

SMU REAL ESTATE TRACK

LKC School of Business

School of Economics



SMU

SINGAPORE MANAGEMENT
UNIVERSITY

27 March 2025



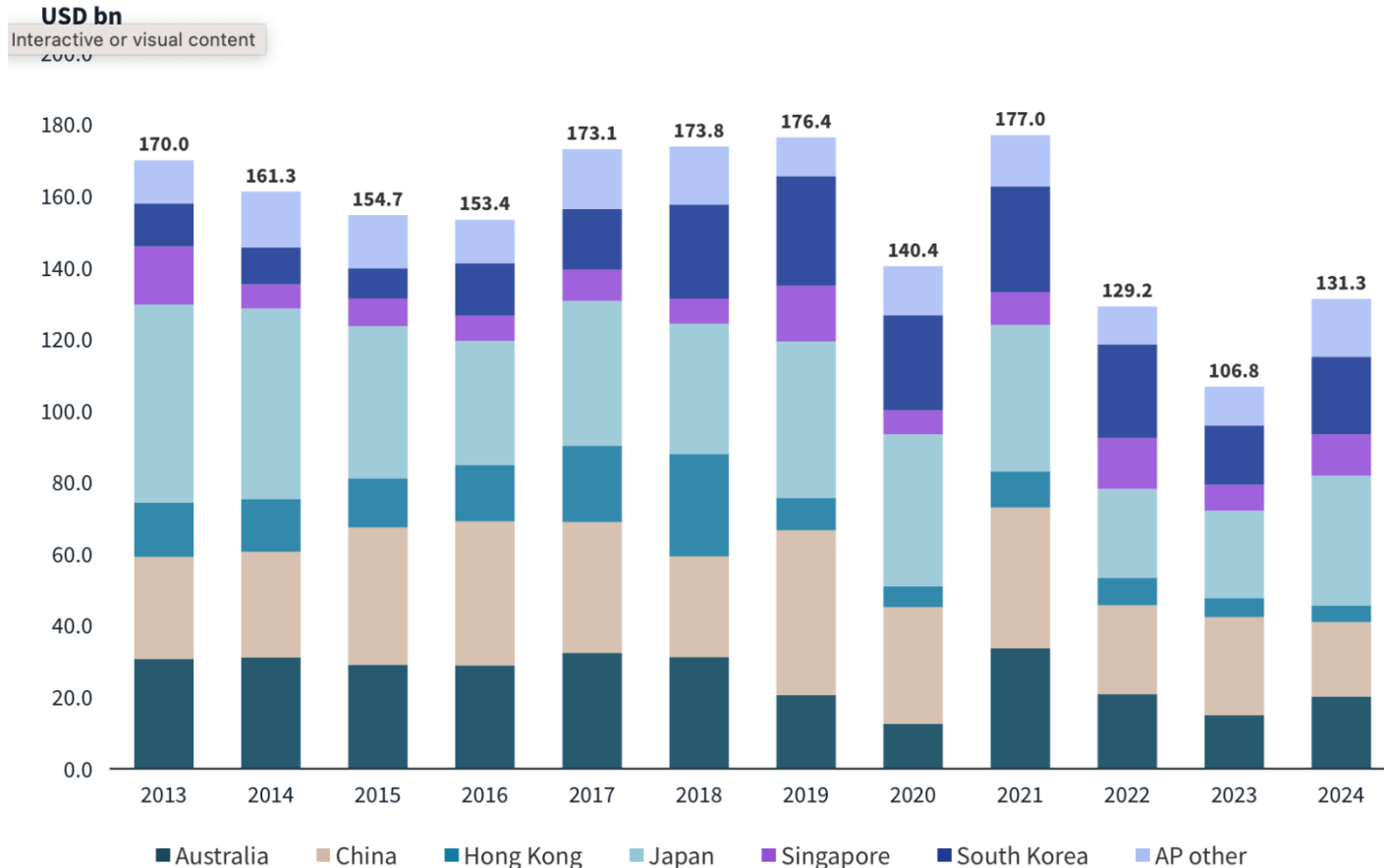
Why Real Estate?

SIZE OF COMMON RE ASSET CATEGORIES



The value of all the world's property stood at \$379.7 trillion at the end of 2022, a rise of 18.7% over the past three years. Real estate is worth more than the global equity and bond markets combined and is almost four times the size of global GDP.

Asia Pacific real estate investment surges 23% in Q4 2024, marking the fifth consecutive quarter of annualised growth



Source: JLL Research, as at Q4 2024

SINGAPORE NEEDS MORE REAL ESTATE PROFESSIONALS FOR INVESTMENTS AND FINANCE

Source: Asia Pacific Real Estate Market Outlook 2022 CBRE Singapore, <https://www.cbre.com.sg/insights/reports/asia-pacific-real-estate-market-outlook-2022>

The SMU Real Estate Track

Students will leverage on the fundamentals of Finance, Business and/or Economics and acquire the quantitative and qualitative tools necessary for variety of job roles in the sector.

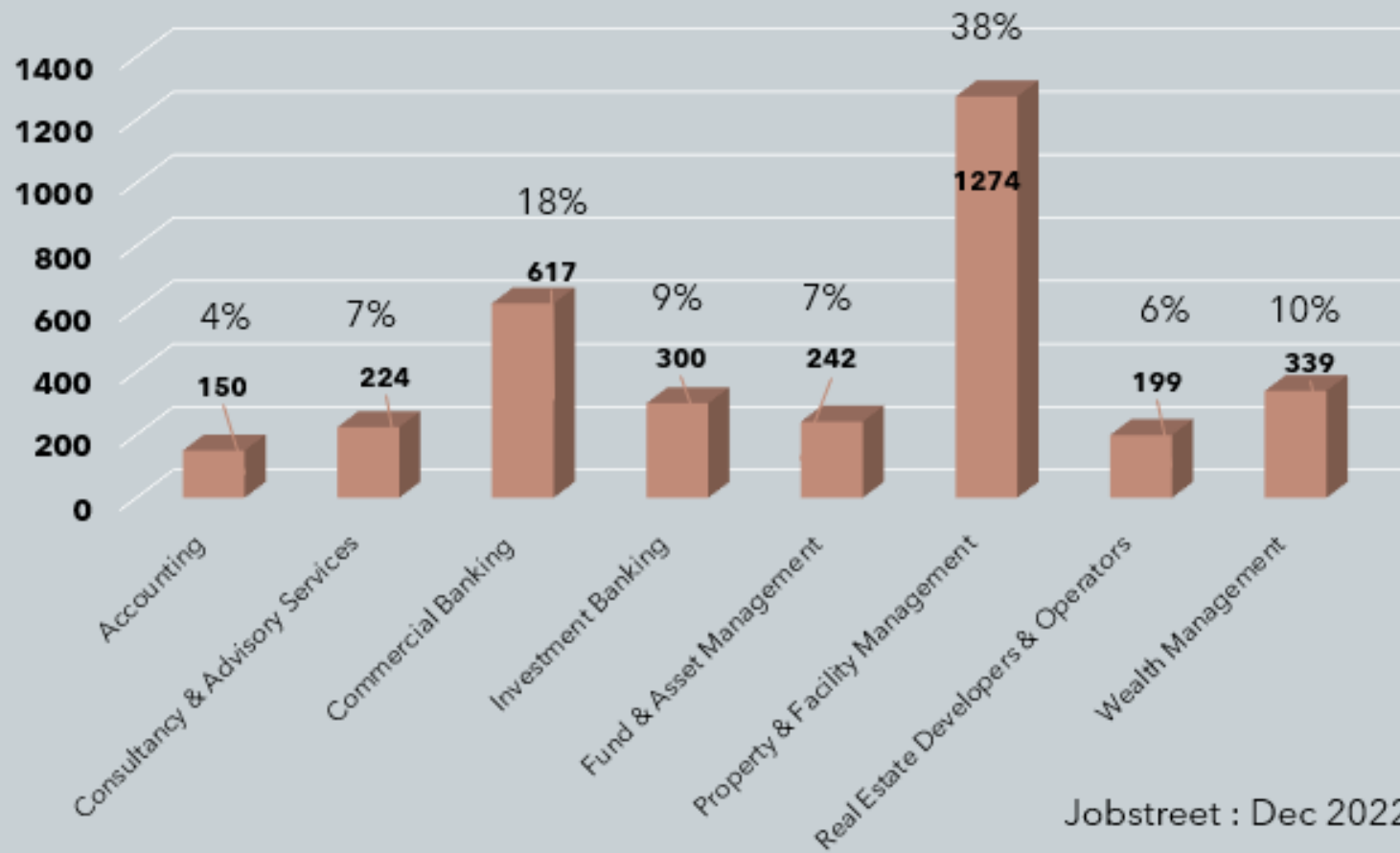
The track prepares SMU undergraduates to be well-equipped with foundational skills needed for real estate companies and pursue opportunities in the exciting and fast-growing sector in the region.



FOCUS OF THE REAL ESTATE TRACK IN SMU IS ON INVESTMENTS AND FINANCE

Real Estate Jobs Account for 48% of Jobs Advertised

REAL ESTATE JOBS



Jobstreet : Dec 2022 - Feb 2023

Companies our Graduates have Joined



INLAND REVENUE
AUTHORITY OF
SINGAPORE



Real Estate
Investing



Project
Managers and
Analysts for
Real Estate
Development
Projects

Economists/Finance
Specialists
for Banks, REITs,
Real Estate
Firms, Sovereign
Wealth Funds



PONTIAC LAND



Mapletree Real Estate Programme



In 2017, Mapletree Real Estate Programme was established at SMU through S\$3 million endowed gift; SMU to offer specialization in Real Estate Investment & Finance from August 2018

- **Mapletree Scholarship**
- **Mapletree Awards**
- **Mapletree Real Estate Forum**
- **Business Study Trips**
- **Mapletree Leadership Series**
- **Mapletree Real Estate Forum**

Local Trip : Toh Guan Road East Warehouse

21 Mar 2024



Overseas Study Trip (Tokyo) 6 to 11 Oct 2024



Capitaland Japan



GIC Japan



Mapletree Japan

Mapletree Leadership Series



(18 April 2024)
Mr Alpin Metha, Temasek International Pte Ltd



(21 Feb 2025)
Mr Mark Chu, Eastdil Secured

SMU Real Estate Career Panel on 5 Sep 2024



Michelle Ling, CEO, Private Capital Management, Mapletree Investments

Han Khim Siew, CEO, OUE REIT

Ashley Wee, Group Managing Director, VestAsia Group

Frank Ng, Co-founder and Chief Investment Officer, EZA Hill

4th Mapletree Real Estate Forum (8 Nov 2024)



Mentor-Mentee Scheme – 6 Feb 2025



SMUREAL Club Networking Events

9 Jul 2024



Forthcoming Events

July
2025

- SMUREAL Networking & Career Panel

Aug/
Sep 2025

- Mapletree Leadership Series
- Real Estate Forum

Oct 2025

- Mapletree Leadership Series
- Overseas Study Trip

Jan
2026

- Mapletree Leadership Series

Real Estate Track Curriculum Structure

Track Requirements 5 CUs

Compulsory (3 courses)

1. Real Estate Economics
2. Real Estate Investments & Finance
3. Risk & Regulation in Real Estate

Electives (Choose 2 courses)

- Real Estate Valuation and Taxation
- Urban Economics and Policy
- Real Estate Development
- Project Financing
- Analytics for Finance & Real Estate
- Infrastructure Economics and Policy

More electives may be offered based on demand and availability of instructors. Other new electives may be developed under SMU-X

Mapping Real Estate Track Modules to Economics Degree

Bachelor of Science (Economics with Real Estate Track)

Economics Degree Requirements

	Course Units (CUs)
<u>Core Curriculum</u>	
Capabilities	6
Communications	4
Civilisations	2
<u>Free Electives</u>	
Any SMU Course	9
<u>Major requirements</u>	
Major Core	9 or 10
Major Electives	5 or 6
Total Required	36

- Real Estate Track ECON electives can be mapped towards **“Major Electives”**
- Real Estate Track FNCE/LGST electives can be mapped towards **“Free Electives”**
- **Note:** ACCT101 and FNCE101 are pre-requisites for FNCE231 and can be mapped towards **“Free Electives”**

Real Estate Track Requirements

Core modules (MUST take all 3):

- FNCE231: Real Estate Investments and Finance**
 - ACCT101: Financial Accounting (Pre-requisite)
 - FNCE101: Finance (Pre-requisite)
- LGST210: Risk and Regulations in Real Estate**
- ECON212: Real Estate Economics**

Electives (CHOOSE 2):

- **ECON253: Infrastructure Economics and Policy**
- **ECON226: Urban Economics and Policy**
- FNCE315: Analytics in Finance and Real Estate
- FNCE232: Project Financing
- FNCE235: Real Estate Development
- FNCE234: Real Estate Valuation and Taxation

If you choose to take Real Estate Track FNCE electives, they can be mapped towards **“Free Electives”**

Mapping Real Estate Track Modules to Business Degree

Bachelor of Business Management (Finance with Real Estate Track)

Business Degree Requirements

	Course Units (CUs)
<u>Core Curriculum</u>	
Capabilities	6
Communications	4
Civilisations	2
<u>Free Electives</u>	
Any SMU Course	7
<u>Major requirements</u>	
Business Core	11
Major Core and Electives	6
Total Required	36
<ul style="list-style-type: none"> Real Estate Track FNCE electives can be mapped towards "Major Core and Electives" Real Estate Track FNCE/LGST electives can be mapped towards "Free Electives" 	

Real Estate Track Requirements

Core modules (MUST take all 3):

1. **FNCE231: Real Estate Investments and Finance**
 - i. ACCT101: Financial Accounting (Pre-requisite)
 - ii. FNCE101: Finance (Pre-requisite)
2. **LGST210: Risk and Regulations in Real Estate**
3. **ECON212: Real Estate Economics**


Electives (CHOOSE 2):

- ECON253: Infrastructure Economics and Policy
- ECON226: Urban Economics and Policy
- **FNCE315: Analytics in Finance and Real Estate**
- **FNCE232: Project Financing**
- **FNCE235: Real Estate Development**
- **FNCE234: Real Estate Valuation and Taxation**

What's Special about the Track?

- **Mapletree Scholarships** **Applications open in January**
 - ❖ S\$40,000 annually to fund up to 2 non-bonded scholarships of \$10,000 each for the recipients' third and fourth years of study
- **Mapletree Awards** **Applications open in May**
 - ❖ S\$40,000 annually to fund up to 5 non-bonded awards of S\$8,000 each
- **Overseas Study Trips** **Applications open in June**
 - ❖ Funds available to plan and support study trips (local and overseas) to visit real estate developments, industrial estates and commercial properties





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INFO SESSION SHARING

27 March 2025

Q&A



Contact Us

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Undergraduate Programmes

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School of economics : undergrad_econs@smu.edu.sg

APPENDIX

SMU Real Estate Track

: CORE UNITS – Course Outline

Real Estate Investments & Finance

- ❖ Real estate investments: public and private equity; public and private debt
- ❖ Valuation of real estate properties
- ❖ Evaluation of real estate projects and developments
- ❖ Financing of real estate: public and private equity; public and private debt
- ❖ Cost of capital

Real Estate Economics

- ❖ Demand and supply of housing
- ❖ House prices and real estate cycles
- ❖ Mortgage instruments, interest rates and default risks
- ❖ Global Financial Crisis and U.S Subprime Loans
- ❖ Local housing policy

Risk and Regulations in Real Estate

- ❖ Contract law, agency law and Tort
- ❖ Property law and titles
- ❖ Contract for sale and conveyancing process
- ❖ Property taxes
- ❖ Real estate financing, property loans and mortgage process
- ❖ Personal rights and proprietary rights
- ❖ Administration of Law and Equity
- ❖ Real Estate Investment Trust

SMU Real Estate Track

: ELECTIVES – Course Outline

Real Estate Valuation & Taxation

- ❖ Various types & nature of real estate, legal Interest & characteristics of real estate market
- ❖ Needs and purpose of property valuation
- ❖ Concept of Value, Cost, Price and Market Value
- ❖ Factors that influence property values
- ❖ Rationale in the use of valuation approaches and methodologies
- ❖ Key concepts in the Property Tax, Stamp Duty, Development Charge & Compulsory Acquisition
- ❖ Property tax payable, stamp duties payable & Development Charge calculations

Urban Economics & Policy

- ❖ Formation of Cities - the economics of agglomeration
- ❖ The urban system, big & small cities, their functions & roles
- ❖ Internal spatial structure of a city & urban housing issues, including location & tenure choice
- ❖ Urban transportation – the economics of traffic congestion
- ❖ Local public goods (Tiebout Model)
- ❖ Land use optimization, public finance & housing markets (Henry George Theorem)
- ❖ The economics of urban planning

SMU Real Estate Track

: ELECTIVES – Course Outline

Real Estate Development

- ❖ Property development cycle
- ❖ Conception of the development project
- ❖ Feasibility study
- ❖ Project financing
- ❖ Project construction
- ❖ Real estate marketing
- ❖ Project completion
- ❖ Post-project management
- ❖ Exit strategies

Project Financing

- ❖ Financing of large scale projects
- ❖ Project cash flow
- ❖ Project risks
- ❖ Project structuring and term sheets
- ❖ One Belt One Road and potential for project financing

Analytics in Finance and Real Estate

- ❖ How big data can be applied in finance and real estate
- ❖ Randomized control trial, differences-in-differences, and regression discontinuity design
- ❖ Analyse cross sectional and panel data
- ❖ Machine learning methods and its application

SMU Real Estate Track

: ELECTIVES – Course Outline

Infrastructure Economics and Policy

This course will provide students with the knowledge and skills to understand key issues and challenges with respect to regulation, governance, policies and market designs for the infrastructure sector, and how these impact on businesses, consumers, the environment, and economic performance.

Course Descriptions

Course Descriptions (1)

REAL ESTATE INVESTMENTS AND FINANCE (Core)

This course focuses on real estate investments and financing from a commercial perspective. It discusses the four quadrants for investments and financing – public debt, private debt, public equity and private equity employed by institutional investors. The course will evaluate real estate investments and financing in each of the four quadrants using a variety of techniques including discounted cash flows and capitalization rates. The course will also cover real estate investment trusts (REITs) and private equity real estate funds.

REAL ESTATE ECONOMICS (Core)

This course is designed as an introductory course to study housing finance systems and housing market outcomes. It provides an overview of real estate markets as well as public policies that affect these markets. The beginning of the course will focus on what determines house price movements (captured by house price indices) and the role of real estate cycles (including bubbles) in mortgage default. The course will then be devoted to analyzing mortgage instruments used to finance investments in real estate. This includes calculations of payment streams for different types of mortgages, consideration of different types of mortgage contracts that shift interest rate and default risk between lenders and borrowers, and the role of the secondary market for mortgage securities. Equipped with aforementioned skills, students taking this course should be able to develop an eye towards the role of housing and mortgage markets in the recent financial crisis as highlighted in the United States and its potential policy implications for the local market.

Course Descriptions (2)

RISK AND REGULATION IN REAL ESTATE (Core)

This course focuses on the legal fundamentals of real estate practice and development in Singapore. While space and the built environment is ubiquitous, real estate remains a unique asset class. The rules relating to its current and future value, how it may be securely transferred from one party to another and its very definition all depend on law. The course is vital for students with an interest in real estate transactions, its development, investment and financing.

REAL ESTATE VALUATION & TAXATION

This course teaches students the use of valuation methodologies and approaches in appraising real estate for sale, acquisition, and leasing; and provides them with a good understanding of real property taxation which can have significant impact on many real estate decisions. The extensive use of examples and case studies will enhance learning and help the students to readily apply their knowledge to address the many real estate issues and challenges commonly encountered in real estate transactions, property development and property ownership.

Course Descriptions (3)

URBAN ECONOMICS & POLICY

This course is designed as an introductory course of urban economics. It covers fundamental principles developed in economics to understand the functioning/ workings of an urban economy and the various aspects of urban life. Firstly, the course begins with the definition of a city, and why cities form by introducing the economics of agglomeration, and how cities interact to form the urban system of the entire economy. These factors affect all urban phenomena. Secondly, the course analyses the internal spatial structure of a city by developing a theory of commuting, housing demand and housing production. It then analyses transportation and land/housing issues in more detail. On transportation, we focus on the economics of traffic congestions, the rationale for congestion pricing (ERP), and the so-called fundamental law of highway congestion. The discussion on land and housing, will address various housing phenomena such as tenure choice and location. The courses will discuss the optimality

Course Descriptions (4)

REAL ESTATE DEVELOPMENT

This course focuses on the real estate development cycle. The main stages of real estate development are (a) predevelopment planning, (b) project inception and roll-out, and (c) post-project management. The first stage consists of activities centred on a feasibility study and due diligence, which will include site planning and development parameters. The next stage is to commence the development, which will include site selection, investigation and evaluation, market study, project management, procurement and regulatory issues. The last stage involves implementing post-project activities including leasing or selling the property, post-construction management and yield enhancement. Each stage has business, financial and operational risks. The course will discuss the embedded activities in the value chain of real estate development for the various sectors, namely, residential, offices, industrial and commercial properties.

PROJECT FINANCING

The course focuses primarily on large projects - those costing at least USD200 million. Through this course, students will learn the mechanics of project finance and the critical success factors for such transactions, including creating value and managing risks. Students will learn how to structure a robust Project Finance Term Sheet to facilitate investment and financing decisions.

The course will include discussions on China's "One Belt One Road" Initiative ("OBOR"), and strategies to capture the opportunities arising from OBOR through Project Finance pathways. Students will also appreciate how finance, economic and political forces are interwoven into project financing especially in the Asia Pacific region.

Course Descriptions (5)

ANALYTICS IN FINANCE AND REAL ESTATE

This course is to help students to apply the econometrics theory with data in finance and real estate in the real world. It will be empirically oriented, with an emphasis on causal identification using various methods such as randomized control trial, differences-in-differences, and regression discontinuity design. This course will focus on applied econometric issues with cross section and panel data. This course will also introduce machine learning methods and its application in finance and real estate

INFRASTRUCTURE ECONOMICS AND POLICY

This course is designed to provide students with an understanding of the theory and practice of the economics of infrastructure provision, regulation, and policy. The first section of the course will deal with reform and governance in the infrastructure sectors and the rationale for privatization and public-private partnerships (PPPs). The theoretical component will cover the rationale for economic regulation, the choice of regulatory instruments, pricing and subsidies, design of markets, regulatory institutions and PPPs. The analysis of these issues will be applied to several infrastructure sectors including water, telecommunications and the internet, transportation, and electricity. The infrastructure sector is increasingly prominent on the sustainability agenda with the adoption of net-zero emissions targets by over 100 countries and large corporations. The course will also discuss policy options and challenges for the transition to net-zero emissions. Relevant case studies will also be used to illustrate the application of economic principles to policy in specific sectors and contexts.