

SYLLABUSES FOR THE DEGREE OF MASTER OF SCIENCE IN REAL ESTATE MSc(RealEst)

(See also General Regulations and Regulations for Taught Postgraduate Curricula)

These syllabuses apply to candidates admitted to the Master of Science in Real Estate in the academic year 2024-25 and thereafter.

Curriculum Structure

The aim of the curriculum design is to provide advanced education in the academic and professional aspects of real estate development, investment, and management. Where appropriate the curriculum will be related to cases not only in Hong Kong but also in the rest of the People's Republic of China and the Southeast Asian region.

To receive the award of Master of Science in Real Estate, a candidate must complete at least 72 credits including 48 credits of prescribed courses.

The prescribed 6-credit courses for Master of Science in Real Estate are:

RECO6014 Real Estate Management;
RECO6042 Law for the Real Estate and Construction Industry;
RECO6059 Project Workshop (RE)*;
RECO6069 Real Estate Investment;
RECO6070 Real Estate Finance;
RECO7076 Property Valuation – Principles and Practices;
RECO7080 Institutional Analysis for Urban Studies; and
RECO7102 Real Estate Development.

Selection of elective courses from the syllabus shall be subject to the approval of the Taught Postgraduate Committee. Not all courses from the syllabus will be offered every year. Candidates are required to take elective courses from a pool of designated electives to be announced by the Programme Director at the beginning of the year.

Selection of elective courses offered by other taught postgraduate curricula of the Faculty of Architecture is subject to prior approval by the Head of the Department in consultation with the respective Programme Directors. Please check the courses offered by these curricula at the time of enrolment and refer to the respective syllabuses for the course descriptions.

* Candidates may take Dissertation (RE) (RECO7103) in lieu of Project Workshop (RE) (RECO6059) in order to meet the requirements of the prescribed courses of the MSc(RE) degree. Both are capstone courses, which focus on the integration and application of knowledge and skills that candidates have acquired throughout their studies. Candidates who take Dissertation RE (RECO7103) as a capstone course may have to complete the curriculum with more than 72 credits.

RECO6001. Urban Planning: Theory and Practice (6 credits)

This course explains and discusses the theoretical and professional issues of town planning and land lease in terms of change in land use and property boundary by contract and edict.

Assessment: 30% coursework and 70% examination

RECO6003. Economics for Professionals (6 credits)

This course introduces a broad range of economic analytical techniques for professionals in real estate and construction industry. The participants will revisit the function of modern economy from an economic perspective. The course will begin with the fundamental market model with economic analysis of costs. Then, it will investigate the economic reasons behind various behaviour of consumers and firms in real world. The role of government policy will be examined. The course will also discuss the frontiers in the interdisciplinary approaches of economic analysis.

Assessment: 100% coursework

RECO6004. Construction Economics (6 credits)

This course examines construction economics, in particular building economics, from both a macro and micro perspective. In so doing, it focuses on issues pertinent to construction firms and construction projects. This includes global construction cost drivers, managing cash flow, management of risks, life cycle costing, cost estimation, and cost control.

Assessment: 100% coursework

RECO6014. Real Estate Management (6 credits)

This course examines the fundamental knowledge and applications of real estate management. Topics to be covered include asset management, strategic decision-making, and facilities management in various types of real estate, such as hotel, shopping centre, office, industrial and public properties.

Assessment: 100% coursework

RECO6016. Land Economics (6 credits)

This course covers the fundamental theories and practices of urban and land economics: urbanization, agglomeration economies, path dependence and destructive innovation, the characteristics of land resources, the concept of rent, land use models, spatial equilibrium models, climate change and land market.

Assessment: 100% coursework

RECO6018. Modern Developments in the Law of Construction Contracts (6 credits)

This course examines the modern development in the laws relating to construction contract: interpretation, programmes, interim certification, set-off of payments, pay when paid clause, variation and architect's instruction, delay and extension of time, liquidated damages; preparation, evaluation and presentation of claims; contractual, non-contractual and ex-gratia claims; global claims; contractual and common law remedies; bankruptcy and insurance in the context of the construction industry.

Assessment: 100% examination

RECO6031. Alternative Dispute Resolution (6 credits)

This course examines the theory and practice of dispute resolution: negotiation; mediation; litigation; arbitration and adjudication; practice and procedure; application in the real estate and construction industry.

Assessment: 100% examination

RECO6032. Law and Practice of Arbitration (6 credits)

This course examines the process of arbitration and adjudication in Hong Kong.

(1) Arbitration - commencement, appointment of arbitrator, procedure and proof; preliminary orders and interim measures, enforcement of arbitral award, recourse against awards, third party funding, arbitration institutions;

(2) Adjudication - feature, contractual and statutory adjudication, multi-tier dispute resolution clause in construction contract; commencement, appointment of adjudicator, procedures, the proposed Security of Payment Legislation and its spirit, adjudicator's decision and its enforcement, challenge to adjudicator's decision, duties and powers of adjudicators; and

(3) the role of expert witnesses.

Assessment: 100% examination

RECO6037. Hong Kong Land Administration (6 credits)

This course examines the basics of the Hong Kong land administration system: its history and functions; how it operates under administrative law; land exchanges and lease modifications; lease interpretation and salient features of land administration in the New Territories.

Assessment: 60% coursework and 40% examination

RECO6039. Planning and Building Development (6 credits)

This course deals with building development by examining the nature and procedures of plan preparation, planning application and building applications; inter-relationship between lease,

planning and building control; planning appeals and building appeals.

Assessment: 20% coursework and 80% examination

RECO6041. Development Projects (6 credits)

This course provides an interactive platform to examine multifaceted issues typical of the land conversion process and real estate market in Hong Kong. A case-based learning approach is adopted for students to actively participate in various problem-solving processes, with the input from featured local developers and interdisciplinary professionals.

Assessment: 100% coursework

RECO6042. Law for the Real Estate and Construction Industry (6 credits)

This course provides a study of the law relating to the real estate development and construction processes: Building and planning control; building contracts (standard forms, comparative studies); agency law; land tenure in Hong Kong; contract for the sale of land; co-ownership; mortgage; deed of mutual covenant and management of multi-storey buildings; financing by pre-sale.

Assessment: 100% examination

RECO6046. Research Seminar (6 credits)

This course aims to familiarize candidates with the rigours of producing a research proposal. Main issues include the development of aims and objectives of the proposed research, determination and justification of a suitable methodology to test hypotheses (if any) and deciding on a practical curriculum for the execution of the research project. Candidates are required to give research seminar presentations of their work as they progress.

Assessment: 100% coursework

RECO6048. An Introduction to Sustainability and its Relevance to the Construction Sector (6 credits)

This course is designed to give candidates a broad introduction to the theoretical concepts of sustainability as well as the practical implications that it has for the construction industry in HK and China and especially to the building design team. The course covers the following aspects: Introduction to the concept of sustainability - historical context; Sustainable development; Environmental impacts; The construction industry and its response to sustainable development; Life Cycle Assessment and its significance; and measurement of social impacts.

Assessment: 20% coursework and 80% examination

RECO6054. Real Estate Derivatives (6 credits)

This course introduces new developments in real estate finance and concentrates on real estate derivatives. The nature of derivatives, pricing basics and indexes are introduced, concentrating on real estate applications. The nature of financial risk in real estate investment and development is considered, together with the use of real estate derivatives as risk management instruments.

Pre-requisite: RECO6070. Real Estate Finance

Assessment: 20% coursework and 80% examination

RECO6059. Project Workshop (RE) (Capstone Experience) (6 credits)

This course comprises a series of workshops focusing on real estate project development. The course reflects the inter-disciplinary nature of the curriculum and aims to synthesise and apply the theories taught in the core courses to a problem set which in practice would engage the combined skills of a number of the professions in the property and construction industries. Through this approach students will understand the importance of teamwork under the exigencies of actual business operations, and will appreciate the significance of their roles in the context of the environmental, planning, financial, innovation, construction, and property markets.

Assessment: 100% coursework

RECO6069. Real Estate Investment (6 credits)

This course introduces the commercial real estate market, presents financial economic principles, concepts, and tools for the analysis of real estate from an investment perspective, and extends such analysis to examine indirect investment vehicles such as REIT.

Assessment: 100% coursework

RECO6070. Real Estate Finance (6 credits)

This course is intended to equip with students the basic financing concepts, theories, tools and development trends in the real estate industry. There are three pillars in this course, namely i) theoretical frameworks, ii) corporate finance, and iii) development finance. Key topics covered by this course include capital structures, leverage, risk management, sources of corporate finance, dividend policies, corporate governance, options of development finance and their financial frameworks, managing risk for project finance and latest trends of financing in the real estate industry.

Pre-requisites: RECO6069. Real Estate Investment

Assessment: 100% coursework

RECO7072 Cities and Real Estate Development (6 credits)

This course deals with the real estate development, market and business in various cities with a particular emphasis on institutional framework and market economy aspects such as real estate regulation, investment practices and development procedures. It also examines and compares key factors affecting real estate development in different cities.

Assessment: 100% coursework

RECO7074 Management Theory and Projects (6 credits)

This course examines fundamental knowledge in management theory and its application to project-based organising, the management of projects and project management in construction. This includes both organisational and individual level theories and their application to the project-based organisation as well as the projects on which they take part.

Assessment: 50% coursework and 50% examination

RECO7076. Property Valuation – Principles and Practices (6 credits)

This course covers the principles and practices of property valuation, land assembly and development controls, market analysis, project evaluation, marketability analysis, development appraisal, tenant portfolio planning and lease negotiation.

Assessment: 60% coursework and 40% examination

RECO7078. Real Estate Business Case Studies (6 credits)

This course examines the practices and processes involved in real estate development taking into account of different perspectives from different stakeholders. Case studies are employed to encourage students to explore different solutions to problems associated with real estate development projects in the public and private sector.

Assessment: 100% coursework

RECO7080. Institutional Analysis for Urban Studies (6 credits)

This course explores the applications of institutional analysis to current issues in the urban markets. It starts with Coase's theory of the firms, Williamson's transaction cost economics, and Hart's incomplete contracts. Then it extends to North's interpretations of institutions, institutional change and their interplays with economic performance. It highlights the conceptual frameworks and tools for carrying out institutional analysis in the built environment, including but not limited to Cheung's contract theory, Coasean bargaining, Ostrom's governance of the commons, Akerlof's analysis of the market for lemons, game theory, experimental and behavioural economics etc. It attempts to better understand the markets of, inter alia, carbon emission and offsets, ESG, urbanization, as well as urban renewal and

conservation.

Co-requisite: RECO6003 Economics for Professionals or RECO6016 Land Economics (except for those who have taken at least one complete introductory economics course at their undergraduate studies, or equivalent courses.)

Assessment: 50% coursework and 50% examination

RECO7087. Green Buildings and Sustainable Built Environment (6 credits)

This course covers the sustainability principles and green building development in the industry. It examines the following key areas: green building concepts and green features; environmental friendly designs and technologies, green procurement, Hong Kong Building Environmental Assessment Method (HK-BEAM), Green Building Assessments, BEAM Professionals, Green Property Management concepts and practices.

Assessment: 100% coursework

RECO7089. Property Rights, Built Heritage Conservation and Sustainable Development (6 credits)

Neo-institutional and Schumpeterian economics are applied to sustainable development via innovations in real estate, systems of de jure property rights, de facto access restrictions, concepts of rent-seeking, subsidiarity and basic survey mapping, and aerial photo interpretations.

Assessment: 100% coursework

RECO7105. Real Estate Capital Markets (6 credits)

This course introduces theories pertaining to asset pricing and practices in public capital markets. It begins with an overview of alternative asset classes and forms of market efficiency. Next, we will discuss financial asset valuation models. Crucial to these models is the discount rate (or the expected return), which can be determined with the capital asset pricing model (CAPM) in a frictionless world. We will further relax some assumptions that underlie CAPM to fit real-life situations. Specifically, traded factors such as value and momentum may bring us closer to the efficient frontier than a single market factor. We will dissect these new factors with the arbitrage pricing theory (APT) and alternative multifactor models. In addition, we will relax the normality assumption and price securities with skewed payoffs (e.g., options). Finally, we will discuss the implications of asset pricing theories on a multi-asset portfolio and the institutional background of public debt and equity markets.

Assessment: 50% coursework and 50% examination

RECO7092. Greater China Real Estate (6 credits)

This course covers the real estate business practices including investment models, financial arrangement, policy, law and taxation in Greater China. It examines the characteristics of the property market, business opportunities and the real estate development process in different cities.

It focuses on the understanding of real estate business operations in various cities in Greater China, particularly integrates innovations & technology as well as the most update national strategy in the area of Digitization, Proptech, Sustainable Finance, ESG & Carbon Neutrality.

Assessment: 100% coursework

RECO7093. Advanced Real Estate Analysis (6 credits)

This course explores the applications of state-of-the-art financial analytical tools, performance measures, and forecasting models in the real estate market. Applications include real estate derivatives, real estate price construction methods, mass appraisal, the interaction between the real estate market and capital market. Selected topics on the determinants of real estate price and rental trends will be discussed.

Assessment: 50% coursework and 50% examination

RECO7094. Construction Management Practice (6 credits)

This course provides a framework for analysing management practice in the construction industry. Students will learn from senior managers and directors of top organisations in the real estate and construction (REC) industries. They will describe the management practices in their respective disciplines, organisations and challenge students to discuss the key issues facing REC at current time. Students will be asked to reflect on what they have learned and are encouraged to quiz the speakers in order to enhance their learning and future prospects in the industry.

Pre-requisite: RECO7074. Management Theory and Projects

Assessment: 100% coursework

RECO7095. Building Design and Construction (6 credits)

This course provides both theoretical knowledge and practical applications about functional design and conventional construction of buildings mainly in Hong Kong. It covers various design and construction aspects of buildings, including envelopes and structures, materials and assemblies; plumbing and drainage; power supply, HVAC; lifts and escalators; fire services; electrical installation; and the inspection and maintenance aspects of these facilities.

Assessment: 100% coursework

RECO7102. Real Estate Development (6 credits)

This course explores the salient elements in the real estate development industry from global perspectives. It covers the key stages of development process, major players, and the key socio-economic and regulatory factors that affect private real estate projects and land development. Selected topical issues such as build-operate-transfer, public private partnership, urban renewal, transit-oriented development and sustainable development etc will be discussed.

Assessment: 100% coursework

RECO7101. Real Estate Analytics (6 credits)

This course introduces a broad range of data analytics skills in real estate related topics. It begins with exploratory analysis where data is visualized through common graphics and hidden data patterns are identified. Then, it moves onto statistical analysis where causal inference skills are introduced. Selected topics on state-of-the-art data analytical skills are illustrated with practical cases. The course offers hands-on experience with the aid of well-established Python packages.

Assessment: 100% coursework

RECO7100. Market Research and Consultancy (6 credits)

This course will guide students to conduct a market research or a consultancy study on an *ad hoc* topic that concerns real estate practitioners, entrepreneurs and policy makers. The findings of the study will be presented in a report.

Assessment: 100% coursework

RECO7099. International Real Estate Market (6 credits)

This course invites scholars and practitioners to discuss issues that affect the business strategies of conducting real estate development projects in the international markets through case study approach. Discussions of the selected cases will cover the underlying market environments, regulatory controls, socio-economic factors, business risks and returns etc. that lead to the outcomes of the end products.

Assessment: 100% coursework

RECO7104. Private Equity Real Estate (6 credits)

The course provides an introduction to the highly specialized private equity real estate market with the essential working knowledge of private equity real estate (PERE) fund formation & structures and investor and fund managers dynamics at the fund management level, investment strategies and cycles, risk and returns analysis at the asset level, portfolio management and risk management and governance issues at the portfolio level. It enables students to equip themselves to be capable of pursuing career in the highly competitive PERE community.

Assessment: 100% coursework

RECO7103. Dissertation (RE) (12 credits)

This course requires candidates to conduct a research and present the findings as a dissertation. The dissertation shall be on an approved topic relevant to the MSc (RE) curriculum.

Assessment: 100% coursework

MHMP8003. Practices of Housing Management and Maintenance (6 credits)

This course aims to introduce and consolidate student's understanding of major concepts and practices of housing management in Hong Kong, including the management of building maintenance. Its objectives are: to discuss the contexts and concepts of housing management; to canvass the tasks and skills in the management of residential properties and related community and commercial facilities; to introduce students to major building fabrics and E&M systems, to analyse their maintenance practices and problems ; and to identify the role of housing managers in the maintenance of properties.

Assessment: 100% coursework

MHMP8006. Housing, Planning and Sustainability (6 credits)

This course aims to provide an integrative and in-depth understanding of Hong Kong's housing system and its relationships with urban planning and the concepts of sustainable development. It discusses the theoretical and practical aspects of housing, making special reference to their relationships with urban planning and sustainable development. Major topics include the housing system concepts, the political economy of housing policies, land use planning, principals of residential planning, housing policy and governance analyses, and the application of the sustainable development perspective to housing analyses.

Assessment: 100% coursework

RECO7108. Sustainability and ESG in Real Estate and Construction: Perspectives and Approaches (6 credits)

This course encompasses a broad spectrum of knowledge and practices related to sustainability and ESG (Environmental, Social, and Governance) considerations. It delves into various topics, including sustainability and ESG challenges, scientific investigations, socio-economic-ecological dilemmas, as well as strategic management adjustments and their impacts. Our course offers industry professionals the necessary theoretical knowledge and practical insights to enhance their decision-making capabilities in current and future business operations. Drawing on academic theory, we supplement the learning experience with relevant real-world case studies that focus on specific sustainable development and ESG challenges. These case

studies, such as 'Climate Solutions and Sustainable Investment,' 'Scope 1, 2, and 3 carbon emissions,' 'housing inequality and affordability,' 'ESG Regulatory Reporting and Compliance,' and 'ESG & Climate resilient Indices,' serve as catalysts for class discussions and debates. Consequently, the course fosters extensive discourse on multiple dimensions of sustainability and ESG within the realms of Real Estate and Construction, given its pioneering nature.

Assessment: 100% coursework

RECO7106. Housing Markets and Policies (6 credits)

This course examines housing from a market perspective. First, it covers several housing market demand and supply issues, such as tenure choice, vacancy, immigration, land constraints, and planning. Second, it investigates how government interventions through property taxes, credit access constraints, employment policies, building regulations, and rent control can affect house prices. Third, it explores housing affordability issues and Sub-Divided Units. Finally, the course incorporates discussions of public housing and command-and-control frameworks in the context of housing markets in Singapore and China, respectively. Other than public housing and command-and-control policies, reading materials on all topics are based on housing markets in Hong Kong and the United States.

Assessment: 100% coursework

Amended
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