

DESCRIPTION

Design, Development, Practice is a workshop that revolves around the interplay between design and finance in the early stage of residential development.

Design and finance are seldom discussed together due to the perceived notion that they belong to two different disciplines. For developers, however, design can become a powerful tool when scoping the financial potential of projects. For architects, understanding the financial side of the operation will not only strengthen the solution but, perhaps more importantly, solidify how the solution is executed and materialized.

FOR

This workshop is for students from MSRED as well as MArch and SMArchs. But anyone who wishes to gain insight into the overall process of development projects in a real-world setting—from conception to construction to operation—may find the course material relevant to their needs.

REQUIREMENTS

In each session, students will work on a set of exercises and asked to share the outcome at the end. Participation is crucial as the majority of learning will take place in the form of a discussion. Students are required to develop a comprehensive development proposal and present the finished proposal on the last day of class. A successful proposal will clearly illustrate the core design concept and development thesis as well as a feasible financial strategy.

FALL 2020
MIT SA+P

MONDAY
7:00PM—10:00PM

CREDITS
9 Units (3-0-6)

COURSE NO.
11.S968

ROOM
Online (Zoom)

SCHEDULE

The first half of the workshop (week 1—5) will focus on building visual and financial literacy in real estate development. Each session will begin with a lecture on fundamental finance and design concepts. A set of exercises will follow to conclude the lecture. The second half (week 6—10) is dedicated to developing a comprehensive proposal for properties in Boston. On the last day of class, students will present their finished proposal to a group of guest critiques.

SYLLABUS AND SCHEDULE
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LECTURER
Minkoo Kang
mkangk@mit.edu

SYLLABUS (1/2)

01 09/14/20 INTRODUCTION
UNCONVENTIONAL ATTEMPTS

By examining successful cases of design and technological interventions in real estate development, we study how these ‘unconventional’ attempts are impacting future practice. An introduction to the course structure and objectives will be outlined as part of the lecture.

possible financial constraints at various points in the development process.

- Introduction to financial modeling
- Market research & site analysis
- Real estate valuation practice I

02 09/21/2020 LECTURE
PART I: RESEARCH
DEVELOPMENT PROCESS:
FROM CONCEPT TO COMPLETION

We look at development projects in Boston from due diligence to completion. Each project presents unique challenges in varying circumstances. We identify various factors involved in the decision making process that impact the final shape of the building.

04 10/05/2020 LECTURE
BUILDING VISUAL LITERACY

We look at various types of architectural practices and analyze how different design approach leads to a different outcome.

- Massing Study
- Real estate valuation practice II

05 10/13/2020 LECTURE
GREEN & AFFORDABLE HOUSING

We question the notion of market value in real estate and survey alternative development strategies that can make housing affordable. We also study technologies that help improve the building’s energy performance by reducing the carbon footprint.

- First assignment site introduction
- Student introduction/group formation

- Develop alternative financing strategy
- Real estate development charrette

03 09/28/2020 LECTURE
BUILDING FINANCIAL LITERACY

We study basic financial concepts that relate to property acquisition and identify

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SYLLABUS (2/2)

PART II: PRACTICE

06 10/19/2020 DISCUSSION
A CONVERSATION WITH THE
PROPERTY OWNERS

We kick off the second part of the workshop by inviting Bryan Lee from Transom Real Estate and Ross Cameron from Elkus Manfredi. They will discuss real estate development from the perspective of property ownership. Students begin the groundwork for the final project.

GUEST Bryan Lee (*Principal, Transom Real Estate*)

GUEST Ross Cameron (*Vice President, Elkus Manfredi Architects*)

07 10/26/2020 DISCUSSION
A CONVERSATION WITH THE
DESIGN-BUILD DEVELOPER

Colin Booth and Andres Bernal from Placetaylor will join the session to discuss their unique position as 'Design-Build Developer' and how it informs their strategy and outcome. Students are welcome to share their progress so far.

GUEST Colin Booth (*Strategic Director, Placetaylor*)

GUEST Andres Bernal (*Director of Architecture, Placetaylor*)

08 11/02/2020 WORKSHOP
REALITY CHECK: CONSTRUCTION

Joe Flaherty from Tocci Building Corporation will join the session to discuss his work as a pre-construction budget specialist. We examine how cost estimation works on different design choices and learn how to adjust the budget accordingly. We will then go over each group's construction cost and feasibility.

GUEST Joe Flaherty (*Pre-construction manager, Tocci Building Corp.*)

09 11/09/2020 WORKSHOP
REALITY CHECK: FINANCE

Charles Steelman from Steelman Development will join the session as a real estate finance specialist. He will discuss different factors that constitute financial fitness in real estate development projects and provide feedback on the work in progress proposal.

GUEST Charles Steelman (*Principal, Steelman Development*)

10 11/16/2020 FINAL PRESENTATION

GUEST (TBD)

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REFERENCE READING

- Graaf, D. R. (2019). *Four Walls and a Roof: The Complex Nature of a Simple Profession* (Reprint ed.). Cambridge, MA: Harvard University Press.
- B6 Baumeister: Curated by Reinier De Graaf. *Baumeister Magazine*, 2019.
- Rasmussen, S. E. (1964). *Experiencing Architecture* (2nd ed.). Cambridge, MA: The MIT Press.
- Geltner, D. (2013). *Commercial Real Estate Analysis and Investments* (w/ CD) (3rd ed.). Brookfield, WI: OnCourse Learning.
- Caviar, S., & Space Caviar. (2014). *SQM*. New York, United States: Macmillan Publishers.
- Willis, C. (1997). *Form follows Finance: Skyscrapers and Skylines in New York and Chicago* (1st ed.). New York, NY: Princeton Architectural Press.
- Poorvu, W. J., & Cruikshank, J. L. (1999). *The Real Estate Game*. New York, NY: The Free Press.
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- Kostof, S., & cuff, dana. (2000). *The Architect*. Berkeley, CA: University of California Press.
- Frieden, B. J., & Sagalyn, L. B. (1991). *Downtown, Inc.* Cambridge, MA: The MIT Press.
- Steele, B. (Ed.). (2010). *Supercritical: P. Eisenman & R. Koolhaas*. AA Publications.

ABOUT THE INSTRUCTOR

Born in Seoul, Minkoo Kang was a researcher in Moscow, and an architect at OMA in Rotterdam, Doha, Hong Kong, and New York office. After studying real estate development at the Massachusetts Institute of Technology, he is now working as an architect and real estate developer in Boston.

FOR MORE INFO

please email MKANGK@MIT.EDU

