

**REGULATIONS FOR THE DEGREE OF MASTER OF SCIENCE
IN CONSTRUCTION PROJECT MANAGEMENT
(MSc[ConstProjectMan])**

(See also General Regulations)

Any publication based on work approved for a higher degree should contain a reference to the effect that the work was submitted to the University of Hong Kong for the award of the degree.

Admission requirements¹

Ar35 To be eligible for admission to the curriculum for the degree of Master of Science in Construction Project Management a candidate

- (a) shall comply with the General Regulations;
 - (b) shall hold
 - (i) a degree or other qualification of equivalent standard awarded by this University or by another university or comparable institution accepted for this purpose; or
 - (ii) a professional qualification and membership of an appropriate professional body accepted for this purpose; and
 - (c) shall satisfy the examiners in a qualifying examination if required.
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Qualifying examination

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- (a) A qualifying examination may be set to test a candidate's formal academic ability or his ability to follow the courses of study prescribed: such an examination shall consist of one or more written papers or their equivalent and may include a project report.
 - (b) A candidate who is required to satisfy the examiners in a qualifying examination shall not be permitted to register until he has satisfied the examiners in the examination.
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Award of degree

Ar37 To be eligible for the award of the degree of Master of Science in Construction Project Management a candidate

- (a) shall comply with the General Regulations; and
 - (b) shall complete the curriculum and satisfy the examiners in accordance with the regulations set out below.
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Curriculum

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- (a) The curriculum shall extend over not less than one academic year of full-time study, or two academic years of part-time study, with a minimum of 300 hours of prescribed work, and shall include all examinations, a workshop report and a dissertation as detailed below.

¹ Candidates for admission are normally expected to show evidence of not less than three years' relevant professional experience.

- (b) To complete the curriculum a candidate
- (i) shall follow courses of instruction and complete satisfactorily all prescribed written work and practical work where appropriate;
 - (ii) shall satisfy the examiners in each of the following Core Modules:
 - Real estate economics
 - Construction economics
 - Law and the real estate industry
 - Management theory and construction projects
 - Contract strategies and project management techniques
 - Real estate and Construction management practice

and each of three Electives selected from the modular programmes and any other courses of study in the University approved from time to time. Candidates without an economics background shall be required to study Economics for professional as a programme prerequisite;

- (iii) shall satisfy the examiners in each of the modules followed either by a written paper, or an assessment of coursework, or a combination of these methods;
- (iv) shall complete and present a dissertation which satisfies the examiners; and
- (v) shall complete and present a workshop report which satisfies the examiners.

The examiners may at their discretion prescribe an oral examination in any module or on the dissertation.

Selection of Electives shall be made in consultation with the programme co-ordinators concerned and be subject to the approval of the Committee for Postgraduate Modular Programmes.

Dissertation

Ar39 The dissertation shall be on an approved topic relevant to the curriculum and shall be not less than 10,000 and not more than 20,000 words. The title of the dissertation shall be submitted for approval not later than December 31 for full-time students or June 30 for part-time students in their first year of study, and the dissertation shall be presented not later than December 31 of the following year. The candidate shall submit a statement that the dissertation represents his own work undertaken after registration as a candidate for the degree.

Examinations

Ar40 A candidate who has failed to satisfy the examiners in more than three modules shall be recommended for discontinuation of studies under the provisions of General Regulation G12. A candidate who has failed to satisfy the examiners in not more than three modules may be permitted to present himself for re-examination in the modules of failure in the following August/September; and should he again fail to satisfy the examiners in any module at the second attempt he shall be recommended for discontinuation of studies under the provisions of General Regulation G12.²

² Notwithstanding a pass in a module at the second attempt, failure in that module at the first attempt shall still count as failure in one module.

Ar41 A candidate who has presented an unsatisfactory dissertation, but has satisfied the examiners at the written examination or re-examination, may be permitted to revise the dissertation and to re-present it within a specified period of not more than four months after receipt of a notice that it is unsatisfactory. A candidate who has presented an unsatisfactory dissertation for a second time shall be recommended for discontinuation of studies under the provisions of General Regulation G12.

Examination results

Ar42 Following presentation of the dissertation, a pass list of candidates awarded the Master of Science (Construction Project Management) degree shall be published. A candidate who has shown exceptional merit may be awarded a mark of distinction, and this mark shall be recorded on the candidate's degree diploma.

SYLLABUSES FOR THE MODULAR MASTER DEGREE PROGRAMME IN CONSTRUCTION PROJECT MANAGEMENT

The aim of the Modular Programmes, on a faculty-wide basis, is to provide advanced tuition in all aspects of the project and land development processes, allowing students maximum flexibility in modules selection within their chosen disciplines. Where appropriate the Programmes will be related to developments not only in Hong Kong but also the Peoples' Republic of China and the Southeast Asian region.

RECO6001. Urban planning: theory and practice

The course examines urban planning theory and urban planning practice especially in Hong Kong. Topics include contemporary urban planning theories, political and social influences in planning, nature and functions of the planning process and basic approaches to practice from strategic planning to local and site planning. Case studies will be presented.

RECO6002. Law and the real estate industry

The course provides a study of the law as it affects the real estate development process. Acquisition, ownership, management and disposal of land and real estate; town planning; finance of development; employment law; building contracts (standard forms, comparative studies); revenue law and the real estate market; agency law.

RECO6003. Economics for professionals

Demand and supply model (consumer and producer surplus; gain from trade), theory of price control (non-exclusive income, minimum wage legislation, rent control legislation), rent-seeking and rent-dissipation model, welfare economics, Pigovian Theory (market failure: “external effects”, “public goods”, “monopoly”), welfare economics - Coasian critique, Neo-classical firm, Neo-classical firm - Critique.

RECO6004. Construction economics

Building cost control, life cycle costing, design economics, introduction to modelling, cost modelling - techniques, problems and recent developments, the Hong Kong construction industry.

RECO6005. Contract strategies and project management techniques

Risk analysis, contract strategy, organization form, planning techniques, value engineering, quality assurance, operations research.

Co-requisite: RECO6006 Management theory and construction projects

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The project organization, management theory: schools of thought, the project life cycle, organization structure, team roles, case studies of successful projects, project management tools.

RECO6007. Real estate and construction management practice

People in organizations, time management, leadership, motivation, conflict resolution, decision aiding technologies, decision making, negotiation, meetings, presentation techniques.

Co-requisite: RECO6006 Management theory and construction projects

RECO6008. Real estate and construction business management

Hong Kong's economy, management theory - schools of thought, strategic management, marketing, forecasting and indices, financial performance, recruitment and human resources management, safety.

RECO6010. Development case studies

This course examines in detail the interaction of the various components within the development process. It utilizes a series of case studies of actual projects of varying scale and complexity which will allow for an analysis of the essential inputs to the process and the effects these may have on outputs and the final product.

RECO6011. Real estate economics

This course deals with the economics and structure of the real estate industry with special reference to Hong Kong. It introduces the real estate sector as consisting of three interrelated subsectors, namely the market for real estate services, the market for real estate assets, and the real estate development market. The course also introduces principles of real estate market analysis and real estate project evaluation.

RECO6013. Real estate investment and finance

This course introduces real estate investments as part of the universe of investment opportunities. It further covers real estate investment decision-making under uncertainty. Principles of real estate investment and development project finance are also covered.

RECO6014. Real estate management

The course approaches real estate management from a total asset management viewpoint. It covers the real estate asset management environment, strategic decision-making in real estate, property asset management, and real estate portfolio management from corporate and institutional perspectives. It also deals with real estate agency and marketing principles.

RECO6015. Real estate investment and the capital markets

This course provides a framework for analyzing real estate investment within a capital markets theoretical framework. It deals with real estate investment and modern portfolio theory, the capital asset pricing model and portfolio performance measurement, and real estate market efficiency. The course highlights comparative problems in the application of modern investment theory to real estate investments and real estate markets.

RECO6016. Land economics

This course covers the fundamental determinants of location of economic activities: the concept of rent, marginal productivity and land rent, bid rent analysis and the formation of a land market, economic regions and retail locations, industrial locations, land use control, property rights and zoning, social cost and pollution problems, development timing and problems of urban redevelopment.

RECO6017. Project finance

This course deals with project finance from an international financial markets perspective, and includes real estate project financing. It covers international project finance and principles of financial risk management. The course contains a substantial self-study component, and candidates are required to present a detailed case study as part of course requirements.

Pre-requisite: RECO6013 Real estate investment and finance

RECO6018. Modern developments in the law of construction contracts

Modern development in the laws of contract and torts; interpretation, comparison and application of various standard forms of building and civil engineering contracts and sub-contracts: 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; advanced claims techniques; contractual and common law remedies; bankruptcy and insurance in the context of the construction industry.

RECO6019. Workshop report

The Workshop report comprises a number of task specific exercises relevant to the surveying discipline which can be independently developed and tested. There will be emphasis on professional/practice skill through practice based case histories and/or assignments such as preparation of valuation reports or lease conditions, pre-contact estimates or project management.

RECO6020. Dissertation/research seminar

This seminar series will examine the various stages in the preparation of a dissertation and introduce the theoretical and practical approaches available. Subjects covered include selection of a dissertation topic, definition of research goals, research methods in different disciplines, sources of data and a dissertation proposal will be prepared as part of this course. Seminars will be conducted by participating faculty and guest speakers.

RECO6025. Project workshop

The project workshop reflects the inter-disciplinary nature of the curriculum and aims to synthesize and apply the theory taught in the lecture courses to a problem which in practice would engage the combined skills of a number of the professions which constitute the property and construction industries. Through this students will experience the demands and importance of teamwork under the exigencies of actual commerce, and will appreciate the significance of their role and that of others in the context of the environment, planning, the property and construction industry and accountancy.

RECO6026. Professional report

The Professional report represents an individual piece of work that emphasizes one of the specialist elements within the chosen professional discipline.

RECO6027. Business process engineering

This course covers the concepts of business process engineering and reengineering. It introduces the principles of business models, business processes analysis and redesign, workflow management, techniques and supporting tools.

RECO6028. Procurement systems

Strategic and emergent issues in construction procurement; a definition of procurement systems; organising the project procurement process; organisational design; organisational learning as a vehicle for improved building procurement; culture; conventionally orientated to developmentally orientated procurement systems; use of world wide web technologies and procurement process implications; applying multiple project procurement methods to a portfolio of infrastructure projects; multiple performance criteria for evaluating construction contractors; applying partnering in the supply chain; selection criteria.

RECO6029. Information management in construction

The course covers the concepts of information management, business information systems and computerization in the construction industry. It introduces the principles and applications of systems analysis and design. It also focuses on special IT applications in construction including computer-aided design and multimedia systems.

RECO6030. Knowledge management in construction

This course covers the concepts and development of knowledge management in the construction industry: strategic information systems, object technology, coordinated project information exchange, principles and applications of knowledge-based systems.

Co-requisite: RECO6029 Information management in construction

RECO6031. Alternative dispute resolution

Theory and practice of dispute resolution: negotiation; mediation; litigation; arbitration and adjudication; practice and procedure; application in the real estate and construction industry

RECO6032. Law and practice of arbitration

Process of arbitration in Hong Kong and China; common law and statute; procedure and proof; the role of expert witnesses; domestic and international arbitrations; arbitration institutions; application in the real estate and construction industry

RECO6033. Facility management in practice

Strategic corporate facility planning, benchmarking, post-occupancy evaluation, facility performance, outsourcing, space planning and management, office safety and security, contingency planning, financial planning and investment.

Pre-requisite: Pre-course – Construction Technology

RECO6034. Facility maintenance management

Principles and types of building maintenance, the building life cycle and obsolescence. Maintenance policies, strategies and statutory requirements. Planned maintenance, preventive maintenance, contracts and standards for maintenance work. Building refurbishment, alteration and conservation.

Pre-requisite: Pre-course – Construction Technology

RECO6035. Advanced facility technology

Options and installation of state-of-the-art services for communication, power and data transmission technology, network security and intrusion detection, virtual office/workplace, data center, advanced monitoring and automation for CAFM and BMS.

Pre-requisite: Pre-course – Construction Technology

RECO6036. Land administration systems

Comparative land administration systems: freehold and leasehold tenure; socialist land systems; communal land systems; their characteristics and impact on government revenue, urban & rural development and resource conservation; land adjustments and reforms; urban renewal.

RECO6037. Hong Kong land administration

The Hong Kong land administration system: its institutions and functions; land allocation, development programming and control; interaction with the public and private sector; salient features of land administration in the New Territories.

RECO6038. Administrative law in land development in Hong Kong

The Basic Law; the HKSAR Government; judicial reviews with the focus on lease control, planning, building and environmental protection; remedies; interpretation of lease and town plans; lease enforcement; planning enforcement and building control with the focus on development potential and liabilities of owners and occupiers.

RECO6039. Planning and building development

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.

RECO6040. Construction safety management

Introduction to construction site organisation; Occupational Safety and Health regulations; Workers compensation and civil claims; Accident reporting systems; Safety management systems; Site safety audits; Site safety initiatives; occupational health on site; Ergonomics and manual handling; dangerous substances on site; Codes of practice and standards; Design and construction considerations; Temporary works; Plant, tools and machinery; Personal protective Equipment; Unions and subcontractors; Workers and dangerous trades

RECO6041. Development projects

This course allows the student to examine actual problems in planning and development practice. Actual project development cases and their problems are discussed from the viewpoints of varying stakeholders. Skills and solutions are examined, and the difficulties in putting theories into planning and development practice analyzed.