

**SAMPLE 2-DAY UNIVERSITY TRAINING CLASS AGENDA
LEVELS: INTERMEDIATE, ADVANCED**



Real Estate Financial Modeling at The MIT Center for Real Estate
2-Day Excel-based Commercial Real Estate Financial Modeling Training



Friday, February 10th – Saturday, February 11th, 2012

Massachusetts Institute of Technology Campus
Building 9, 3rd Floor, Lecture Hall
105 Massachusetts Avenue, Cambridge, MA 02142

Instructors:

Bruce Kirsch, Editor, Real Estate Finance and Investments: Risks and Opportunities, 3rd ed.

Bulkeley Banks, Senior Director of Financial Modeling, Real Estate Financial Modeling

Overview

This is a 2-Day class that teaches intermediate and advanced Excel-based financial modeling techniques specific to a variety of real estate property and transaction types. In addition to other topics, this class addresses the financial structuring of partnerships and partitioning of cash flows for profit sharing.

Format

Participants will follow along in Excel on their laptops, perform skills and model-building exercises and have an ongoing Q&A with the instructor. Participants are encouraged to ask their questions in real time to have them answered by the Instructor on a rolling basis.

Schedule Summary

Friday, February 10th

10:00 AM to 1:30 PM	Equity Joint Venture Partnership and Waterfall Modeling
1:30 PM to 2:00 PM	Lunch Break
2:00 PM to 6:00 PM	Mixed-Use Office Building Development Financial Modeling

Saturday, February 11th

10:00 AM to 12:30 PM	Apartment Building Acquisition and Individual Unit Renovation Financial Modeling
12:30 PM to 1:30 PM	Lunch Break
1:30 PM to 3:30 PM	Distressed Commercial Mortgage Note Modeling
3:30 PM to 5:30 PM	Excel-based Customization of a Commercial/Retail Cash Flow Output from ARGUS DCF

Included in Course Fee

- Sophisticated, reusable Excel-based models specific to the class sessions
- PDF slide presentations

What You Must Bring

Your laptop with Excel 2007 or 2010 installed (Excel 2003 is not OK). Macs are OK if they have Excel for Mac 2008 or more recent. Don't forget your power cord and mouse.

Continuing Education Credits



CFA Institute has approved this program, offered by Real Estate Financial Modeling, LLC, for 3.5 CE credit hours. If you are a CFA Institute member, CE credit for your participation in this program will be automatically recorded in your CE Diary.

Detailed Schedule

Friday, February 10th – 10:00 AM to 1:30 PM

Equity Joint Venture Partnership and Waterfall Modeling Bootcamp Training



Equity joint venture partnerships are becoming increasingly complex and their proper structuring and modeling increasingly critical as equity capital requirements have grown given today's more conservative lending environment. Participants follow along in Excel in real time and perform exercises to ensure they are grasping the lesson and are mastering the concepts and technical skills being taught. Topics covered in this 4-hour, interactive session, include:

- Rationale behind targeting disproportionate returns to the Sponsor
- How to achieve disproportionate returns through fees and cash flow partitioning
- Preferred Return overview and variations with respect to priority of payment
- Preferred Return in context (Payment Types A, B and C)
- Nature of Preferred Return (Compounded and not, cumulative and not)
- Annual and Monthly Preferred Return Exercises
- Waterfall Distribution overview, with Animation
- Promote Mechanism overview and modeling
- Look-Back Internal Rate of Return (IRR) Method
- 3-Tier Waterfall modeling
- Double-Promote, 5-Tier Waterfall modeling and Exercise
- Alternate Compounding Periods: Monthly, Daily, Quarterly

- Sample Partnership Structures
- Claw-Back overview and modeling
- Claw-Back Exercise.

Friday, February 10th – 2:00 PM to 6:00 PM

Mixed-Use Office/Industrial Building Development Modeling Training



In this 4-hour, interactive session, participants learn how to model the ground-up development and sale of a commercial (office or industrial) building (with a ground-floor retail component for office building) and income-producing parking component. Participants follow along in Excel in real time and perform exercises to ensure they are grasping the lesson and are mastering the concepts and technical skills being taught. Topics covered include:

- Site and Building Information and Construction Type
- Project Timing Elements
- Capital Structure
- Uses and Sources of Funds
- Cash Flows and Returns
- Capitalized Valuation



CFA Institute has approved this program, offered by Real Estate Financial Modeling, LLC, for 3.5 CE credit hours. If you are a CFA Institute member, CE credit for your participation in this program will be automatically recorded in your CE Diary.

Saturday, February 11th – 10:00 AM to 12:30 PM

Apartment/Multi-Family Building Acquisition and Individual Unit Renovation Modeling Training



In this 2.5-hour, interactive session, participants gain a mastery of Excel-based technical financial projection modeling skills for the acquisition and individual unit renovations (with continued operation) of a rental apartment building with ground-floor retail. The principles and skills taught apply equally to duplexes and 1,000-unit complexes. Participants follow along in Excel in real time and perform exercises to ensure they are grasping the lesson and are mastering the concepts and technical skills being taught.

Topics covered include:

- Integration of historical property data and existing rent roll into your pro-forma
- Modeling of future lease expirations and renewals
- Modeling of the unit renovation program
- Modeling of operating expense savings gained from the renovation/greening of apartment units
- Modeling of acquisition loan financing, residual equity requirement, and permanent take-out loan/refinancing
 - Constructing amortization tables and using the VLOOKUP function efficiently
- Property Disposition

Saturday, February 11th – 1:30 PM to 3:30 PM

Distressed Commercial Mortgage Note Modeling Training



Commercial Mortgage Notes are a **less visible** but potentially highly profitable way of investing in real estate. Participants follow along in Excel in real time and perform exercises to ensure they are grasping the lesson and are mastering the concepts and technical skills being taught. Topics covered in this 2-hour, interactive session include:

- What makes a Commercial Mortgage Note distressed in nature
- The various elements that comprise a Mortgage Note investment, including:
 - Collateral Value and Note Face Value at original underwriting
 - Current Remaining Loan Principal
 - Nominal and Default Interest Rates
 - Receiver Collections
- How to model the acquisition of a Mortgage Note:
 - All cash or with acquisition debt
 - With and without ongoing debt service
 - With and without cash flows after foreclosure but before final sale
- How to model exit opportunities:
 - Sale of Note
 - Partial pay down
 - Sale of the underlying collateral.

Saturday, February 11th – 3:30 PM to 5:30 PM

**Excel-based Customization of a Commercial/Retail Asset
Cash Flow Output from ARGUS DCF Training**

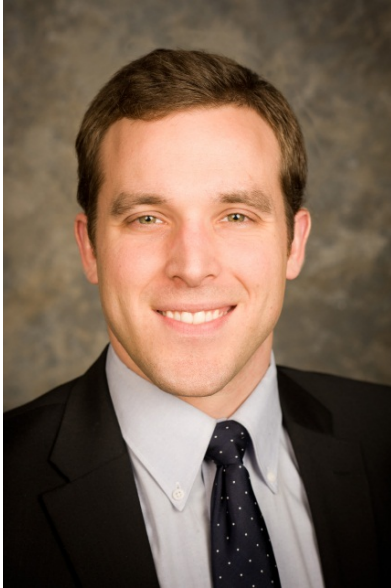


While ARGUS DCF is able to generate future cash flow projections based on market factors and tenant rollover assumptions, a DCF valuation and sensitivity analyses are more easily controlled by using Excel. Additionally, a customized presentation of the property valuation and investment returns is more appropriate to individual deals and partnerships. Participants follow along in Excel in real time and perform exercises to ensure they are grasping the lesson and are mastering the concepts and technical skills being taught.

Topics covered in this 2-hour, interactive session include:

- How to quickly build a live Excel-based pro-forma valuation model that links directly to a 11-year cash flow Excel-based output from Argus
- How to construct data table-based Sensitivity Analysis using discount rate and terminal capitalization rate as variables
- How to construct a leveraged cash flow analysis including both a Senior Loan and a Mezzanine loan
- How to construct and run data table-based Sensitivity Analyses on Internal Rate of Return by varying:
 - Purchase Price vs. Terminal Capitalization Rate
 - Purchase Price vs. Loan-to-Cost
 - Loan-to-Cost vs. Interest Rate.

Instructor Biographies



Bulkeley Banks is REFM's Senior Director of Financial Modeling, and also serves as Instructor for REFM. In these roles, he creates financial models, spearheads consulting client assignments, and conducts training sessions at top university programs including Cornell, The Wharton School, and Georgetown University.

Mr. Banks holds a Masters in Professional Studies in Real Estate from Georgetown University, where he served as the Finance Co-Chair on the Student Advisory Board in Real Estate. Prior to joining REFM, Mr. Banks worked at the University of Chicago's Evolution and Ecology Lab analyzing genetic variation in botany. He also holds a B.A. in Philosophy from the University of Chicago, where he was awarded the Herman S. Dunlap Scholarship.



Bruce Kirsch is the founder and principal of REFM, and is an Editor of the Third Edition of Real Estate Finance and Investments: Risks and Opportunities (Linneman), the top real estate finance textbook.

Mr. Kirsch instructed on real estate finance and financial modeling for three years as Adjunct Faculty at Georgetown University. A highly-acclaimed trainer, Mr. Kirsch previously worked in commercial brokerage and real estate investment in New York and Washington, DC. Mr. Kirsch holds an MBA in Real Estate from The Wharton School, where he was awarded the Benjamin Franklin Kahn real estate scholarship. He also holds a B.A. in Communication from Stanford University.