be part of a truly hands-on experience in real estate securities investment management. The student leadership of the Fund shall work directly with Schack's REIT Center ("REIT Center") on marketing, research, and various industry engagement initiatives. Please refer to the SPS-REIT Investment Fund Guidebook on Brightspace for more information.

The objectives of the Fund are to provide students with an opportunity to apply and integrate real estate institute's teachings in the pursuit of investment management; to preserve and grow the funds under management; to allow students the opportunity to run their own business, to think like principals, and to further develop management and teamwork skills.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 8000 Real Estate Financial Modeling Using Excel - Shell Course (0 Credits)**

This is a shell course to the REFI1-CE9355

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9100 Real Estate Finance (0 Credits)**

Learn the principles of real estate investment property finance. Topics include financing of income-producing properties including office buildings, industrial buildings, apartment buildings, and shopping centers; types of commercial mortgage instruments and notes; mortgage underwriting; the lease as a form of financing; construction loans, the second mortgage, and other interim loans; the property income statement; the three approaches to value; sources of capital; and the secondary mortgage market and securitization.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9101 Schack Bootcamp: Real Estate Financial Analysis (2 Credits)**

Learn the essential concepts, measurements, and calculations employed in quantitative real estate investment and income property analysis. This course covers time value of money (TVM), including future value, present value, net present value (NPV), and internal rates of return (IRR); the pro forma income statement; income and expenses; net operating income (NOI); income capitalization, including direct capitalization and yield capitalization or discounted cash flow analysis (DCF); capitalization rates; cash-on-cash return; residual value; debt service; commercial lease analysis; the implications of leverage on investment returns; and depreciation and capital gains.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9102 Schack Bootcamp: Real Estate Financial Modeling Essentials (2 Credits)**

Learn the fundamentals of building a real estate financial investment model using Excel. Discover how to organize and to present data in order to analyze real estate investments more efficiently. Topics include income and expense assembly; multiple lease analysis, including effective rent; sizing debt with lender parameters and calculating levered and unlevered net present values (NPV) and internal rates of return (IRR); pro forma forecasting; and discounted cash flow (DCF) analysis. Multifamily, interest only (I/O), and office models are presented. Excel functions, tools, and formulas covered include SUM, ROUND, IF, AND, OR, PV, FV, RATE, NPER, NPV, XNPV, IRR, XIRR, PMT, PPMT, IPMT, VLOOKUP, HLOOKUP, and SUMIF; relative and absolute cell references; conditional statements; Boolean logic (true/false); formatting; and keyboard shortcuts.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9105 Real Estate Financial Analysis I: Direct Capitalization (2 Credits)**

Learn how to develop a reconstructed property operating statement to determine net operating income (NOI) and to convert a single-year's NOI into an estimate of property value. Topics to be covered include risk versus return concepts; three approaches to value; property types and classifications; lease types, including gross and net leases; market rent versus contract rent; estoppel certificates; useable and rentable area; vacancy and loss; and load factor. Also, become knowledgeable about potential gross income (PGI), miscellaneous income, effective gross income (EGI), fixed and variable operating expenses (OE), capital expenditures (CAPX), net operating income (NOI), and overall or going-in capitalization rates. Learn how to perform due diligence for confirming expenses, to utilize direct capitalization and income multipliers, and to apply the direct market extraction method using comparable property sales. Case studies and Excel are used throughout the course.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9106 The Intelligent REIT Investor Guide (1 Credit)**

The Intelligent REIT Investor Guide will provide both basic and advanced topics in the profitable, sustainable world of real estate investment trusts (REITs). From historical industry performance to the equations needed to calculate key metrics in REIT stocks, this masterclass covers the history, vocabulary, principles, and analysis you'll need to invest wisely in this growing asset class. Find out how you can strengthen your investment decisions and conclusions with publicly traded REITs in the short- and long-terms alike. The course will also include C-suite interviews from leading industry experts.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9110 Real Estate Financial Analysis II: Discounted Cash Flow (2 Credits)**

Build upon the instructional material covered in [Real Estate Financial Analysis I: Direct Capitalization](https://www.sps.nyu.edu/professional-pathways/courses/refi1-ce9105) and progress from a single-year property operating statement to a multiyear cash flow forecast, commonly referred to as a pro forma income statement, and estimate property value based upon a series of cash flows over time along with resale proceeds. Topics to be covered include time value of money (TVM), discounting, present value (PV), compounding, future value (FV), net present value (NPV), internal rates of return (IRR), lease escalations, effective rent, expense stops, yield capitalization, discounted cash flow (DCF) analysis, discount rates, and cash-on-cash return. Also, discuss reversion, terminal capitalization rates or going-out cap rates, residual or terminal value, net proceeds from sale, selling expenses, debt service, before-tax cash flow (BTCF), levered and unlevered returns, income tax, after-tax cash flow (ATCF), depreciation, and capital gains. Case studies and Excel are used throughout the course.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9111 Real Estate Financial Analysis II: Discounted Cash Flow (1.5 Credits)**

Build upon the instructional material covered in *Real Estate Financial Analysis I: Direct Capitalization* and progress from a single-year property operating statement to a multiyear cash flow forecast, commonly referred to as a pro forma income statement, and estimate property value based upon a series of cash flows over time along with resale proceeds. Topics to be covered include time value of money (TVM), discounting, present value (PV), compounding, future value (FV), net present value (NPV), internal rates of return (IRR), lease escalations, effective rent, expense stops, yield capitalization, discounted cash flow (DCF) analysis, discount rates, and cash-on-cash return. Also, discuss reversion, terminal capitalization rates or going-out cap rates, residual or terminal value, net proceeds from sale, selling expenses, debt service, before-tax cash flow (BTCF), levered and unlevered returns, income tax, after-tax cash flow (ATCF), depreciation, and capital gains. Case studies and Excel are used throughout the course.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9113 Economic Analysis of Real Estate Markets (3 Credits)**

This course examines connections between the national and global economies and real estate markets from both theoretical and empirical perspectives. Explore the performance of specific property types under different macroeconomic and monetary conditions, as well as key policy issues and their economic impact on real estate markets, and identify indicators used to track economic and real estate performance. Also, examine the economic structure of major metropolitan areas, the impact of local governments on urban economic growth, the impact of urban economic growth on supply and demand for specific property types, and conditions under which certain regions thrive while others decline. Building upon the concepts and tools of economic analysis, this course introduces appropriate data sources and techniques useful in analyzing and forecasting real estate demand and supply for specific property types at specific locations. Class discussion will highlight current economic and financial trends and their implications for real estate markets.

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**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9351 Real Estate Financial Analysis (2 Credits)**

Learn the essential concepts, measurements, and calculations employed in quantitative real estate investment and income property analysis. This course covers time value of money (TVM), including future value, present value, net present value (NPV), and internal rates of return (IRR); the pro forma income statement; income and expenses; net operating income (NOI); income capitalization, including direct capitalization and yield capitalization or discounted cash flow analysis (DCF); capitalization rates; cash-on-cash return; residual value; debt service; commercial lease analysis; the implications of leverage on investment returns; and depreciation and capital gains.

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**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9352 Introduction to Real Estate Finance (2 Credits)**

Learn the principles of real estate investment property finance. Course topics include permanent debt financing of income-producing properties such as office buildings, industrial buildings, apartment buildings, and shopping centers; types of commercial mortgage instruments and notes; mortgage underwriting; credit analysis; the term sheet; the lease as a form of financing; construction loans, the second mortgage, and other interim loans; the three approaches to value; sources of capital; and an introduction to the secondary mortgage market and securitization.

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**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9353 Real Estate Financial Analysis II (0 Credits)**

Apply the real estate financial analysis concepts and mathematical techniques taught in Real Estate Financial Analysis I to four property types: office, residential, industrial, and retail; to gain a higher level of proficiency. Explore different debt/equity financing scenarios and examine their effect on the equity investor's pre-tax cash flow. Other advanced cash flow concepts introduced include ways to structure preferred equity and initial equity distributions (waterfall concept), as well as the effect of tax and depreciation on cash flow and investment decision-making.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9354 Real Estate Debt Finance (1.5 Credits)**

Learn the principles of real estate investment property finance. Course topics include permanent debt financing of income-producing properties such as office buildings, industrial buildings, apartment buildings, and shopping centers; types of commercial mortgage instruments and notes; mortgage underwriting; credit analysis; the term sheet; the lease as a form of financing; construction loans, the second mortgage, and other interim loans; the three approaches to value; sources of capital; and an introduction to the secondary mortgage market and securitization.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9355 Real Estate Financial Modeling Essentials (2 Credits)**

Learn the fundamentals of building a real estate financial investment model using Excel. Discover how to organize and to present data in order to analyze real estate investments more efficiently. Topics include income and expense assembly; multiple lease analysis, including effective rent; sizing debt with lender parameters and calculating levered and unlevered net present values (NPV) and internal rates of return (IRR); pro forma forecasting; and discounted cash flow (DCF) analysis. Multifamily, interest only (I/O), and office models are presented. Excel functions, tools, and formulas covered include SUM, ROUND, IF, AND, OR, PV, FV, RATE, NPER, NPV, XNPV, IRR, XIRR, PMT, PPMT, IPMT, VLOOKUP, HLOOKUP, and SUMIF; relative and absolute cell references; conditional statements; Boolean logic (true/false); formatting; and keyboard shortcuts.

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**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes



**REFI1-CE 9356 Financial Modeling for Real Estate Development (2 Credits)**

Learn to build financial models in Excel for real estate development projects. Gain the skills to prepare a construction budget, value tax abatements, size debt, and allocate sources and uses. Topics covered include residual land valuation, land/site, hard and soft costs, levered and unlevered returns, construction drawdown projections, sizing interest reserves, project completion, and stabilization.

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**Grading:** SPS Non-Credit Graded**Repeatable for additional credit:** Yes**REFI1-CE 9357 Financial Modeling for Real Estate Equity Structures (2 Credits)**

Learn to build financial models in Excel for real estate joint ventures, funds, and equity participants. Topics include equity analysis; funding equity in phases from pari-passu to proportional percentage of investment; the recapturing of investor share when exiting deals and the achievement of multiple investment hurdles. Cash flows are analyzed from preferred returns through promotes and waterfalls.

*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**REFI1-CE 9358 Financial Modeling for Real Estate Equity Structures (1.5 Credits)**

Learn to build financial models in Excel for real estate joint ventures, funds, and equity participants. Topics include equity analysis, funding equity in phases from pari-passu to proportional percentage of investment, the recapturing of investor share when exiting deals, and the achievement of multiple investment hurdles. Cash flows are analyzed from preferred returns through promotes and waterfalls.

**Grading:** SPS Non-Credit Graded**Repeatable for additional credit:** Yes**REFI1-CE 9359 Real Estate Capital Markets (2 Credits)**

Learn how the world of real estate meets the world of finance and how debt and equity are raised to finance real estate transactions. Topics include the structure and participants of the public and private real estate capital markets; sources of debt and equity financing; deal structuring; tranches; risk and return; weighted average cost of capital (WACC); the capital asset pricing model (CAPM); the risk-free rate of return; note structures; mezzanine debt; REOCs; real estate-related bonds; private and public real estate investment trusts (REITs); commercial real estate debt markets, including the mortgage finance system; securitization; and commercial mortgage-backed securities (CMBS).

*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

**REFI1-CE 9360 Commercial Mortgage-Backed Securities (2 Credits)**

Learn how the secondary mortgage market and the securitization process convert pools of illiquid commercial real estate instruments into liquid commercial mortgage-backed securities (CMBS) for the benefit of borrowers, lenders, and investors. Topics covered in this course include the history of the commercial banking industry; loan package requirements; the due diligence process, including appraisal, engineering and environmental reports, underwriting, and pricing; risk issues; rating agency and loan tranching; loan documents and negotiation strategies; defeasance language; CMBS investors; and asset management and servicing.

*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

**REFI1-CE 9361 Real Estate Investment Analysis: Analyzing the Deal (2 Credits)**

Apply the concepts learned in previous real estate finance and investment courses to specific real estate transactional situations. Learn how experienced investors analyze a commercial real estate deal and determine its potential for profitability. Topics include forms of ownership and deal structures; the capital stack and structured finance; income and expense analysis; valuation analysis; debt analysis; and equity return analysis, equity investment vehicles, and analytical performance techniques. Investment property case studies bring together various elements that are covered in the course.

*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

**REFI1-CE 9362 Real Estate Investment Analysis: Analyzing the Deal (1.5 Credits)**

Apply the concepts learned in previous real estate finance and investment courses to specific real estate transactional situations. Learn how experienced investors analyze a commercial real estate deal and determine its potential for profitability. Topics include forms of ownership and deal structures; the capital stack and structured finance; income and expense analysis; valuation analysis; debt analysis; and equity return analysis, equity investment vehicles, and analytical performance techniques. Investment property case studies bring together various elements that are covered in the course.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9363 Advanced Real Estate Investment Analysis Techniques (0 Credits)**

Explore advanced financial economic principles and analytical techniques. Topics include commercial real estate investment and decision analysis, developing financial models at the property and portfolio levels, financing and partnership arrangements, financial statement preparation according to GAAP, and real estate economics and market cycles. Also, learn about capital structure and return analysis on levered and unlevered cash flows, the effect of leverage on weighted average cost of capital (WACC), investment return, quantifying debt service and modeling amortization schedules, refinancing and prepayment decisions, waterfall arrangements in cash flow distribution, time weighted returns, management fees, hedging techniques, mitigation of foreign exchange, interest rate risk, and simulation techniques to measure risk at the property and portfolio levels.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9364 Real Estate Investment Decision Analysis: Part 1 (2 Credits)**

This intensive course covers various methods, techniques, and tools used by investors, developers, and lenders in making investment decisions related to income-producing commercial real estate. The topics reviewed provide a solid foundation in evaluating investment opportunities and financing options. Gain an overview of commercial real estate principles and underwriting techniques from the perspective of an institutional investor. Some of the course material will be evaluated in one or more brief case studies, through which you will learn the fundamental viewpoints of the key players in a commercial real estate investment: sellers, buyers, equity investors, and lenders.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9365 Real Estate Investment Decision Analysis: Part 2 (2 Credits)**

This course covers some of the methods, techniques, and markets used by investors, developers, and lenders in making investment decisions related to income-producing commercial real estate. We will delve into topics that will enable you to better analyze the deal and build confidence in formulating opinions or recommendations about income-producing commercial real estate transactions. Gain an overview of commercial real estate principles and underwriting techniques. This course is not designed to teach you how to get rich quick or to invest in real estate with no money down! Some of the course material will be presented in one or more brief case studies, through which you will learn the fundamental viewpoints of the key players in commercial real estate investment: sellers, buyers, equity investors, and lenders.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9366 International Real Estate Investment and Development (2 Credits)**

Explore strategies and techniques used, as well as practical issues encountered, when conducting real estate investment in global markets. Topics include risks and returns, macroeconomic and geopolitical considerations, identification of opportunities, international real estate development, global REITs, global mortgage products and mortgage-backed securities (MBS), and international taxation of real estate. Real-world case studies will be used to examine the idiosyncrasies of region-specific investment and development, and the execution strategies employed.

**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

**REFI1-CE 9367 Global Real Estate Capital Markets (2 Credits)**

Learn how capital markets around the world can interact to create value for, and effectively manage the risk of, corporations and their stakeholders. Examine institutional differences between markets and the impact of these differences on risk, costs, and return on investment. Gain in-depth knowledge of real estate markets in Europe, North America, Asia-Pacific, and the transitional/developing world. Learn about the settlement of trades, derivatives processing, accounting and valuation service, foreign exchange, cash management, income collection, single point of contact for all custody transactions, corporate action processing, tax services, and proxy voting.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes



**REFI1-CE 9368 Global Real Estate Economics (2 Credits)**

Gain an understanding of the macroeconomic factors that influence global real property markets. The material covered in this course includes studies of changing economic activities, demographic trends, transportation, and local government behavior, as well as the effect of these on real estate.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9369 European Real Estate Markets (2 Credits)**

There's an optimistic outlook for Europe's property industry, with many expecting economic growth to improve over the next five years. But the geopolitical backdrop is creating a shift in focus, with concerns moving from the regional to the global markets. This course introduces real estate professionals to the basic skills and knowledge necessary to facilitate international transactions with European clients, and it is designed to benefit both experienced international professionals and those just getting started.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9370 Asian Real Estate Markets (2 Credits)**

The Asian real estate markets have gained the attention of investors in recent years due to the strong economic performance of the region, higher-than-expected returns in the area relative to European and US markets, and the additional diversification benefits that investment in the region offers. This course will analyze the investment risk, currency risk, political risk, and institutional risk of investing in the Asian real estate markets.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9371 Real Estate Investing in Emerging Markets (2 Credits)**

This course is designed for professionals who are seeking a career in investing, developing, or expanding businesses in emerging markets, domestically or internationally. It focuses on real estate and associated operating businesses, such as retail, logistics, hotels, and certain types of infrastructure. The course also reimagines the classic real estate industry to include the role of real estate in many operating businesses in emerging markets due to the relative (high) value and scarcity of quality real estate assets in these markets. These characteristics often lead to supply-side constraint and, therefore, present a hurdle to scaling businesses such as retail, entertainment, hospitality, and logistics in such markets.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9400 Commercial Real Estate Loan Underwriting (2 Credits)**

This course provides a comprehensive and practical framework for CRE credit risk assessment and lending decisions. Using multifamily loan exercises, learn fundamental credit analysis and underwriting skills. Topics covered include the five Cs of credit, the loan process from preliminary structure through closing, initial setup, income and expense statements, valuation, market analysis, direct capitalization, gross income multipliers, and market rent versus contract rent. Also, discuss net usable and rentable area, vacancy and collection loss, debt service coverage ratio (DSCR), loan-to-value (LTV) ratio, loan stress tests, capital stack, and global cash flow. Learn how to evaluate the borrower and guarantors and how to write clear, concise credit memos.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9412 Real Estate Capital Markets (0 Credits)**

Learn how the world of real estate meets the world of finance and how debt and equity are raised to finance real estate transactions. Topics include the structure and participants of the public and private real estate capital markets; sources of debt and equity financing; deal structuring; tranches; risk and return; weighted average cost of capital (WACC); the capital asset pricing model (CAPM); the risk-free rate of return; note structures; mezzanine debt; REOCs; real estate-related bonds; private and public real estate investment trusts (REITs); commercial real estate debt markets, including the mortgage finance system; securitization; and commercial mortgage-backed securities (CMBS).

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9414 Private Equity and Institutional Real Estate Finance (2 Credits)**

Most commercial real estate transactions involve private equity or institutional investors who approach real estate as an alternative asset class to complement their broader investment strategy. In this course for aspiring real estate professionals, acquire the skills and knowledge to understand and to participate in these investments. Become familiar with real estate as an institutional investment, the different types of PE investors and their respective motivations, private structures and their counterparties/stakeholders, fund formation and life cycle, and the evolving landscape for private equity real estate. Learn to analyze the capital stack of a private structure through the lessons of the current economic contraction and ensuing restructurings. Topics include fund strategies, private equity investment vehicles, joint ventures, j-curve, waterfalls, risk and return, governance issues, alignment of interests, and documentation.

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](mailto:sps.realestate@nyu.edu).

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**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9416 Real Estate Portfolio Management (2 Credits)**

Explore the concepts, tools, and strategies used in the management of portfolios of real estate investments. Learn why investors should evaluate potential real estate investment deals in relation to their overall portfolio goals. Topics covered include the risk-return paradigm; geographical and financial diversification; risk profiles including core, value-add, and opportunistic; performance measurement and analysis; and mathematical and statistical tools. Also, examine portfolio standards and practices; portfolio selection, allocation, and balancing; asset-only versus asset-liability allocation; interest-rate sensitivity; measures of duration for property investment; and optimal portfolios, including theory and applications.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9420 Hotel Investment Analysis and Valuation (2 Credits)**

Unlike other real estate assets in which revenue streams are tied to short- and long-term leases, hotels can re-lease on a daily basis. However, national, regional, and local economic factors have a significant impact on a hotel's ability to re-lease and on its rates. Designed for commercial appraisers, lenders, brokers, portfolio analysts, hotel industry professionals, and investors, this seminar examines the economic factors that generate hotel revenues. Topics include operating expenses, operating ratios, capitalization rates, and values for the four primary hotel categories: budget, mid-priced, upscale, and luxury (and related) franchises. Various research and reference sources are discussed and utilized.

*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

**REFI1-CE 9421 Analyzing Real Estate Investment Trusts (REITs) (2 Credits)**

Learn how to analyze the financial performance of a publicly traded real estate investment trust (REIT), to calculate various valuation metrics, and to make investment decisions based on your results. This class focuses on both qualitative and quantitative analysis.

Learn how to determine strategy, to interpret portfolio statistics, to understand the income statement and the REIT-specific metric funds from operation (FFO), to discern balance sheet strength, and to assess dividend-paying ability. The course also covers management teams and demonstrates how to access and approach publicly available documents.

*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](mailto:sps.realestate@nyu.edu)

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**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9422 Real Estate Investment Syndication: Acquiring and Managing Real Estate Using Other People's Money (0 Credits)**

Learn the role of the person pooling funds for the purpose of acquiring real estate assets, as well as the legal and business requirements for successfully running a real estate syndication business. Topics include consideration of the regulatory framework, such as taxes, entity formation issues (corporation), and federal and state securities laws and regulations; specified pools versus blind pools; and property types and property selection. Gain insight into structuring and managing the syndication, including marketing and identifying investors, as well as maximizing opportunities to generate revenue. Examine the basics of reading and evaluating a prospectus and private placement memorandum, the issues specific to public and private real estate investment trusts (REITs), and liquidity considerations.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9423 Real Estate Taxation (2 Credits)**

This course provides an understanding of the impact of taxation on real estate investment, as well as an overview of accounting and tax rules that are applicable to the real estate and construction industries. The Tax Cuts and Jobs Act of 2017 created two new code sections that greatly benefit real estate investors, Section 199A and Section 1400Z. These sections will be discussed in detail providing the investor with the most sophisticated tax planning ideas. The course also covers tax and accounting concepts, principles, rules, regulations, and reporting requirements. Discuss the accounting and tax issues that are critical to understanding, managing, operating, and investing in real estate, with a focus on income tax analysis.

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

**REFI1-CE 9424 Principles of Sustainable Real Estate (2 Credits)**

Learn the core concepts of sustainable design. Topics include an overview of the current initiatives and practices used to economically and successfully implement eco-friendly measures in the design, construction, and development of commercial and residential high-rise properties; government initiatives and guidelines; rating systems; and financial incentives. Examine the roles of the owner, project consultant, and government in sustainable construction; life-cycle analysis and costing; size selection; building materials; energy, water, indoor environmental quality, and waste management; building commissioning and post-occupancy evaluation; and building operations and management.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9425 EB-5 Real Estate Project Finance (2 Credits)**

A once relatively unknown federal financing program, EB-5, is taking the real estate industry by storm. A single 2014 project—Hudson Yards—raised \$600 million in one funding through this program. The Immigrant Investor Program, known as EB-5, offers foreign citizens a US green card if they invest \$1 million (\$500,000 in certain designated areas) in an American project that creates or preserves at least 10 jobs. This financing program has been around since 1990 but was rarely used until real estate developers tapped into the alternative low-cost debt and equity funds to provide large amounts of high-risk capital to fund their developments. This course explores the EB-5 program, its players, the advantages and disadvantages to sourcing and using the funds, and some of the criticism and politics surrounding this increasingly hot topic. Additional topics covered include the law, the process, and the purpose of EB-5 financing; the benefits, costs, and drawbacks; sourcing; the capital stack; regional centers; immigration consultants; investor expectations and economics; funding into escrow; and borrower's use and compliance.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9426 Principles of Sustainable Real Estate (1.5 Credits)**

Learn the core concepts of sustainable design. Topics include an overview of the current initiatives and practices used to economically and successfully implement eco-friendly measures in the design, construction, and development of commercial and residential high-rise properties; government initiatives and guidelines; rating systems; and financial incentives. Examine the roles of the owner, project consultant, and government in sustainable construction; life-cycle analysis and costing; size selection; building materials; energy, water, indoor environmental quality, and waste management; building commissioning and post-occupancy evaluation; and building operations and management.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9430 Commercial Real Estate Decision-Making Using Technology (2 Credits)**

This course provides an introduction to the use of technical applications for commercial real estate (CRE) decision-making. Gain exposure to major commercial software packages and methodologies that are employed by leading real estate practitioners. Guest speakers from Real Capital Analytics and CompStak, data and analytics companies, and Assess RE, a CRE investment analysis platform, will provide live in-class demonstrations. Technology applications have evolved to efficiently and effectively produce higher quantity and more reliable quality data for CRE decision-making in the following areas: the sourcing of potential sites to acquire and capital financing opportunities, market research and due diligence, asset management, investment sales and disposition, and valuation of income-producing properties. Conclude the course by executing the decision-making for a case study that solves a CRE business need.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9500 Underwriting and Structuring Multifamily Loans (2 Credits)**

This course provides a comprehensive and practical framework for CRE credit risk assessment and lending decisions. Using multifamily loan exercises in class, learn fundamental credit analysis and underwriting skills. Topics covered include the five Cs of credit, the loan process from initial setup through closing, the setup, income and expense statements, valuation, market analysis, direct capitalization, gross income multipliers, debt service coverage ratio (DSCR), loan to value (LTV), stressing the loan, and borrower evaluation. In addition, discuss how to write clear, concise credit memos.

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.

This course can be substituted as an elective for the [Certificate in Real Estate Investment](#). Please contact the academic department at [sps.realestate@nyu.edu](mailto:sps.realestate@nyu.edu) for approval. For general information about this course, please call 212-992-3336 or email [sps.realestate@nyu.edu](mailto:sps.realestate@nyu.edu).

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**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9501 Mergers and Acquisitions in the Real Estate Industry (0 Credits)**

Learn the intricacies of the high stakes mergers and acquisitions (M and A) process as it applies to public and private companies in the real estate industry. Examine the drivers of M and A transactions in real estate and the issues involved in the decision-making process. Topics include an overview of the M and A industry, the role of the real estate M and A banker, drivers of M and A transactions, public and private company transactions, special considerations in real estate M and A, the M and A process, M and A valuation and price considerations, negotiations, and closing the deal. Case studies will be used throughout the course.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9502 Underwriting and Structuring Office, Retail, and Industrial Loans (2 Credits)**

Build upon the principles and techniques covered in [Underwriting and Structuring Multifamily Loans/REFI1-CE9500](https://www.sps.nyu.edu/professional-pathways/courses/refi1-ce9500) and learn how to underwrite and structure more complex real estate deals involving office, retail, and industrial loans. Topics include discounted cash flow (DCF) analysis; lease review; rent roll risk; go dark provisions; upside potential; subordination, nondisturbance, and attornment (SNDA) agreements; and single-tenant occupancies and risk mitigation. During the course, prepare a credit memo to "committee" on one or more property types.

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



**REFI1-CE 9503 Underwriting and Structuring Construction Loans (2 Credits)**

Acquire the specialized lending skills to structure real estate construction loans. Topics include sponsorship, completion guarantees, lien waivers, release provisions, loan draws, interest reserve, contingency, third-party reports, hard- and soft-cost budgets, percent complete, work in place, and borrower profile analysis. As part of the course, prepare a credit memo to "committee." 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. This course can be substituted as an elective for the [https://www.google.com/url?q=https://www.sps.nyu.edu/professional-pathways/certificates/real-estate-and-construction/real-estate-investment.html](#) Certificate in Real Estate Investment. Please contact the academic department at <mailto:sps.realestate@nyu.edu> for approval. For general information about this course, please call 212-992-3336 or email [sps.realestate@nyu.edu](mailto: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 or [AskITS@nyu.edu](mailto:AskITS@nyu.edu).

**Grading:** SPS Non-Credit Graded  
**Repeatable for additional credit:** Yes

**REFI1-CE 9504 Hedge Fund Investing in Real Estate (0 Credits)**

Learn how real estate investments fit into a hedge fund's investment strategy and how hedge funds invest in real estate using debt, equity, and hybrid investment methods. Topics include an overview of the hedge fund industry, hedge fund strategies applicable to real estate, the constructs of value and arbitrage, and finding value and arbitrage in real estate. Case studies will be used throughout the course.

**Grading:** SPS Non-Credit Graded  
**Repeatable for additional credit:** Yes

**REFI1-CE 9505 CRE Loan Servicing, Workouts, and the Secondary Market (2 Credits)**

Apply the skill-based knowledge gained from the previous three courses to examine and better understand CRE lending department operations. This course covers processing, underwriting, closing, and servicing CRE loans; setting interest rates and margins; and developing loan programs. Additional topics include funding provisions, ARMs, Reducing Foreclosure, loan workouts, and the loan foreclosure process.

**Grading:** SPS Non-Credit Graded  
**Repeatable for additional credit:** Yes

**REFI1-CE 9506 Valuation of Private Equity and Hedge Fund Investments in Real Estate (0 Credits)**

Learn how private equity (PE) firms and hedge funds value their real estate investments and understand the implications of these valuation decisions for PE and hedge fund portfolios. Topics include an overview of PE and hedge funds, types of real estate investments in PE and hedge fund portfolios, financial reporting requirements, valuation policies, valuation for fund investment relative to appraisals, valuing liquid and illiquid real estate securities, assets and companies, understanding the real estate asset/company capital stack, variations of real estate securities, and minority versus control investments. Case studies will be used throughout the course.

**Grading:** SPS Non-Credit Graded  
**Repeatable for additional credit:** Yes



**REFI1-CE 9507 Commercial Real Estate Lending Operations (2 Credits)**

Examine and better understand commercial real estate. Topics include the processing, underwriting, closing, and servicing of CRE loans; the setting of interest rates and margins; the monitoring of covenants/annual review and tracking of financial data; funding provisions; loan program development; marketing; hedging; compliance; loan workouts; and the loan foreclosure process.

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

**REFI1-CE 9510 Commercial Real Estate Credit Analysis: Property Analysis (0 Credits)**

One of two foundational courses in the Commercial Real Estate Credit Analysis program, this course provides the fundamentals of property analysis necessary to underwrite commercial mortgage loans. Focus on the physical aspects of the property, including property types, the different risks and rewards associated with each, and the subject property's relationship to the market. In this course, learn about obtaining an appraisal and improve your understanding valuation. By the conclusion of the course, be able to critically analyze property data and to use it to underwrite the property section of a commercial real estate mortgage loan.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9520 Commercial Real Estate Credit Analysis: Understanding Cash Flow (0 Credits)**

The second of two foundation courses in the Commercial Real Estate Credit Analysis program, this course presents the fundamentals of property analysis necessary to underwrite a commercial mortgage loan. Focus on concepts related to the property's cash flow, such as understanding rent roll and its contents, extracting data to develop key ratios, performing tenant analysis, and identifying risks to cash flow, among others. Learn to underwrite the cash flow and lettings section of a commercial real estate mortgage loan. Topics include rent roll data collection and organization; rent schedule; CAM; rent increases, concessions, and effective gross rent; expenses; NOI; weighted average lease expiry/break (WALE/WALB); debt yield, debt service coverage, and capacity; interest rate coverage; and tenant credit analysis and risk identification.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9610 Emerging Trends in Real Estate (0 Credits)**

Log in to hear our faculty provide their insight on current real estate investment trends, real estate finance and capital markets, underwriting and securitization, and other real estate issues.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9630 The Business of Real Estate Intensive I: Property Valuation (4 Credits)**

This intensive, one-week course provides a solid foundation for understanding the high-stakes business of commercial real estate. Through exposure to real-world applications, develop an understanding of the essential concepts and underpinnings of commercial real estate finance, investment, and asset valuation. Topics include the nature of real estate and real estate markets, real estate valuation concepts and techniques, and time value of money and mortgage calculations. Discuss property-level income statement and pro forma analysis, capitalization rates and direct capitalization, discounted cash flow analysis and yield capitalization, real estate financial modeling, investment analysis, and analyzing the deal.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9632 Commercial Real Estate Credit Analysis: Property Analysis (0 Credits)**

One of two foundational courses towards the completion of the Commercial Real Estate Credit Analysis program, this course provides the fundamentals of property analysis necessary to underwrite commercial mortgage loans. Focus on the physical aspects of the property, including property types and the different risks and rewards associated with each type, as well as the subject property's relationship to the market, obtaining an appraisal, and understanding valuation. By the conclusion of the course, you are able to critically analyze property data and use it to underwrite the property section of a commercial real estate mortgage loan.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9640 Real Estate Financial Modeling and Analysis Intensive (0 Credits)**

Improve your cash flow analysis and financial modeling skills to organize and present real estate transaction and investment data more efficiently. Begin with a review of quantitative calculations and measurements using the HP 12c financial calculator and progress to setting up a financial model template using Excel. Concepts and measurements covered include annual property operating statements; pro forma forecasting and preparation; net operating income (NOI), cash-on-cash return, internal rates of return (IRR), net present value (NPV), discounted cash flow, residual value, capitalization rate, debt service, depreciation, and capital gains. Property types covered include office, residential, industrial, and retail. Learn spreadsheet design and formula composition and start developing a financial model template for acquiring and refinancing commercial real estate.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9670 Global Real Estate Transactions (0 Credits)**

Develop your international investment skills by applying a transactional due diligence framework to global real estate investment deals. Apply tools to analyze various risks, including sovereign, partner, market, legal, tax, foreign exchange, interest rate, and valuation framework. Gain a deeper understanding of a range of international real estate markets through select global real estate investment case studies. This course presents both a framework for global real estate markets and a framework for investment risk. Topics include global real estate capital flows, leverage and capital structure, global public and private debt and equity markets, global income statement risks and analysis, the investor's perspective, international partner risk, global infrastructure trends, and investment risk management framework.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9680 The Business of Real Estate Intensive II: Debt and Equity Finance (4 Credits)**

Further your understanding of commercial real estate investment decision analysis by applying a framework of advanced analytical techniques and financial structuring to property acquisitions and dispositions. Learn to find the appropriate discount rate based upon the weighted average cost of capital (WACC). Explore the effects of leverage, and prepare a before- and after-tax investment analysis based upon net present value (NPV) and internal rate of return (IRR). Topics include the top-down approach to investing, essential investment ratios and the effects of leverage, forms of ownership for pooled equity investments, and partnership taxation. Discuss capital markets, funds flow to commercial real estate, alternative real estate financing and investment vehicles, CMBS and securitization, and private equity investment vehicles and waterfalls.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9681 Real Estate Capital Markets Intensive (0 Credits)**

Strengthen your understanding of the interplay among the real estate finance markets, overall capital markets, and the economy. Examine the structure of and participants in public and private real estate capital markets. Also, discuss sources of debt and equity financing, deal structuring, tranches, risk and return, note structures, mezzanine debt, real estate-related bonds, private and public real estate investment trusts (REITs), commercial real estate, private equity markets, corporate unsecured debt, capital structure and implications for value, and the impact of leverage on risk and returns.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9682 Real Estate Financial Modeling (0 Credits)**

Learn to develop a financial model template for the acquisition and refinancing of commercial real estate, using Microsoft Excel software. Topics covered include annual property operating statements, pro forma forecasting and preparation, net operating income (NOI), cash-on-cash return, internal rates of return (IRR), net present value (NPV), discounted cash flow, residual value, capitalization rates, debt service, the implication of leverage on investment returns, depreciation, and capital gains. Property types covered include office, residential, industrial, and retail.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9685 Real Estate Investment Banking and Capital Markets Intensive (0 Credits)**

Strengthen your knowledge of corporate finance and capital markets through an examination of how the public capital markets value commercial real estate investments and firms and assess risk. Acquire a comprehensive understanding of value creation during the life cycle of a real estate firm with a focus on the role investment banking plays in reallocating risk and enhancing value. Gain hands-on knowledge of this process through a mixture of conceptual frameworks, practical applications, and case studies. Topics include Initial Public Offerings (IPOs); transitioning from private to public markets; secondary equity offerings; corporate unsecured debt; the nuances of leverage; mergers and acquisitions (M&A); and Leveraged Buy-Outs (LBO).

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9686 The Business of Real Estate Intensive II: Investment Decision Analysis (3 Credits)**

Through hands-on exercises and a sequence of increasingly complex case studies, hone your ability to think critically about real estate investment deals. Analyze a single-asset real estate transaction, and then match multi-asset deals with investor objectives. Explore the dynamics of private equity-funded real estate transactions and related investor considerations. Topics include real estate investment concepts, financial analysis of real property investments, single-asset investing, multi-asset investment analysis, the matching of investor profile to real estate investment, the financing of real estate deals, the structuring of real estate deals from an investor's perspective, real estate private equity investing, private equity investor returns, and institutional investors and real estate.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9689 Summer Intensive in Global Real Estate Finance and Investment (0 Credits)**

Learn how to analyze the potential of global real estate investments and development projects, and how they might meet investor objectives. In this five-day intensive program, participants are introduced to advanced analytical techniques and shown how to value an investment opportunity using an optimal mix of financing with a minimization of risk. Practical applications of the real estate analysis techniques are used throughout the program. By the conclusion, a number of spreadsheets are made available for immediate use to enable participants to make informed investment decisions.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9690 Real Estate Corporate Finance Intensive (0 Credits)**

Gain a solid understanding of cutting-edge corporate finance concepts, and learn to apply them to real estate companies and real estate investment decisions. This intensive examines the underpinnings of financial markets and investigates how they intersect with corporate objectives and financial technology. Class discussion focuses on developing creative solutions for real estate companies within market and regulatory constraints. Please note that this course does not cover concepts in corporate real estate.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9692 Real Estate Capital Markets and Portfolio Analytics Intensive (0 Credits)**

Strengthen your understanding of the interplay among the real estate finance markets, the overall capital markets, and the economy. Examine the structure and participants of the public and private real estate capital markets; sources of debt and equity financing; deal structuring; tranches; risk and return; note structures; mezzanine debt; real estate-related bonds; private and public real estate investment trusts (REITs); commercial real estate debt markets, including securitization; and commercial mortgage-backed securities (CMBS). Gain a better understanding of portfolio analysis for more informed portfolio allocation, acquisition, and balancing decisions. Particular focus is placed on the underlying standard portfolio theory assumptions and their performance for real estate markets.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9693 Summer Intensive in Global Real Estate Development (0 Credits)**

Gain a comprehensive understanding of real estate development by analyzing the unique challenges associated with developing projects in international locations. Explore the institutions, actors, and processes involved in global real estate development. Examine each stage of the process, the procedural and analytical skills required, and the opportunities available over various real estate sectors and regional markets. Specific attention is given to strategies and decision-making tools that balance social impacts and environmental sustainability while optimizing financial return potential.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9695 Summer Intensive in Global Real Estate Markets (0 Credits)**

Join distinguished, international guest speakers and faculty from New York University for a dynamic five-day intensive program of study focusing on the global real estate markets of Europe, Asia, the Middle East, and the Americas. Examine the transnational real estate transactions and investments and the firms that operate in this environment with a special focus on four principal areas of concern: the institutional framework at the property and sovereign level, political considerations, currency markets, and capital markets.

**AREAS COVERED**

- Global real estate investors and trends.
- Globalization of real estate capital markets.
- Risk and portfolio management.
- Laws and regulations.
- Legal representation.
- Environmental requirements.
- Land ownership and title.
- Tax regimes.
- Currency exchange and hedging.
- Use of off-shore entities and transactions.
- Development rights.
- Cultural differences and considerations.

The team of senior instructors is drawn from the graduate and professional program faculty at NYU Schack Institute of Real Estate, all of whom are accomplished professionals in their fields, as well as experienced instructors.

**Tom Geurts**, academic director and clinical associate professor, NYU Schack Institute of Real Estate.

**Stephen P. Peca**, Moody's Analytics, Inc.

**PROGRAM NOTES**

This program counts as one course toward the Certificate in Real Estate Finance and Investment for students pursuing the accelerated certificate option. Tuition includes course materials, refreshments, and luncheons. For those seeking a letter grade for this course, an exam is administered on the final day of the class.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9697 Global Real Estate Markets Intensive (0 Credits)**

Join distinguished, international guest speakers and NYU faculty members for the first of two dynamic, five-day intensive courses focusing on the global real estate markets of Europe, Asia, the Middle East, and the Americas. Explore international investment transactions in depth, with a special focus on the key areas of property rights and sovereign issues, political landscape, intercultural negotiation and behavioral finance, currency markets, capital markets, and cross-border transaction procedures.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9698 Global Real Estate Transactions Intensive (0 Credits)**

Building upon the foundational knowledge gained in [Global Real Estate Markets Intensive](http://scps.nyu.edu/academics/course_detail.html?id=REFI1-CE9697), further develop your international investment skills by applying a transactional, due-diligence framework to global real estate investment deals. Develop the tools to analyze the various risks, including sovereign, partner, market, legal, tax, foreign exchange, interest rate, and valuation framework. Gain a deeper understanding of a range of global real estate markets through select global real estate investment case studies. This course, along with *Global Real Estate Markets Intensive*, presents frameworks for both global real estate markets and investment risk.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9699 Global Real Estate Transactions (0 Credits)**

Develop your international investment skills by applying a transactional due diligence framework to global real estate investment deals. Gain the tools to analyze the various risks, including sovereign, partner, market, legal, tax, foreign exchange, and interest rate, as well as the valuation framework. Gain a deeper understanding of a range of international real estate markets through select global real estate investment case studies. This course presents a framework for both global real estate markets and investment risk.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFI1-CE 9700 Infrastructure Projects and Investments (0 Credits)**

Learn why infrastructure projects—roads; airports; and power, health, and educational facilities—are privately funded investment vehicles for some real estate developers and institutional investors. If you are seeking real estate development options or additional outlets for your investments, then this course can teach you the essential concepts of infrastructure project types, project and financial analysis, financial structuring, project agreements and key legal documentation, risk management, and public-private partnerships.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes