

SYLLABUSES FOR THE DEGREE OF MASTER OF SCIENCE IN CONSTRUCTION PROJECT MANAGEMENT

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

These syllabuses apply to candidates admitted in the 2020-21 academic year and thereafter.

Curriculum Structure

The aim of the curriculum design, on a faculty-wide basis, is to provide advanced tuition in all aspects of the project and land development processes, allowing candidates maximum flexibility in course selection within their chosen disciplines. Where appropriate the curriculum will be related to developments not only in Hong Kong but also in the People's Republic of China and the Southeast Asian region. Some of the courses listed below may not be offered every year.

To receive the award of Master of Science in Construction Project Management, a candidate must complete at least 72 credits including 54 credits of prescribed courses.

The prescribed 6-credit courses for Master of Science in Construction Project Management are:

RECO6004 Construction economics;
RECO6018 Modern developments in the law of construction contracts;
RECO6028 Procurement systems;
RECO6042 Law for the real estate and construction industry;
RECO6058 Project workshop (CPM)*;
RECO6060 Development case studies (QS);
RECO7074 Management theory and projects;
RECO7079 Occupational health, safety and well-being in construction; and
RECO7096 Information management in construction

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.

* Candidates may take Dissertation (RECO6020) in lieu of Project workshop (CPM) (RECO6058) in order to meet the requirements of the prescribed courses of the MSc (CPM) 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 (RECO6020) as a capstone course may have to complete the curriculum with more than 72 credits.

RECO6003. Economics for professionals (6 credits)

This course offers an overview of modern economic analysis. It begins with the Demand and Supply Analysis, introducing key economic concepts, including elasticity, consumer and producer surplus, deadweight loss. Then it examines the consumer theory in the framework of

Indifference curve analysis, and then study firms' behaviour in a perfectly competitive market as well as monopoly behaviour and its pricing strategies. An oligopoly market competition is introduced. Market Failures including externalities and public goods as well as its critiques are briefly discussed. Elements of Macroeconomics will be covered, including trade balance, interest rate, exchange rate.

Assessment: 40% coursework and 60% examination

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: 70% coursework and 30% examination

RECO6018. Modern developments in the law of construction contracts (6 credits)

This course examines the 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.

Assessment: 100% examination

RECO6020. Dissertation (18 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 curriculum.

Assessment: 100% coursework

RECO6027. Business process engineering (6 credits)

This course covers the concepts of business process engineering and reengineering. It introduces the principles of business models, business processes analysis and design, workflow management, techniques and supporting tools; innovation and innovation management, technology management and product development, Building Information Modeling.

Assessment: 100% coursework

RECO6028. Procurement systems (6 credits)

This course examines the strategic and emergent issues in construction procurement: a definition of procurement systems; organising the project procurement process; contract strategy; international comparisons of procurement systems; applying multiple project procurement methods to a portfolio of projects; performance criteria for evaluating construction project; applying relational contracting in the supply chain; selection criteria.

Assessment: 100% coursework

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 provides an introduction to alternative dispute resolution and examines the process of arbitration in Hong Kong and China through common law and statute; procedure and proof; domestic and international arbitrations; arbitration institutions; the role of expert witnesses; application in the real estate and construction industry.

Assessment: 100% 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: 40% coursework and 60% examination

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: Acquisition, ownership, management and disposal of land and real estate; building and planning control; finance of development; building contracts (standard forms, comparative studies); agency law; alternative dispute resolution movement.

Assessment: 100% examination

RECO6043. Construction business management (6 credits)

This course examines the management of construction businesses which covers construction markets, case studies, strategic management, marketing, international contracting, recruitment and human resources management, ethics, transparency.

Assessment: 20% coursework and 80% 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

RECO6058. Project workshop (CPM) (Capstone Experience) (6 credits)

This course is comprised of project workshop designed for construction project management. 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 candidates 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.

Assessment: 100% coursework

RECO6060. Development case studies (QS) (6 credits)

This course is comprised of development case studies designed for the professional discipline of Quantity Surveying. It 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.

Assessment: 100% coursework

RECO6068. Construction practice in Mainland China (6 credits)

This course examines the theories of international business and their applications in international construction with a particular focus on China. It focuses on the following aspects of international construction: An overview of international construction business; the regulatory framework shaping the sector; Construction multinational corporations (MNCs) and project delivery; Competition in the global construction market; International construction project practices; Culture and corporate social responsibility (CSR) in the international

construction context.

Assessment: 40% coursework and 60% examination

RECO7074. Management theory and projects (6 credits)

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

Assessment: 50% coursework and 50% examination

RECO7075. Management practice and projects (6 credits)

This course provides a framework for analyzing management practice in the real estate and construction industry: people in organizations, organizational culture & climate, leadership, motivation, commitment, cooperation & collaboration, decision making, negotiation, meetings, presentation techniques, conflict management, case studies of management issues.

Assessment: 100% coursework

RECO7077. Construction business case studies (6 credits)

This course is comprised of a number of task-specific exercises relevant to the Quantity Surveying discipline which can be independently developed and tested. There will be an emphasis on professional/practice skill through practice-based case histories and/or assignments.

Assessment: 100% coursework

RECO7079. Occupational health, safety and well-being in construction (6 credits)

This course covers legislation & safety management systems; Workers' health & well-being; Safety plans, method statements & risk assessments; OHS initiatives; Social capital & OHS; Institutional analysis of OHS management; Heat stress management.

ASSESSMENT: 100% COURSEWORK

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

RECO7091. Construction claims (6 credits)

This course provides an introduction of the law relating to construction claims in the following aspects: Types of claims: contractual claims, extra-contractual claims, ex-gratia claims and quantum meruit claims; Principles and assessment of claims: acceleration and prolongation, loss and expense, common law damages, delay and extension of time, program analysis, burden and standard of proof, procedural requirements, common heads of claim.

Assessment: 50% coursework and 50% examination

RECO7092. Greater China real estate (6 credits)

This course covers the real estate business practices including investment models, 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.

Assessment: 100% coursework

RECO7094. Construction management practice (6 credits)

This course provides a framework for analyzing management practice in the construction industry: people in organizations, organizational culture & climate, leadership, motivation, commitment, cooperation & collaboration, decision aiding technologies, decision making, negotiation, meetings, presentation techniques, conflict management.

Pre-requisite: RECO7074. Management theory and projects

Assessment: 100% coursework

RECO7095. Building design and construction (6 credits)

The course prepares candidates for the essentials of basic building design and construction commonly adopted in Hong Kong. Topics cover building structures and envelopes, materials and assemblies, plumbing and drainage, power supply, HVAC, lifts and escalators, fire services, and electrical installation.

Assessment: 50% coursework and 50% examination

RECO7096. Information management in construction (6 credits)

This course examines fundamental knowledge in information management and its application to the management of projects and project management in construction. This includes an introduction to information management, information management theories, through-life

information management, common information management tools and techniques, and digital information management and its effect on collaboration, coordination and integration, commercial and contractual aspects of construction.

Assessment: 100% coursework

RECO7097. Modern developments in construction (6 credits)

This course explores modern developments in construction from institutional, strategic, commercial and technological perspectives. This includes the effects of globalization, evolving competitive strategies, procurement innovation, and industrialization of construction, as well as theoretical developments and new technologies and approaches in construction project management and their applications in contemporary construction practice. A particular focus is given to the changes in practice enabled by state-of-the-art digital and smart technologies.

Assessment: 100% Coursework

MHMP8003. Practices of housing management and maintenance (6 credits)

This course aims to introduce and consolidate candidate'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 candidates to major building structures, building fabrics and building materials and their maintenance problems and maintenance policies and their implementation; and to identify the role of housing managers in the maintenance of residential properties.

Assessment: 100% coursework

20190528/cpm

20190530/cpm

20190621/cpm

20190628/cpm

[20200723/cpm](#)