

Programme Requirement Document

Master of Science in

Construction and Real Estate (Programme code: 32111)

Construction Law and Dispute Resolution (Programme code: 32112)

Project Management (Programme code: 32113)

Table of Contents

		Page
Part 1 Ger	neral Information	
1.1. Intro	oduction	1
1.2. The		1
	exible Programme of Study	1
1.4. Fina		1
_	lish Language Requirement for Admission	1
	dits Requirement for Graduation	2
1.7. Dura		2
1.8. Reg		2 3 3 3 3
	ss and Examination Timetable	3
	dent Counselling	3
•	gramme Management nbursable Courses for Continuing Education Fund (CEF)	ა ვ
I. IZ. Nell	indusable Courses for Continuing Education Fund (CEF)	3
Part 2 Pro	gramme Curriculum	
2.1. MSd	in Construction and Real Estate	4
2.2. MSc	in Construction Law and Dispute Resolution	8
2.3. MSc	in Project Management	11
Part 3 Suk	eject Description Form	
List of Co	mpulsory Core and Core Subjects	14
BRE505		15
BRE506	Principles of Project Management	17
BRE511	Information Management for Construction and Real Estate	20
BRE524	Urban Planning and Urban Design	23
BRE525	Property Management	26
BRE527	Construction Practice in China	29
BRE530	Economics for Urban Studies	32
BRE532	Maintenance Management and Operation	35
BRE533	Value Management in Construction and Property	38
BRE541	Property Law	41
BRE542	Construction Law	46
BRE544	Principles and Practices of Law	49
BRE545	Dispute Management and Law for International Projects	52 50
BRE546	Mediation Training	56 50
BRE547	Construction Law Project	59
BRE548	Dispute Resolution Project	62 67
BRE549 BRE550	Arbitration Law and Practice Statutory Framework for Construction Practice	67 70
BRE562	Statutory Framework for Construction Practice Project Appraisal	70 74
DIVEDUA	ι τομου Αργιαιδαί	<i>i</i> 4

BRE565 BRE567 BRE572 BRE574 BRE581 BRE582 BRE586 BRE587 BRE5731 BRE5731 BRE5751	Real Estate Asset Management International Real Estate: China Real Estate Development Construction Process Management International Construction Projects Development Finance and Investment Construction Information Technology Research Methods for Construction and Real Estate Managing People in Projects Strategic Management Legislation Aspects of Fire Safety Management	77 80 82 85 87 90 93 95 98 100
CSE565	Construction Technology	107
Part 4 App	endices	
• •	A Regulations	
•	1: Introduction	440
	Preamble The Neture of BDE's Destarted viets Education	110
	The Nature of BRE's Postgraduate Education	110
3. 4.	The Subject Pre-requisites, Recommended Background Knowledge, Exclusions, Mutual Exclusions and Exemptions without	110
	Credits	111
5.	A Student's Programme of Study	111
6.	·	112
7.	· ·	112
8.	Admission	112
Chapter	II: Regulations	
· 1.	Credit Transfer	113
2.	Exclusion and Exemption without Credit	113
3.	Registration/Academic Probation/Progression/	
	Deregistration	113
4.	Zero Subject Enrolment	115
5.	Deferment of Study	115
6.	Transfer of Study	115
7.	Withdrawal of Study	115
8.	Subject Registration and Withdrawal	116
9.	Dissertation and Dissertation Assessment	116
10). Assessment of Taught Subjects	117
11	. Retaking of Subjects	119
12	2. Appeal against Assessment Results	119
	B. Eligibility for Award	119
14	I. Grade Point Average (GPA)	120
15	5. Guidelines for Award Classification	121

Appendix B: Dissertation Handbook (For BRE591 Dissertation)	122
1. Introduction	123
2. The Dissertation Process: Preparation, Progress and	
Assessment	123
3. Dissertation Supervision	126
4. Dissertation Moderation	126
Format and Presentation of Dissertations	126
6. Retention of Dissertation	128
Diagram of the Process of Dissertation	129
8. Assessment Rubrics for BRE591 Dissertation	130

Annex One

Guidance Notes on Avoiding Plagiarism, on Bibliographic Referencing and on Photocopying of Copyright Materials 131

Note:

This Programme Requirement Document is subject to review and changes which the department can decide to make from time to time. Students will be informed of the changes as and when appropriate.

Part 1 General Information

1.1. Introduction

This programme requirement document covers the following three Master of Science (MSc) programmes hosted by the Department of Building and Real Estate (BRE):

- MSc in Construction and Real Estate (programme code: 32111)
- MSc in Construction Law and Dispute Resolution (programme code: 32112)
- MSc in Project Management (programme code: 32113)

These programmes provide a range of taught subjects of a high standard in a common format and are designed to enable graduates to construct a programme of postgraduate studies meeting their needs relating to their individual employment and future careers. Successful completion of an acceptable programme of subjects will lead to the University postgraduate award of the Master of Science degree

1.2. The Aims

Depending on the needs of a student, the common aims of the three MSc programmes are to:

- develop areas of study relevant to the student's current profession or a profession he/she intends to engage in, and to update a student's knowledge in a particular discipline;
- develop areas of study new to the student including areas of study not directly related to the scope of the student's first degree;
- provide an in-depth analytical study of an area already introduced at undergraduate level;
- synthesize and integrate subjects of a number of different yet related disciplines; and
- develop applied studies or to extend an area of study which cannot be pursued adequately at undergraduate level.

1.3. A Flexible Programme of Study

Students in employment normally take two subjects in a semester. However, the pace of study can be decided by individual students.

Most of the subjects are offered either in the evenings over a 13-week period or in the form of 3 full-day workshops over weekends. Subject to demand and viability, classes may be scheduled during the day for full-time students as an alternative to normal evening lectures and/or weekend workshops. Whilst every effort will be made to offer a range of subjects as extensive as possible, it is possible that some students may not be able to study certain subjects due to unforeseen circumstances. In such circumstances, students may consider alternative subjects with the advice of their Programme Leaders.

1.4. Final Awards

Master of Science Degree is awarded to students who successfully complete the required contents detailed in the programme curriculum of the respective awards. Under exceptional circumstances as detailed in Appendix A, students will be awarded the Postgraduate Diploma in lieu of Master of Science Degree.

1.5. English Language Requirements for Admission

If a student is not a native speaker of English, or his/her Bachelor's degree or equivalent qualification is awarded by institutions where the medium of instruction is not English, he/she is expected to fulfil

the following minimum English Language requirements set by the University for admission purpose:

- A Test of English as a Foreign Language (TOEFL) score of 80 for the Internet-based test or 550 for the paper-based test; OR
- An overall Band Score of at least 6 in the International English Language Testing System (IELTS).

1.6. Credits Requirement for Graduation

Master of Science (MSc)

- Acquire a total of 30 credits through completion of <u>taught subjects (21 credits)</u> plus a <u>9- credit</u> <u>dissertation</u>. The subject requirements specified for the relevant award must be fulfilled and the dissertation topic shall be pertinent to the area prescribed by BRE; OR
- Acquire a total of 30 credits through completion of <u>taught subjects (21 credits)</u> plus <u>2 to 3</u> <u>other core subjects</u> (which are worth 9 credits in total to replace the dissertation). The subject requirements specified for the relevant award must be fulfilled and the dissertation- replacement subjects must be relevant subjects prescribed by BRE.

MSc students should indicate their intention in writing to graduate with the exit award of Postgraduate Diploma before end of examination period.

Postgraduate Diploma (PgD)

Acquire 21 credits through completion of taught subjects. The subject requirements specified for the relevant award must be fulfilled.

1.7. Duration

The normal duration of the programme is two and a half academic years for students of part-time mode and one academic year for students of full-time mode with effective from intake cohort 2020/21.

Provisions are in place for students to apply for extension of their study period from the relevant authority if there is a justified need. The authorities for approving requests for extension of study period are as follows:

Approval Authority	Duration of Extension of Study Period
Head of Department of BRE	Up to one year for full-time programmes Up to two years for part-time programmes
Faculty Board Chairman of Faculty of Construction and Environment	Beyond one year and up to two years for full-time programmes Beyond two years and up to four years for part-time programmes

1.8. Regulations

For full details of the regulations governing the three MSc programmes in Construction and Real Estate, Construction Law and Dispute Resolution and Project Management, students can refer to Appendix A. Dissertation Handbook which contains detailed guidance on the process of completing a dissertation is enclosed in Appendix B.

1.9. Class and Examination Timetables

Timetable information is updated from time to time. Please check the latest version on eStudent (*PolyU homepage> myPolyU> eStudent*).

1.10. Student Counselling

The Programme Leaders are available to answer questions and provide advice. Their contact numbers and email addresses are given in the following section.

1.11. Programme Management

Chairman, BRE Taught

Postgraduate Programme

Committee

: Dr Daniel Chan, Associate Professor

Tel: 2766 4387 Email: daniel.w.m.chan@polyu.edu.hk

Secretary, BRE Taught Postgraduate Programme

Committee

: Miss Queenie Wong, Executive Officer

Tel: 3400 8122 Email: queenie.wong@polyu.edu.hk

Programme Leaders : Dr Minhyun Lee, Assistant Professor

(MSc in Construction and Real Estate)

Tel: 2766 4260 Email: minhyun.lee@polyu.edu.hk

: Dr Esther Yung, Associate Professor

(MSc in Construction Law and Dispute Resolution)
Tel: 3400 8196 Email: esther.yung@polyu.edu.hk

: Dr Hsi-hsien Wei, Associate Professor

(MSc in Project Management)

Tel: 3400 8194 Email: hsi-hsien.wei@polyu.edu.hk

Programme Officers : Ms Kaman Mak

(MSc in Construction and Real Estate)

Tel: 3400 8121 Email: ka-man.mak@polyu.edu.hk

: Ms Connie Yap

(MSc in Construction Law and Dispute Resolution)
Tel: 3400 3819 Email: connie.yap@polyu.edu.hk

: Ms Esther Leung

(MSc in Project Management)

Tel: 3400 8120 Email: esther.leung@polyu.edu.hk

BRE General Office: ZS725, 7/F, South Tower, Block Z, The Hong Kong Polytechnic University

Opening hours: 9:00 a.m. – 1:00 p.m. and 2:00 p.m. – 5:35 p.m.

(closed on Saturdays, Sundays and Public Holidays)

Website: polyu.edu.hk/bre/

1.12. Reimbursable Courses for Continuing Education Fund (CEF)

A number of subjects have been included in the list of reimbursable courses for CEF. Students may refer to individual programme curriculums or http://www.wfsfaa.gov.hk/cef/ for details.

Part 2 Programme Curriculum

2.1. MSc in Construction and Real Estate

[MSc Stream Code: RFM (Full-time); RPM (Part-time)] [PgD (exit award) Stream Code: RFP (Full-time); RPP (Part-time)]

Programme Aims

This self-financed taught postgraduate programme is designed to provide a learning opportunity for practicing architects, engineers, surveyors, project managers, construction managers, property managers, town planners, and other real estate related professionals at various levels of responsibility, to broaden and deepen their knowledge in the construction and real estate sectors.

Besides, it serves as a bridging programme for those industrial practitioners currently involved in the construction or real estate sector to meet the academic requirements for chartered professional membership of the Royal Institution of Chartered Surveyors (RICS) while their bachelor's degree programmes are not accredited and recognized.

In this credit-based programme, students will have flexibility in tailoring a set of subject topics to meet their own career and personal development needs. We provide:

- Up-to-date knowledge in the construction and real estate sectors based upon contemporary research findings;
- Specific specialist skills that are required in the construction and real estate sectors, and beyond the first degree level; and
- The opportunity for students to study construction and real estate practices in the Chinese Mainland.

Programme's Intended Learning Outcomes against Institutional Learning Outcomes

	Institutional Learning Outcomes	Programme's Intended Learning Outcomes
Professional competence of specialists/ leaders of a discipline/ profession:	Graduates of PolyU taught postgraduate programmes will possess in-depth knowledge and skills in their area of study and be able to apply their knowledge and contribute to professional leadership.	Graduates will possess in-depth professional knowledge in specialist areas within construction and real estate discipline: Construction Management, Planning and Development and Commercial Property and be able to apply their knowledge and contribute to professional leadership.
Strategic thinking:	Graduates of PolyU taught postgraduate programmes will be able to think holistically and analytically in dealing with complex problems and situations pertinent to their professional practice. They will be versatile problem solvers with good mastery of critical and creative thinking skills, who can generate practical and innovative solutions.	Graduates will be able to think holistically and analytically in dealing with complex problems and situations pertinent to their professional practice. They will be versatile problem solvers with good mastery of critical and creative thinking skills, who can generate practical and innovative solutions.
Lifelong learning capability:	Graduates of PolyU taught postgraduate programmes will have an enhanced capability for continual professional development through inquiry and reflection on professional practice.	Graduates will have an enhanced capability for continual professional development through inquiry and reflection on professional practice.

Specialist skills	N/A	Graduates will be equipped with
development:		specific multi-disciplinary skills
		necessary in real estate
		development, urban planning and
		economics, asset management,
		property management and
		maintenance management in order
		to meet desired needs within
		realistic constraints.

Programme Structure and Contents

This programme is launched based on the mixed mode of delivery allowing students to pursue their studies in either the full-time mode or the part-time mode. Students are required to attend classes during the daytime and evening if they choose the full-time mode of study. Students can select from a wide range of subjects including elective subjects chosen from core subjects, recommended electives, and other relevant subjects offered by the BRE Department or other sister Departments within the Faculty of Construction and Environment.

Generally, each subject will require one 3-hour weekday evening class per week over a 13-week semester except those subjects specified as "weekend" which are offered in the form of 3 full-day weekend (Saturdays and/or Sunday) workshops.

Students who opt to take the full-time mode can attend daytime classes for designated subjects held on weekdays. Students who study part-time are expected to take up two subjects (each carrying 3 credits normally) per semester. Students should be reminded that each subject may not be offered in every academic year due to the requirement of minimum viable number of registered students.

Graduation Requirements

For the MSc (30 credits required)

Students shall complete 7 subjects (3 credits each) with at least 4 core subjects including the compulsory core subject *Research Methods for Construction and Real Estate* (BRE587), PLUS a *MSc Dissertation* (BRE591) (9 credits) that is relevant to construction and/or real estate.

Alternatively, students shall complete 10 subjects (3 credits each) with at least 7 core subjects including the compulsory core subject *Research Methods for Construction and Real Estate* (BRE587) AND the dissertation replacement subject *Professional Workshop and Project* (BRE505) (3 credits).

For the PgD (exit award) (21 credits required)

Students shall complete 7 subjects with at least 4 core subjects including the compulsory core subject Research Methods for Construction and Real Estate (BRE587).

BRE587 is a pre-requisite subject of BRE505 (Professional Workshop and Project) if students opt for the non-dissertation route. Students opting for the dissertation route are allowed to take BRE587 either in parallel to or in advance of the Dissertation.

Full-time students are strongly recommended to take 7 taught subjects and BRE591 – MSc Dissertation (9 credits) in a normal study period of one academic year. Students should complete the Dissertation within a normal period of 3 semesters including summer term.

Core Subjects (3 credits each)

Students wishing to specialize in one of the following three study disciplines are advised to select at least THREE core subjects from the relevant discipline.

1. Construction Discipline

Students wishing to specialize in 'Construction' Discipline are advised to study the following subjects.

Compulsory core subject

BRE587[^] Research Methods for Construction and Real Estate

Core subjects (at least 3 subjects + Dissertation)

BRE506# Principles of Project Management

BRE511 Information Management for Construction and Real Estate

BRE527 Construction Practice in China

BRE533# Value Management in Construction and Property

BRE5751#^ Strategic Management

BRE581# International Construction Projects

Recommended electives

BRE545 Dispute Management and Law for International Projects

BRE562# Project Appraisal

Dissertation replacement subjects

As an alternative, Professional Workshop and Project (BRE505) and two core subjects listed above may be taken in lieu of the Dissertation.

2. Planning and Development Discipline

Students wishing to specialize in 'Planning and Development' Discipline are advised to study the following subjects.

Compulsory core subjects

BRE587[^] Research Methods for Construction and Real Estate

Core subjects (at least 3 subjects + Dissertation)

BRE524[^] Urban Planning and Urban Design BRE530 Economics for Urban Studies BRE572# Real Estate Development

BRE582#^ Development Finance and Investment

Recommended electives

BRE562# Project Appraisal

Dissertation replacement subjects

As an alternative, Professional Workshop and Project (BRE505) and two of the following subjects may be taken in lieu of the Dissertation.

BRE506# Principles of Project Management

BRE541 Property Law

BRE565# Real Estate Asset Management

BRE5751#^ Strategic Management

3. Commercial Property Discipline

Students wishing to specialize in 'Commercial Property' Discipline are advised to study the following subjects.

Compulsory core subjects

BRE587[^] Research Methods for Construction and Real Estate

Core subjects (at least 3 subjects + Dissertation)

BRE525 Property Management

BRE532 Maintenance Management and Operation

BRE541 Property Law

BRE565# Real Estate Asset Management

BRE5751#^ Strategic Management

Recommended electives

BRE562# Project Appraisal

Dissertation replacement subjects

As an alternative, Professional Workshop and Project (BRE505) and two of the following subjects may be taken in lieu of the Dissertation.

BRE524[^] Urban Planning and Urban Design BRE530 Economics for Urban Studies

BRE582#^ Development Finance and Investment

Subjects are offered in the form of 3 full-day weekend (Saturday and/or Sundays) workshops.

^ Weekdays daytime classes are offered to full-time students

Entrance Requirements

- A Bachelor's degree with Honours; OR
- A Bachelor's degree in a construction or real estate related discipline; OR
- Corporate membership of a relevant professional institution.

Professional Recognition

The MSc programme is accredited by the Royal Institution of Chartered Surveyors (RICS) as meeting their academic requirements. MSc graduates may apply for the full membership of RICS based on their appropriate period of relevant working experience in the construction and/or real estate sectors.

Continuing Education Fund (CEF)

CEF Course Code	CEF Course Title	Notes
31Z139764	Construction Practice in China (BRE527) (Module from Master of Science in Construction and Real Estate)	This course has been included in the list of reimbursable courses under Continuing Education Fund.
31Z139748	Strategic Management (BRE5751) (Module from Master of Science in Construction and Real Estate)	The mother course Master of Science in Construction and Real Estate of this module is recognised under the Qualifications Framework (QF Level [6]).

Guidance note on the reimbursement procedures will be provided to students via email at the beginning of the academic year.

2.2. MSc in Construction Law and Dispute Resolution

[MSc Stream Code: LFM (Full-time); LPM (Part-time)]
[PgD (exit award) Stream Code: LFP (Full-time); LPP (Part-time)]

Programme Aims

- Integrate the necessary knowledge in construction management and law for the needs of construction professionals.
- Cut through discipline barriers by integrating the various skills and strengths of the different professions to produce a specialized contribution to the construction industry.
- Apply theory to practice by providing training on key dispute resolution skills offered by approved trainers.
- Attract construction graduates and specializing lawyers who wish to focus on construction law and alternative dispute resolution.

Programme's Intended Learning Outcomes against Institutional Learning Outcomes

	Institutional Learning Outcomes	Programme's Intended Learning Outcomes
Professional competence of specialists/ leaders of a discipline/ profession:	Graduates of PolyU taught postgraduate programmes will possess in-depth knowledge and skills in their area of study and be able to apply their knowledge and contribute to professional leadership.	Graduates will possess in-depth law-related knowledge and skills in managing construction projects and disputes which might arise therefrom and will thus be able to contribute to professional leadership.
Strategic thinking:	Graduates of PolyU taught postgraduate programmes will be able to think holistically and analytically in dealing with complex problems and situations pertinent to their professional practice. They will be versatile problem solvers with good mastery of critical and creative thinking skills, who can generate practical and innovative solutions.	Graduates will be able to think holistically and analytically in dealing with complex problems and situations pertinent to their professional practice. They will be versatile problem solvers with good mastery of critical and creative thinking skills, who can generate practical and innovative solutions.
Lifelong learning capability:	Graduates of PolyU taught postgraduate programmes will have an enhanced capability for continual professional development through inquiry and reflection on professional practice.	Graduates will have an enhanced capability for continual professional development through inquiry and reflection on professional practice and problems in the construction industry.
Project-based skills:	N/A	Graduates will possess skills and knowledge on recognizing and addressing legal and construction dispute issues arising from projects which they are expected to handle, such as matters concerning contract, agency, employment, evidence, tort, property, etc.
Organisational skills:	N/A	Graduates will acquire legal and dispute resolution skills related to the organization, administration and management of human and other resources relating to a construction

	project, both local and
	transnational.

Programme Structure & Contents

For the MSc (30 credits required)

Students opting for dissertation shall complete 7 subjects, including 5 compulsory core subjects and the core subject *Research Methods for Construction and Real Estate* (BRE587), <u>plus MSc Dissertation</u> (BRE591) (9 credits). Students are required to take BRE587 either in parallel to or in advance of the Dissertation.

Students opting not to take the dissertation shall complete 10 subjects, including 5 compulsory core subjects and the core subjects *Construction Law Project* (BRE547), and *Dispute Resolution Project* (BRE548) and/or Mediation Training (BRE546).

For the PgD (exit award) (21 credits required)

Students shall complete 7 subjects (including 5 compulsory core subjects).

Core Subjects

BRE506@	Principles of Project Management
BRE527@	Construction Practice in China
BRE541	Property Law
BRE542#	Construction Law
BRE544^	Principles and Practices of Law
BRE545#	Dispute Management and Law for International Projects
BRE546*	Mediation Training
BRE547**	Construction Law Project
BRE548**\$	Dispute Resolution Project
BRE549#	Arbitration Law and Practice
BRE550#	Statutory Framework for Construction Practice
BRE581@	International Construction Projects
BRE587	Research Methods for Construction and Real Estate
BSE534	Legislative Aspects of Fire Safety Management
CSE565@	Construction Technology

- # Compulsory core subjects
- ^ Compulsory core subject (Limited to and compulsory for <u>non-lawyer</u> candidates)
- @ Available for lawyer candidates as a replacement for the compulsory core subject 'Principles and Practices of Law' (BRE544)
- * Students opting for 'Mediation Training' (BRE546), which involves mediation training run by approved trainers, will be required to pay an extra fee.
- ** Limited to and compulsory for MSc students opting not to take the dissertation.
- \$ Students who opt not to take the dissertation may take Mediation Training as an alternative for this compulsory subject

Entrance Requirements

- A Bachelor's degree in a construction-related discipline or the equivalent (including recognized professional qualifications such as HKIA, HKIS, HKIE, HKIP, HKICM, CIOB, etc.)e; or
- Qualification as a lawyer.

Candidates are expected to have some background knowledge of construction law.

Professional Recognition

Students in the MSc/PgD programme are eligible for Associate Membership of the Hong Kong Institute of Arbitrators. The MSc programme is also recognised by the Royal Institution of Chartered Surveyors (RICS) as meeting their academic requirements for membership.

Those students who opt to complete the Mediation Training will be recognised by various professional institutions overseas and in Hong Kong as completion of the accredited mediation course qualifies for membership, subject to professional assessment.

Continuing Education Fund (CEF)

CEF Course Code	CEF Course Title	Notes
31Z139675	Construction Practice in China (BRE527) (Module from Master of Science in Construction Law and Dispute Resolution)	This course has been included in the list of reimbursable courses under Continuing
31Z139683	Mediation Training (BRE546) (Module from Master of Science in Construction Law and Dispute Resolution)	Education Fund. The mother course Master of Science in Construction Law and Dispute Resolution of this
31Z139667	Arbitration Law and Practice (BRE549) (Module from Master of Science in Construction Law and Dispute Resolution)	module is recognized under the Qualifications Framework (QF level [6]).

Guidance notes on the reimbursement procedures will be provided to students via email at the beginning of the academic year.

2.3. MSc in Project Management

[MSc Stream Code: PFM (Full-time); PPM (Part-time)]
[PgD (exit award) Stream Code: PFP (Full-time); PPP (Part-time)]

Programme Aims

This postgraduate programme targets relevant professionals who already have Bachelor's degrees in relevant disciplines in or around Hong Kong. Primarily, it is an opportunity for practising architects, construction managers, engineers, surveyors, technologists, and other related professionals to broaden and deepen their knowledge in project management.

Many businesses need professionals who are skillful in project management and capable of innovating and providing creative solutions for complex problems. Over time, this programme aims at producing more highly-skilled project management professionals to operate throughout the region, including China and Hong Kong SAR.

Programme's Intended Learning Outcomes against Institutional Learning Outcomes

	Institutional Learning Outcomes	Programme's Intended Learning Outcomes
Professional competence of specialists/ leaders of a discipline/ profession:	Graduates of PolyU taught postgraduate programmes will possess in-depth knowledge and skills in their area of study and be able to apply their knowledge and contribute to professional leadership.	Graduates will possess in-depth knowledge and skills in project management and be able to apply their knowledge and contribute to professional leadership.
Strategic thinking:	Graduates of PolyU taught postgraduate programmes will be able to think holistically and analytically in dealing with complex problems and situations pertinent to their professional practice. They will be versatile problem solvers with good mastery of critical and creative thinking skills, who can generate practical and innovative solutions.	Graduates will be able to think holistically and analytically in dealing with complex problems and situations pertinent to their professional practice. They will be versatile problem solvers with good mastery of critical and creative thinking skills, who can generate practical and innovative solutions.
Lifelong learning capability:	Graduates of PolyU taught postgraduate programmes will have an enhanced capability for continual professional development through inquiry and reflection on professional practice.	Graduates will have an enhanced capability for continual professional development through inquiry and reflection on professional practice.
Project-based skills:	N/A	Graduates will possess knowledge on time, cost, quality, safety and environmental control of projects which they are expected to handle.
Organisational skills:	N/A	Graduates will acquire skills of managing people and other resources in a project organisation which is related, inter alia, to real estate and infrastructure development.

Programme Structure and Contents

This programme will be delivered by mixed mode, which allows students to opt for either full-time or part-time study (note: switching between full-time and part-time studies requires prior approval of the Programme Leader). Full-time students are recommended to take 7 taught subjects and a dissertation within a normal duration of one academic year (including a summer term). Part-time students are expected to take two taught subjects (each carrying 3 credits normally) per semester within a normal duration of two and a half academic years.

For the MSc (30 credits required)

Students shall complete 10 subjects (including 5 compulsory core subjects and at least 2 other core subjects) OR, alternatively, 7 subjects (including 5 compulsory core subjects) plus a *MSc Dissertation* (BRE591, which is a 9-credit core subject).

For the PgD (exit award) (21 credits required)

Students shall complete 7 subjects (including 5 compulsory core subjects). No dissertation is required.

Core Subjects

BRE506	Principles of Project Management
BRE533	Value Management in Construction and Property
BRE572#	Real Estate Development
BRE5731#	Managing People in Projects
BRE574#	Construction Process Management
BRE5751#	Strategic Management
BRE562	Project Appraisal
BRE581	International Construction Projects
BRE582	Development Finance & Investment

BRE586 Construction Information Technology
BRE587#@ Research Methods for Construction and Real Estate

Each core subject as listed above adopts the guided learning approach consisting of 3 full-day weekend (Saturdays and/or Sundays) workshops, with study materials (in hard or soft copy form as determined by the subject leader) provided for students to progress learning between workshops during each semester. Full-time students shall attend daytime classes on a weekday basis when designated subject(s) is/are on offer, whereas for other core subjects they attend weekend classes with part-time students.

For elective subjects (subject to a maximum of 9 credits), students may choose from a pool of subjects offered by the BRE Department or other sister Departments within the Faculty of Construction and Environment. Some of these subjects may be timetabled in the evenings of weekdays on a 13-week basis.

For applicants whose educational backgrounds are not construction-related, they will be recommended to take BRE550 (*Statutory Framework for Construction Practice*) or CSE565 (*Construction Technology*), or an equivalent designated by the Programme Leader, as an elective subject forming part of the 30-credit (for MSc)/21-credit (for PgD) requirement for graduation. BRE550 and CSE565 may be offered in alternate years in weekday evenings on a 13-week basis, or not at all, depending on the subject offer pattern of the host Department.

[#] Compulsory core subjects

Students opting for dissertation (normal period is 3 semesters including a summer term) are required to take BRE587 either in parallel or in advance. Students opting not to take the dissertation are still required to take BRE587 which is a compulsory core subject.

Students are reminded that the majority of subjects are normally offered once in each academic year (subject to a minimum viable number requirement), whilst some subjects are offered in alternate years, and are therefore advised to check and plan subject registration carefully. Quotas may also be imposed for certain subjects. Taught subjects are not offered during summer term unless otherwise notified.

Entrance Requirements

A Bachelor's degree in a relevant discipline or the equivalent (including recognised professional qualifications).

Professional Recognition

The MSc programme is recognised by the Royal Institution of Chartered Surveyors, the Chartered Institute of Building, and the Hong Kong Institute of Project Management as fulfilling their academic requirements leading to professional assessments for their corporate memberships. The recognition status is subjected to regular reviews by the respective professional institutions.

Continuing Education Fund (CEF)

CEF Course Code	CEF Course Title	Notes
31Z139586	Managing People in Projects (BRE5731) (Module from Master of Science in Project Management)	This course has been included in the list of reimbursable courses under Continuing Education Fund.
31Z139594	Strategic Management (BRE5751) (Module from Master of Science in Project Management)	The mother course Master of Science in Project Management of this module is recognised under the Qualifications Framework (QF Level [6]).

Guidance note on the reimbursement procedures will be provided to students via email at the beginning of the academic year.

Part 3 Subject Description Form

List of Compulsory Core and Core Subjects

Subjects offere	ed by the Department of Building and Real Estate
BRE505	Professional Workshop and Project
BRE506	Principles of Project Management
BRE511	Information Management for Construction and Real Estate
BRE524	Urban Planning and Urban Design
BRE525	Property Management
BRE527	Construction Practice in China
BRE530	Economics for Urban Studies
BRE532	Maintenance Management and Operation
BRE533	Value Management in Construction and Property
BRE541	Property Law
BRE542	Construction Law
BRE544	Principles and Practices of Law
BRE545	Dispute Management and Law for International Projects
BRE546	Mediation Training
BRE547	Construction Law Project
BRE548	Dispute Resolution Project
BRE549	Arbitration Law and Practice
BRE550	Statutory Framework for Construction Practice
BRE562	Project Appraisal
BRE565	Real Estate Asset Management
BRE567	International Real Estate: China
BRE572	Real Estate Development
BRE574	Construction Process Management
BRE581	International Construction Projects
BRE582	Development Finance and Investment
BRE586	Construction Information Technology
BRE587	Research Methods for Construction and Real Estate
BRE5731	Managing People in Projects
BRE5751	Strategic Management

Subjects offered by the Department of Building Environment and Energy Engineering

BSE534 Legislation Aspects of Fire Safety Management

Subject offered by the Department of Civil and Environmental Engineering

CSE565 Construction Technology

Notes:

For subjects not listed above offered by BRE / other Departments / other Faculties which may be taken as free elective subjects, their synopsis can be found via the "Subject Search" function in the eStudent.

Subject Description Form

Subject Code	BRE505
Subject Title	Professional Workshop and Project
Credit Value	3
Level	5
Pre-requisite	BRE501/BRE585 Research and Consultancy Techniques for Construction and Real Estate or BRE587 Research Methods for Construction and Real Estate
Objectives	a. The primary objective of the subject is to strengthen students' capacity for independent, analytical study in the area of construction and real estate sectors in a professional context.
	b. In conjunction with the core subjects in construction and real estate studies, it forms an integrating component in the course.
	c. It is also used as a vehicle for students to engage in a critical assessment of their own work.
Intended Learning	Upon completion of the subject, students will be able to:
Outcomes	a. select and pursue in depth, a non-trivial topic relevant to professional practice in the field of construction or real estate;
	b. complete a substantial piece of work autonomously, with guidance from a supervisor but without detailed day-to-day supervision;
	c. formulate a set of questions in a way that renders them amenable to rigorous investigation;
	d. discriminate and identify in the available written material which is useful to the topic under investigation;
	e. identify and make use of methods of investigation appropriate to the subject;
	f. draw conclusions that are based on the work undertaken and relevant to construction management and assess the limitations of those conclusions;
	g. write up a comprehensive report and present an individual project in an appropriate style.
Subject Synopsis/ Indicative Syllabus	The key learning strategy for the subject is that of learning by doing. Students are expected to work independently and individually, reflecting on the experience of the work in progress and feedback from the supervisor. The principle educational aims for the subject are to promote the following abilities and disciplines:
	Self learning
	Independence of thought
	Critical evaluation
	Formulation and research of complex problems
	Communication of complex ideas and conclusions
Teaching/Learning Methodology	The subject consists of an introduction workshop at the first week of the semester outlining the requirement of the subject. Students then submit their research proposal and will be allocated supervisors according to their areas of research interest. Students will then work independently and meet with their

	supervisors regularly for research findings in class Small group meeting Individual presentation Independent study Individual assignment Self-study	s and submit s on					sent their
Assessment Methods in Alignment with Intended Learning Outcomes	Specific assessment methods/tasks	% weighting		sessed (l	ect learnir Please tid	•	mes to
			a., b.	c., d.	d., e.	f.	g.
	1. Proposal*	15%	5%	5%	-	-	5%
	2. Presentation*	15%	5%	-	5%	-	5%
	3. Research-based paper*	70%	-	25%	15%	20%	10%
	Total	100%			•	•	
	*Students are required pass the subject. Explanation of the appropriate intended learning out The assessment is 100° explicitly linked to the leto students as they emb precedes the subject. The given in the Table above	opriateness toomes: % by coursevarning outcoark on the sue assessme	of the a work. As mes for ubject, u	assessm ssessme the sub usually a	ent methent criteri ject and t the first	nods in a will no will be o	assessing ormally be distributed oop, which
Reading List and References	Fellows, R. and Liu, A. (Wiley-Blackwell.	2008), <i>Rese</i>	arch Me	ethods fo	or Constr	uction, 3	Brd Edition,
	Lester J.D. and Lester J. 12 Edition, Longman.	D. (2007). W	/riting R	esearch	Papers;	a compl	ete guide,

Subject Description Form

Subject Code	BRE506
Subject Title	Principles of Project Management
Credit Value	3
Level	5
Pre-requisite / Co-requisite/ Exclusion	Nil
Objectives	This subject aims to enrich students' knowledge and skills in project management.
Intended Learning	Upon completion of the subject, students will be able to:
Outcomes	a. Understand the principles of Project Management Body of Knowledge (PMBOK);
	b. Learn the skills in managing projects with cross-functional teams and external parties;
	c. Apply the project management techniques at work places aiming at shorter lead time, reduced costs, improved quality and enhanced relationship with the concerned parties.
Subject Synopsis/	Keyword syllabus:
Indicative Syllabus	Overview of project management: characteristics of project; characteristics of project management; defining project management; responsibilities of project managers; meaning of PMBOK.
	Project integration management: definition of integration management; project stakeholders; project objectives and trade-offs; project life cycles; project plan; project execution; overall project change.
	Project scope management: meaning of scope; development of a project charter; scope statement; work breakdown structure (WBS).
	Project time / schedule management: project master schedules; defining activities; estimating activity durations; logic networks; methodology for network analysis; identifying the critical path; schedule control.
	Project cost management: meaning of cost management; process of cost management; resource planning; cost estimating; cost budgeting; cost control; value management.
	Project quality management: source of failure; possible causes for cost related errors; overview of quality management; quality planning; quality assurance; quality control.
	Project resource management: overview of project human resource management; organizational planning; estimating activity resources; staff acquisition; team development.

Project communications management: general communication concept; process of project communication; best practice for project communication.

Project risk management: process of project risk management; risk identification; risk quantification; risk response development; risk response control.

Project procurement management: process of procurement management; procurement planning; solicitation planning; solicitation; source selection; contract administration; contract close-out.

Project stakeholder management: process of identifying stakeholders; process of planning stakeholder management; process of managing stakeholder engagement; process of controlling stakeholder engagement.

Teaching/Learning Methodology

Lectures and seminars will be run throughout the semester period. A lecture schedule outlining the topics to be discussed throughout the three weekend daytime workshops will be informed to students in the first lecture of the semester.

During the lecture period, the lecturers will introduce and discuss the topics, with frequent reference to, and examination of, the recommended textbook, published research papers or other reference materials whenever deemed appropriate.

Apart from the face-to-face lecture classes, students are required to form small groups to write a group term paper or report based on a set of assigned questions and scenarios in relation to project management in the construction sector or other industry sectors. Students are encouraged to apply their concepts and knowledge learned from the subject, and their hands-on working experience at their workplace, to the term paper questions.

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)				
		a.	b.	c.		
1. Continuous assessment / Group term paper or report*	50%	\checkmark	V	√		
2. Examination*	50%	√	V	1		
Total	100 %					

^{*}Students are required to pass all the specific assessment methods/tasks to pass the subject.

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

The designed group term paper or report questions attempt to test the level of students' knowledge and understanding of various underlying functions of project management as defined by the PMBOK Guide (2017) used for projects, and then to compare and contrast the actual implementation of these functions

between different types of construction projects or between different industry sectors of projects that they have been involved in.

The examination questions attempt to test students' knowledge and understanding of various underlying functions of project management as defined by the PMBOK Guide (2017) used for projects, and then to analyze different hypothesized scenarios given by citing relevant both local and international case study projects for proper illustration and justified arguments.

Reading List and References

- 1. Dennis P. Slevin, David I. Cleland and Jeffrey K. Pinto (2004). *Innovations: Project Management Research*.
- 2. David I. Cleland and Lewis R. Ireland (2010). *Project Manager's Portable Handbook*, 3rd edition.
- 3. Erling S. Andersen, Kristoffer V. Grude and Tor Haug (2009). *Goal Directed Project Management: Effective Techniques and Strategies*, 4th edition.
- 4. Frederick Harrison and Dennis Lock (2004). *Advanced Project Management: A Structured Approach*, 4th edition.
- 5. Harold Kerzner (2004). *Advanced Project Management: Best Practices on Implementation*, 2nd edition.
- 6. Scott Berkun (2005). The Art of Project Management.
- 7. Gary Heerkens (2006). The Business-savvy Project Manager: Indispensable Knowledge and Skills for Success.
- 8. John M. Nicholas and Herman Steyn (2008). *Project Management for Business, Engineering and Technology: Principles and Practice*, 3rd edition.
- 9. Paul A. Tedesco (2006). Common Sense in Project Management.
- 10. Project Management Institute (2013). A Guide to the Project Management Body of Knowledge (PMBOK Guide 2013), 5th edition.
- 11. Project Management Institute (2017). A Guide to the Project Management Body of Knowledge (PMBOK Guide 2017), 6th edition.
- 12. Thomas E. Uher and Martin Loosemore (2004). *Essentials of Construction Project Management*.

Subject Description Form

Subject Code	BRE511
Subject Title	Information Management for Construction and Real Estate
Credit Value	3
Level	5
Pre-requisite/ Co-requisite/ Exclusion	Nil
Objectives	This subject aims at understanding of how data and information is designed, created, used and managed in the construction industry with emphasis on information modelling and management at the project and organization levels.
Intended Learning	By the end of this subject, students will be able to:
Outcomes	a. understand the basic concepts of the creation and management of data and information within construction projects;
	b. understand contemporary issues in information management at project and organization level;
	c. apply basic building modelling knowledge to construction projects through the selection, development and implementation of information systems.
Subject Synopsis/ Indicative Syllabus	Information systems: information management; e.g. information distribution, access, securing and control; the strategic management of information and communication technologies assessing the business benefits of information technologies, knowledge management, IT and organization change.
	Understand current information systems and management procedures within the construction industry; relevant legislation impact of information systems; building information modelling; integrated property and construction industry databases; and construction project-based systems.
	Case studies from both large and small construction organizations will be used to illustrate current systems within the industry.
Teaching/Learning Methodology	 Lectures Training exercises on information systems (including Microsoft Project, Autodesk Revit and Navisworks)
	Independent study and teamwork
	• Assignments
	Individual and team projects
	Case study and presentation

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)				
		a	b	С		
1. Assignment	30%	√	✓	✓		
2. Individual Report	30%	✓	√	✓		
2. Group Report	40%	√	✓	✓		
Total (Continuous Assessment*)	100 %					

^{*}Students are required to achieve grade D or above in overall subject grade to pass the subject.

Assignments require students to work on questions to help them for understanding of fundamental knowledge of the management of data and information within construction projects.

Individual projects require students to work individually and submit an individual report that is focused on topics of IT-related information management application in construction projects.

Students will also need to work in a project team for the group project. Group project will be focused on potential applications of IT systems, BIM, AI, and Big Data analytics to solve existing practical problems during the life cycle of a construction project. By working together in a team environment and working on real-world working practices, students will be able to test information-management practices in the way to become creative and innovative practitioners.

Reading List and References

Shen, Q.G., Brandon, P., & Baldwin, A., (2009) Collaborative Construction Information Management, Taylor & Francis.

Eastman, C., Eastman, C.M., Teicholz, P., Sacks, R. & Liston, K. (2011). BIM Handbook: A Guide to Building Information Modeling for Owners, Managers, Designers, Engineers and Contractors, John Wiley & Sons.

Smith, D.M. & Tardi, F.M. (2009) Building information modeling: a strategic implementation guide for architects, engineers, constructors, and real estate asset managers, John Wiley and Sons.

Electronic Journal of Information Technology in Construction, www.itcon.org.

CIC, Construction Industry Council (2014), Roadmap for Building Information Modelling in Hong Kong's Construction Industry.

CIC, CIC BIM Standards - General (August 2019); (Version 2 - December 2020) and (Version 2.1 - 2021)

CIC BIM Standards for Architecture and Structural Engineering (Version 2 - December 2020); and (Version 2.1 - 2021);
CIC BIM Dictionary (December 2020); and (2021);

Subject Description Form

Subject Code	BRE524
Subject Title	Urban Planning and Urban Design
Credit Value	3
Level	5
Pre-requisite/ Co-requisite/ Exclusion	Nil
Objectives	The subject aims to provide student with a comprehensive perspective on urban planning and urban design issues with particular emphasis on the importance of urban planning and urban design in the land development process.
Intended Learning Outcomes	Upon completion of the subject, students will be able to:
Outcomes	a. understand the nature and development of urban planning;
	b. understand the basic concepts of urban design;
	c. apply urban planning and urban design concepts to analyze contemporary urban land use problems;
	d. develop a more in-depth understanding of urban planning and urban design issues in Hong Kong;
	e. develop ability to work in a team and manage to present research findings in a professional manner.
Subject Synopsis/ Indicative Syllabus	<u>Topical studies</u> : Nature of urban planning; theories of urban structure; conflict between urban planning and real estate development; problems of town planning in Hong Kong; public participation in urban planning; land use planning; urban redevelopment; urban design concepts and heritage conservation principles.
Teaching/Learning Methodology	Topics related to urban planning and urban design will be introduced by lectures. The subject also emphasizes case studies on local urban planning and urban design issues. Small group discussion will bring out initial understanding on the problems of urban planning and urban design in modern cities. Students are required to conduct urban planning/design projects and presentations for constructive criticism and exchange of ideas. Professionals/researchers in the urban planning and urban design fields may be invited to give guest lectures to provide most updated knowledge to the students.

Assessment
Methods in
Alignment with
Intended Learning
Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					
		a.	b.	C.	d.	e.	
Coursework:							
a) term project	50%	V	V	V	V	V	
b) term paper	50%	V	V	V	V	V	
Total	100 %		•	•	•	•	•

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

Students are required to conduct urban planning and design projects. The projects require students to apply planning and design concepts to analyze a selected current land use planning issue. The learning outcomes are assessed by various means, such as group presentation, group report, term paper, and so on. Students are required to achieve grade D or above in overall subject grade to pass the subject.

Reading List and References

Birch, Eugenie Ladner (2009) *The Urban and Regional Planning Reader*, Routledge.

Cuthbert, A. (2003) Designing Cities: Critical Readings in Urban Design, Blackwell Publishers.

Lai, Lawrence Wai-Chung (2000) *Town Planning Practice*, Hong Kong University Press.

LeGates and Stout (2011) The City Reader, Routledge.

Levy, John M. (2011) Contemporary Urban Planning, Pearson/Prentice Hall.

Li, Y., Chen, X., Tang, B. S., & Wong, S. W. (2018). From project to policy: Adaptive reuse and urban industrial land restructuring in Guangzhou City, China. *Cities*, 82, 68-76.

Nissim, Roger (2016) *Land Administration and Practice in Hong Kong*, Hong Kong University Press.

Song, Yan and Ding, Chengri (2009) *Smart Urban Growth for China*, Lincoln Institute of Land Policy.

Scott Campbell and Susan Fainstein (2003) Readings in Planning Theory. Oxford, United Kingdom

- Wong, S.W., Tang, B.S. Liu, J.L., Liang, M and Ho, W. (2021). From "Decentralization of Governance" to "Governance of Decentralization": Reassessing Income Inequality in Periurban China. *Environment and Planning A: Economy and Space*. [DOI:10.1177/0308518X20988013]
- Wong, S.W., Tang, B.S. and Liu, J.L. (2021). Neoliberal State
 Intervention and the Power of Community in Urban Regeneration: A Tale

of Three Village Redevelopment Cases in Guangzhou, China. *Journal of Planning Education & Research*. [DOI:10.1177/0739456X21994661]

Wong, S. W., Tang, B.S., Liu, J. (2020). Rethinking China's rural revitalization from an historical perspective. *Journal of Urban History*. [DOI: 10.1177/0096144220952091]
 [DOI: 10.1061/(ASCE)UP.1943-5444.0000586].

 Wong, S. W., Tang, B. S. and Liu, J. (2020). Village elections, grassroots governance and state power restructuring: an empirical study in Southern Periurban China. *The China Quarterly*, 241(March), 22–42.

Wong, S.W., Tang, B.S. and Liu, J.L. (2018). Village Redevelopment and Desegregation as a Strategy for Metropolitan Development in Southern China: Some Lessons from Guangzhou City. *International Journal of Urban and Regional Research*, 42 (6), 1064-1079.

Yung, EHK and Chan, EHW (2012) Implementation challenges to the adaptive reuse of heritage buildings: Towards the goals of sustainable, low carbon cities. *Habitat International*, 36(3), 352-361.

Yung, E.H.K., Langston, C., & Chan, E.H.W. (2014) Adaptive reuse of shophouses in urban renewal districts in Hong Kong, *Cities*, 39, 87–98

Yung, E.H.K. & Chan, E.H.W. (2015) Re-examining the pro-growth ideology in cities: Conservation of historic properties in Hong Kong, *Urban Review Affairs*, 32 (4): 513–35.

HKSAR Government Publications:

A Report on the updated area assessments of industrial land in the territory (2006) Planning Department

Building Coordinated and Sustainable World-Class City-Region: Planning Study on the Co-ordinated Development of the Grater Pearl River Delta Townships (2009) Planning Department

Planning and Urban Design for a Liveable High-density City (2016) Planning Department

The Urban Design Guidelines for Hong Kong Executive Summary (2002) Planning Department

The Urban Renewal Strategy (2011) Planning Department

Subject Description Form

Subject Code	BRE525
Subject Title	Property Management
Credit Value	3
Level	5
Pre-requisite / Co-requisite/ Exclusion	Nil
Objectives	 a. To allow the students to broaden and deepen their knowledge in the areas related to property management practices in Hong Kong. b. To provide lectures and seminars at postgraduate study level in property management theories and techniques in Hong Kong built environment. c. To develop the students' ability in applying theories and techniques in both research and practice in property management in Hong Kong.
Intended Learning Outcomes	 Upon completion of the subject, students will be able to: a. possess in-depth professional knowledge in specialist areas within property management and be able to apply their knowledge and contribute to professional leadership; b. think holistically and analytically in dealing with complex problems and situations pertinent to their professional practice. They will be versatile problem solvers with good mastery of critical and creative thinking skills, who can generate practical and innovative solutions; c. have an enhanced capability for continual professional development through inquiry and reflection on professional practice; d. be equipped with specific multi-disciplinary skills necessary in real estate development, urban planning and economics, asset management and maintenance management in order to meet desired needs within realistic constraints.
Subject Synopsis/ Indicative Syllabus	Building Management Ordinance, Deeds of Mutual Covenants, financial planning and control for property management, real estate appraisal and ethics in property management.
Teaching/Learning Methodology	The subject consists of a series of lectures and tutorials for the introduction of concepts and theory of property management and related operations. In supplement, case studies will be introduced to reflect the real life examples of property management and related techniques. Prominent external speakers will also be invited to present their own cases with the participation of students. • Lectures • Seminars / Workshops • Independent study • Self-study material • Assignments

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					
		a.	b.	C.	d.		
1. Continuous Assessment (Individual presentation and participation in class / Group project)*	40%	√ 	√ 	√	√ 		
2. Examination*	60%	√	V	V	V		
Total	100%						

^{*}Students are required to pass all the specific assessment methods/tasks to pass the subject.

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

Assessment methods are set in line with the intended learning outcomes.

Reading List and References

Buildings Department (2002), "Building Maintenance Guidebook", Hong Kong SAR Government.

City University of Hong Kong (2003), "Building Design and Development in Hong Kong", City University of Hong Kong Press.

Corgel, John B. (2001), "Real Estate Perspectives: An Introduction to Real Estate", 4e, McGraw-Hill.

David Flux, (2009), "Hong Kong Taxation: Law & Practice (2008-08 Edition)", The Chinese University Press.

Geltner, D and Miller, N. G. (2001), "Commercial Real Estate Analysis and Investment", Prentice Hall.

Goo, S.H., and Lee, A., (2003) Land Law in Hong Kong, Butterworths.

Horngren, Datar, and Foster (2009), "Cost Accounting: A Managerial Emphasis", 13e, Prentice Hall.

Malcolm Merry (2003), "Hong Kong Tenancy Law", Butterworths.

Paul Kent, Malcolm Merry and Megan Walters (2002), "Building Management in Hong Kong", Butterworths.

Rebecca Lai-har Chiu [Editor] (2006), "Professional Housing Management Practices in Hong Kong", Hong Kong University Press.

Robert C. Kyle (2000), "Property Management", 6e, Dearborn Financial Publishing.

Sihombing, J., and Wilkinson, M., (2002) A Student's Guide to Hong Kong

Conveyancing, Butterworths.
方芳(2003),"物業管理",上海財經大學出版社
方鎮光(2008), "建築物管理法律精解", 香港大學出版社
香港地產學會(2000),"物業管理專業手冊"商務印書館

Subject Description Form

Subject Code	BRE527				
Subject Title	Construction Practice in China				
Credit Value	3				
Level	5				
Pre-requisite / Co-requisite/ Exclusion	Nil				
Objectives	This subject aims to introduce the real estate and construction management theories and techniques in the China's construction context for project managers.				
Intended Learning	Upon completion of the subject, students will be able to:				
Outcomes	a. broaden and deepen their knowledge in the areas related to the practices in the construction and real estate industries in China;				
	b. apply theories and techniques in both research and practices in construction management and real estate development in China.				
Subject Synopsis/ Indicative Syllabus	The construction practices in China Construction market and resource management, construction project development procedures, construction procurement systems, competition and competitiveness, project supervision and project management, contract management, construction professionals' qualifications and practice and risk management in the construction business.				
	Real estate development in China				
	Introduction of the real estate market, real estate market practices, urban land use and development, real estate finance and foreign investment in real estate in China.				
Teaching/Learning	The methods of teaching comprise:				
Methodology	a. formal lectures for explaining and discussing important concepts and theories in the subject contents;				
	b. workshops and seminars for students to present and discuss the key issues problem-based cases;				
	c. professional study for students to exchange with professionals in China Mainland;				
	d. guest speakers will be invited to deliver lectures on special topics.				

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					
		a.	b.				
1. Group Work*	50%	V	√				
2. Examination*	50%	√	√				
Total	100%						

^{*}Students are required to pass all the specific assessment methods/tasks to pass the subject.

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

Assessment (50%) via a group work tests the students' ability to analyze and synthesis the construction theories and techniques for developing a business strategy in their own trade.

Examination (50%) tests the students' ability to apply the theories to scenarios drawn from their work experience, and to test whether they can articulate the relationships through discussions and arguments.

Reading List and References

Recommended:

Cao, J. (2015). The Chinese real estate market: development, regulation and investment. Abingdon, Oxon: Routledge.

Flanagan, R. and Li, S. R. (1997). *International construction: a perspective of China*, Chartered Institute of Building. (HD9715.C52 F57 1997)

Frederick, E. G. and Nancy, E. J. (2014). *Construction Project Management (4th Edition)*, Boston: Pearson. (TH438 .G62497 2014)

Howlett, A. (2009). *Chinese construction law: A guide for foreign companies (2nd ed.)*. CCH Asia Pte Limited.

Leung, Y.P.B.; Hui, C.M.E.; Tan, J.H., Chen, L. and Xu, W.B. (2011) SWOT Dimensional Analysis for Strategic Planning – The case of Overseas Real Estate Developers in Guangzhou, *International Journal of Strategic Property Management.*, Vol. 15, No. 2. 2011.

Shen, L.Y.; Leung, Y.P.B. and Hao, J.L. (2010) *Construction and Real Estate Practice in China*, The Hong Kong Polytechnic University Press, ISBN 978-962-367-692-2.

Walker, A., Levett, D., and Flanagan, R. (1998). *China: Building for Joint Ventures*, Hong Kong University Press. (HD9715.C52 C564)

Wei, Yigang; Lam, Patrick Tsun-Ip; Chiang, Yat-Hung; Leung, Barbara Yuk-Ping and Seabrooke, William (2014) An exploratory analysis of impediments to China's credit control on the real estate industry: An institutional perspective, Journal of Contemporary, Vol. 23, No. 86.

Supplementary:

Fainstein, S. S. (2010). The Just City. Ithaca: Cornell University Press.

Fang D. P.; Li, M. E.; Fong, P. And Shen, L. Y. (2004). Risks in Chinese construction market – contractors' perspective, *Journal of Construction Engineering & Management ASCE*, Vol. 130, No. 6, 853-861.

International Journal of Construction Management

International Journal of Project Management

Journal of Construction Engineering and Management (ASCE).

Journal of Construction Management and Economics

Logan, J. R., & Molotch, H. L. (2007). *Urban fortunes: The political economy of place*. Berkeley, CA: University of California Press.

Shen, L. Y. and Hai, S. (2000). Project Supervision Practice in the Chinese Construction, *Journal of the Hong Kong Surveyor*, Vol. 11 (1), pp. 22-26.

Shen, L. Y., Li, Q. M., Drew, D., and Shen, Q. P. (2004). Awarding construction contracts on multi-criteria basis in China, *Journal of Construction Engineering and Management ASCE*, Vol. 130, No. 3, 385-394.

Shen, L. Y. and Song, W. G. (1998). Competitive Tendering Practice in Chinese Construction, *Journal of Construction Engineering and Management ASCE*, Vol.124, (2), pp.155-161.

Shen, L. Y., Wu, W. C., and Ng, S. K. (2001). Risk Analysis for Construction Joint Ventures in China, *Journal of Construction Engineering and Management ASCE*, 127 (1). pp.76-82.

Shen, L Y, Zhao, Z Y and Drew, D (2006). Strengths, Weaknesses, Opportunities and Threats (SWOT) for foreign-invested construction enterprises: a China study, *Journal of Construction Engineering and Management, ASCE*, Vol. 132, No. 9, 966-976.

Zhao, Z.Y., Yao, J.H. and Tang, C. (2017) Chinese Contractors in the International Market: Business Distribution and Competitive Situation. In Wu, Y. et al. (eds.), Proceedings of the 20th International Symposium on Advancement of Construction Management and Real Estate, Springer, Singapore.

Zou, P.X.W., Fang, D.P., Wang, S.Q. and Loosemore, M. (2007). An overview of the Chinese construction market and construction management practice, *Journal of Technology Management in China*, 2(2), pp. 163 – 176

Subject Code	BRE530
Subject Title	Economics for Urban Studies
Credit Value	3
Level	5
Pre-requisite/ Co-requisite/ Exclusion	Nil [Recommended background knowledge: Introductory economics (e.g. Economics 101 or equivalent undergraduate subjects offered by other schools, BRE 263 Construction Economics and Finance, BRE 363 Construction Economics, etc.). Students are expected to possess a basic understanding of the concepts and principles of economics before registering for this subject.]
Objectives	This subject aims to equip students with an economic way of thinking towards the problems in connection to the built environment. Both the classic and state-of-the-art literature in economics will be introduced. Attention will be paid to how economics can shed light on the analyses of problems in urban context. The emphasis of the subject will be put on both economic theories and their applications in resolving problems in urban studies and exploring the economic value in urban development.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: a. use economic principles and state-of-the-art theories to help students develop an understanding of the real estate market and urban economy, b. acquire skills necessary to analyze urban development and policy implications to support decision-making process, and c. identify the root causes on contemporary issues and possible solutions in dealing with urban problems.
Subject Synopsis/ Indicative Syllabus	The subject content can be broadly divided into three parts: Part I: Introduction to fundamental economic concepts State-of-the-art theories covering urbanization, location theories, and urban structure. Analysis of the real estate market by use of Four-Quadrant Model, Hedonic model, and market efficiency models. Determining land rents and land use patterns by bid rent theory. Part II: Social and environmental dimensions of urban development Theories covering neighbourhood choice and segregation, urban transportation and congestion, and sustainable development within an urban context. Comparison of various practices in achieving urban rejuvenation by mitigating negative externalities. Part III: Economic value of (re)development projects and government policies in urban context Valuation of development and redevelopment projects within the urban context by use of various appraisal methods. Means and justifications for government intervention in urban development and renewal.

Teaching/Learning Methodology

Students are required to attend lectures and tutorials throughout the whole course. Lectures will be used to deliver the subject content, and tutorials will be organized in a highly interactive manner which will require students to read selected materials and be prepared BEFORE attending the lectures. In-depth discussions on problem solving and hands-on development appraisals will be conducted in tutorials.

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment % weighting					_	outcom approp	
		a.	b.	c.			
1. In-class participations and Individual performance in group presentation*	50%	V	V	V			
2. Examination*	50%	V	V	V			
Total	100%						

^{*} Students are required to pass all the specific assessment methods/tasks to pass the subject.

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

In-class participations and discussions, and individual assignment (50%): Intensive discussions will be held in classes covering the subject topics. Based on the reflection and ideas brain-stormed from the discussions, students are required to critically review a contemporary issue assigned to them in an individual assignment, by employing what they learned from classes in resolving urban problems.

Final examination (50%): Students are required to attend a two-hour examination at end of semester. They will be required to attempt three essay type questions out of a list of 5 to 6. No compulsory question will be set and all questions carry equal marks. It is so designed to ensure that the students will gain an in-depth understanding of at least three topics in the indicative syllabus.

Reading List and References

Recommended:

Harvey, J. (2004) *Urban Land Economics: The Economics of Real Property*, London: MacMillan.

O'Sullivan, A. (2019) Urban Economics, London: Irwin.

Pirounakis, N.G. (2013) Real Estate Economics – A Point-to-point handbook, Routledge, 2013.

Supplementary:

- Adams, D., & Hastings, E. M. (2001). Urban renewal in Hong Kong: transition from development corporation to renewal authority. *Land Use Policy*, 18(3), 245-258.
- Agarwal, S., Fan, Y., McMillen, D. P., & Sing, T. F. (2021). Tracking the pulse of a city—3D real estate price heat maps. *Journal of Regional Science*, 61(3), 543-569.
- Arnott, R. (1979). Optimal city size in a spatial economy. *Journal of Urban Economics*, 6(1), 65-89.
- Bruch, E. E., & Mare, R. D. (2006). Neighborhood choice and neighborhood change. *American Journal of Sociology*, 112(3), 667-709.
- Davis, J. C., & Henderson, J. V. (2008). The agglomeration of headquarters. *Regional Science and Urban Economics*, 38(5), 445-460.
- DiPasquale, D., & Wheaton, W. C. (1992). The markets for real estate assets and space: A conceptual framework. *Real Estate Economics*, 20(2), 181-198.
- Fan, Y., Yang, Z., & Yavas, A. (2019). Understanding real estate price dynamics: The case of housing prices in five major cities of China. *Journal of Housing Economics*, 43, 37-55.
- Glaeser, E. L. (2007). *The economics approach to cities*. National Bureau of Economic Research (No. w13696).
- Hui, E. C., & Yue, S. (2006). Housing price bubbles in Hong Kong, Beijing and Shanghai: a comparative study. *The Journal of Real Estate Finance and Economics*, 33(4), 299-327.
- Mayer, C. (2011). Housing bubbles: A survey. *Annual Review of Economics*, 3(1), 559-577.
- Musterd, S., & Ostendorf, W. (Eds.). (2013). *Urban segregation and the welfare state: Inequality and exclusion in western cities*. Routledge.
- Nechyba, T. J., & Walsh, R. P. (2004). Urban sprawl. *Journal of Economic Perspectives*, 18(4), 177-200.
- Pagourtzi, E., Assimakopoulos, V., Hatzichristos, T., & French, N. (2003). Real estate appraisal: a review of valuation methods. *Journal of Property Investment & Finance*.
- Parry, I. W. H. (2002). Comparing the efficiency of alternative policies for reducing traffic congestion. *Journal of Public Economics*, 85(3), 333-362.
- Warren-Rhodes, K., & Koenig, A. (2001). Ecosystem appropriation by Hong Kong and its implications for sustainable development. *Ecological Economics*, 39(3), 347-359.
- Zheng, S., & Kahn, M. E. (2008). Land and residential property markets in a booming economy: New evidence from Beijing. *Journal of Urban Economics*, 63(2), 743-757.

Subject Code	BRE532
Subject Title	Maintenance Management and Operation
Credit Value	3
Level	5
Pre-requisite / Co-requisite/ Exclusion	Nil
Objectives	To provide students with knowledge of building maintenance technology and management.
	To provide students with the current practice and regulations of building maintenance in Hong Kong
	To enable students to apply those knowledge to their future workplaces.
Intended Learning	Upon completion of the subject, students will be able to:
Outcomes	a. recognize the importance of effective and appropriate maintenance work;
	b. identify building defects;
	c. propose execution plan of building maintenance upon the defects;
Subject Synopsis/ Indicative Syllabus	Maintenance management: establishing workload; budgeting, programming, executing and controlling programme; contractual forms and procedures; use of direct and indirect labour; controlling maintenance and repair work; working in occupied premises; service charges; information systems; categories of information; feedback; maintenance manuals; establishing database; schedules and specifications; survey; report writing.
	Maintenance technology: diagnosis and treatment of common defects in buildings by life expectancy; conservation.
	Hazardous materials in buildings and health issues related to buildings.
	Sick building syndrome; development and prevention; case studies.
	Asbestos management; abatement and disposal; case studies.
	Building defects diagnostic techniques.
	Sustainable maintenance.
Teaching/Learning Methodology	The subject consists of a series of lectures, tutorials, practical workshops and laboratory demonstration classes. Concepts, theory and application of maintenance management and operation will be covered. Case studies will be introduced to reflect the real life examples of building maintenance techniques. In particular in maintenance operation, the subject will introduce the condition-based inspection and maintenance technology covering a host of advanced non-destructive testing (NDT) technologies such as infrared thermography, pulsed radar, forced vibration techniques etc. The subject will also emphasize the importance of continuous condition monitoring and complete rehabilitation instead of patch repairs to deteriorated concrete structures. Prominent guest speakers are invited to advance students' technological and managerial

	knowledge.								
Assessment Methods in	Specific % Intended subject learning outcomes								be
Alignment with Intended Learning Outcomes	assessment methods/tasks	weighting	asse a.	ssed (F	Please	tick as	approp	riate)	
	1. Continuous assessment	40%	√	√ √	√ √				
	2. Examination	60%	V	√	√				
	Total	100%		•	1		•	•	•
	*Students are re examination to pa	•	•	both	the co	ontinuo	us ass	sessm	ent and
	Explanation of the the intended learn			of the	assess	ment r	nethod	s in a	ssessing
	Continuous assessment through a series of seminar topics and worksho covers all knowledge that students shall be able to achieve as stated in intended learning outcomes. Examination is to assess the theoretical aspet of maintenance technology and management skills.						ed in the		
Reading List and References	Akhtar, S. (2013). "Review of nondestructive testing methods for condition monitoring of concrete structures." <i>Journal of construction engineering</i> , 2013.								
	Buildings Departm	Buildings Department (2002) Building Maintenance Guidebook. HKSAR							
	Chang, CY., and Tsai, MD. (2013). "Knowledge-based navigation system for building health diagnosis." <i>Advanced Engineering Informatics</i> , 27(2), 246 260. Chanter B. (2007) <i>Building Maintenance Management</i> , Blackwell								
	Douglas J. & Noy E A (2011) <i>Building Surveys & Reports</i> Wiley Blackwell 4 Edition Douglas J. & Ransom B. (2013) <i>Understanding Building Failures</i> Routledge 4 Edition.					kwell 4th			
						ledge 4 th			
	Lee H.S. and Yue	n, C.S. (199	3) <i>Buil</i>	ding M	aintena	nce Te	chnolo	<i>gy</i> Ma	cmillan
	Lee R. (2001) Buil	ding Mainte	nance	Manag	gement	Blackw	/ell 4 th (edition	
	McCann, D., and assessment of colors 34(2), 71-84.								
	Petty S. E. Edit. Residential and Co	` '		-	_		age As	sessm	ents for
	Sing, M.C.P., Lov condition assess				•	,	•		•

response approach." Structural Survey, 32(2), 89-101.
Wood B. (2009) Building Maintenance Wiley-Blackwell

Subject Code	BRE533
Subject Title	Value Management in Construction and Property
Credit Value	3
Level	5
Pre-requisite/ Co-requisite/ Exclusion	Nil
Objectives	This subject aims to meet the needs of construction professionals who wish to apply value management/engineering methodology to obtain best value for money for their projects, by broadening and deepening their knowledge in the theory and practice of value management/value engineering in the construction context.
Intended Learning Outcomes	 Upon completion of the subject, students will be able to: a. Understand the value management methodology; b. Use value management tools/techniques such as function analysis in workshops; c. Organize and manage value management workshops in a project life cycle; d. Exercise practical creativity skills and work with a team of stakeholders to arrive at innovative solutions; e. Ensure value for money for projects by applying value management in business and/or technical situations; f. Implement the value management methodology and techniques in real-life construction projects.
Subject Synopsis/ Indicative Syllabus	 Value management basics: historical development, definitions and concepts. Value management methodology and techniques, including function analysis, function cost analysis, environment for creativity, life cycle costing. Structured job plan (information, analysis, creativity, evaluation, development, presentation) and alternative VM approaches such as the Charette job plan. Group dynamics, teamwork, group problem-solving methods, and facilitation skills. Project selections for VM studies, applications in Hong Kong and overseas, limitations. Comparison of value management and traditional cost management techniques. Case studies of the practice of value management. Guided VM workshop for real life projects.

Teaching/Learning Methodology

Topics related to the concepts and development of value management (VM) techniques will be introduced by brief lectures, these periods will also serve to guide the students to various reference materials. Case studies, coursework, and supervised VM workshops will provide opportunities for students to have a deeper understanding of the methodology how it is practiced in real-life projects, and to have some hands-on experience.

Lectures and Seminars

- Historical Developments, Definitions, Concepts of VM
- The Value Management Methodology
- VM Job Plan
- Managing VM Study
- Teamwork and Group Dynamics
- Group Facilitation and Creative Thinking
- The Use of Group Support Systems in VM Studies
- VM Applications, Limitations and Case Studies

Supervised workshops

Independent study

- Self-study material
- Projects
- Assignments

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcom to be assessed (Please tick as appropriate)					
		a.	b.	C.	d.	e.	f.
1. Continuous Assessment*	50%	√	✓	√	√	√	√
Preparation of a term paper individually	25%			✓			✓
 Participation in hands-on VM workshop 	25%	✓	√	✓	√	✓	✓
2. Examination*	50%	✓	√			✓	
Total	100%						

^{*} Students are required to pass both the continuous assessment and examination to pass the subject.

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

The hands-on VM workshop will inform how well the students have achieved
the intended learning outcomes. The examination will measure students'
understanding of the VM theory/concepts in a written form.

Reading List and References

Essential Reading:

Shen G.Q.P., Yu A.T.W. (2016). Value Management in Construction and Real Estate: Methodology and Applications. Routledge, Taylor and Francis Group, ISBN: 978-1-138-85278-5.

Recommended Readings:

British Standards Institution (2020). British Standard: Value Management, BS EN 12973: 2020.

Environment, Transport and Works Bureau (2002). Technical Circular (Works) No. 35/2002 Implementation of value management in public works projects, http://www.devb.gov.hk/filemanager/technicalcirculars/en/upload/126/1/c-2002-35-0-1.pdf

Kelly John, Male Steven, Graham Drummond (2015). Value Management of Construction Projects, 2nd Edition, John Wiley & Sons.

Shen G.Q.P., Fan S.C. and Kelly J. (2009). A group support system for collaborative working in a value management workshop environment, in Shen et al (Eds), Collaborative Construction Information Management, Spon Press, UK, USA, Canada, 303-326.

Shen Q.P. and Liu G.W. (2003). Critical Success Factors for Value Management Studies in Construction, Journal of Construction Engineering and Management, ASCE (American Society of Civil Engineers), 129(5), 485-491.

Shen Q.P. and Liu G.W. (2004). Applications of Value Management in the Construction Industry in China, Engineering, Construction and Architectural Management, 11(1), 9-19.

Shen Q.P. and Yu A.T.W. (2012). Value management: recent developments and way forward, Construction Innovation: Information, Process, Management, 12(3), 264-271.

Yu A.T.W., Shen Q.P., Kelly J. and Lin G.B. (2006). A Value Management Approach to Strategic Briefing: An Exploratory Study, International Journal of Architectural Engineering and Design Management, 2(4), 245-259.

Yuan Z., *Shen G.Q.P., Chung J.K.H., Ramly Z., Yu A.T.W., Wang H. (2015). Experimental Study on Virtual Value Management Workshop in Hong Kong, ASCE Journal of Management in Engineering, 32(2). DOI 10.1061/(ASCE)ME.1943-5479.0000392.

Subject Code	BRE541
Subject Title	Property Law
Credit Value	3
Level	5
Pre-requisite/	No special pre-requisite for this subject.
Co-requisite/ Exclusion	The subject is mutually exclusive with Property and Construction Law (BRE584)
Role of the subject in real estate maintenance and development	As regards real estate maintenance and real estate development, owners of any right relating to any existing estate or any estate yet to be created as well as the legal significance of any action to be taken by those engaged in the industry are needed to be understood before any action is taken for maintaining and/or developing the related estate.
	Hence, it is essential to equip students the related legal knowledge so that they are in a better position to consider the most appropriate action when circumstances arise.
Objectives	The objectives of the subject are to:
	a. Equip the students with the legal knowledge being essential to building management and real estate development.
	b. Develop students' ability to make professional judgment over the areas relating to the management and development of a real estate.
Intended Learning	Upon completion of the subject, students will be able to:
Outcomes	Understanding the legal system of the HKSAR and the obligations created under contract law and tort law.
	b. Discriminate between property concepts, including land ownership, land use and charges.
	c. Understand the key concepts in property law which are essential for building management and development and discriminate among the concepts.
	d. Understand the relationship, rights and obligation between a landlord and a tenant under a tenancy agreement.
	e. Possess the ability to evaluate property law with reference to contemporary issues and building management in particular.
	f. Use knowledge, reasoning and research skills to deal with property related issues arising in the context of an area of practice.
	g. communicate effectively
Subject Synopsis/ Indicative Syllabus	Context
	The nature and classification of property, review of the legal system and general principles in contract law and tort law that have direct application to

property management area.

A comparative analysis of the elements of different legal systems over property law concepts.

Rights and obligation of the owner of an estate

Legal and economic meanings of property rights; title; use; income; and management, including the right of disposal.

The legal relationship between co-owners in a multi-storey building, the importance of a deed of mutual covenant in regulating the rights and obligations of the co-owners as well as the statutory law over the management of a multi-storey building.

Acquisition, disposal and loss of property rights

Principles and legal rules relating to the creation and transfer of property rights.

The creation of a landlord and tenant relationship in general and in commercial world in particular.

The nature of a security transaction and the charges being created by a company for financing a development.

Protection of property rights

Relationships between building management law and contract law, tort law, criminal law and tenancy law and the Land Registration system in Hong Kong and judicial remedies.

The nature of a tenancy relationship as well as the rights and obligations of the landlord and tenant under a tenancy agreement.

The nature of land covenant and, in particular, the nature and role of a deed of mutual covenant.

Adverse possession

Restrictions on property rights

- a. Private restrictions including easements and restrictive covenants, and sale of goods
- b. Public restriction including planning, land resumption, building controls.

Teaching/Learning Methodology

The pedagogical philosophy underpinning this subject is experiential learning. Students will follow a sequence of activities which may be summarized as follows:

- Learning by doing
- Learning through sharing
- Learning through feedback
- Learning by reflection

An experiential methodology is particularly appropriate for a Master's

programme which is intended for persons with some knowledge and experience in the management of real estate industries. The framework is also consistent with development professional judgment, particularly the emphasis upon reflection, through which experience is turned into learning.

Class contact time is organized into seminars in which relevant topics will be explored and discussed. Guidance on legal research will be provided. Legal practitioner may be invited to attend the seminars to discuss matters of topical interest and practical relevance.

Students will divide into learning support groups to, firstly, assist learning, secondly, share viewpoints on the case studies, and finally, work together in the assignment.

For the graded coursework component of summative assessment, a topic relating to the syllabus of this subject of particular interest to the students will be select and research may be carried out into that topic.

Learning approach involves:

- Lectures and seminars
- Independent study
 - Self-study material
 - Assignment

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					nes to
		a.	b.	C.	d.	e.	
Assignment: research project	50%	√	√	V	V	1	
2. Examination	50%	√	1	V	V	$\sqrt{}$	
Total	100 %						

^{*}Students are required to pass all the specific assessment methods/tasks to pass the subject.

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

Research project designed to assess legal research skills, legal study and legal analysis and application of law to real-life problems.

One three hour open-book examination, comprising a combination of breadth and depth problems designed to assess knowledge, reasoning ability, and critical judgment.

Reading List and References

Indicative reading list and references:

Note: The latest version of the readings should be used.

Cottrell J (1999) Legal Research: A Guide for Hong Kong Students, Hong

Kong University Press. Hong Kong.

Hong Kong legal system and general principles of law:

Vanessa Stott. (2010). An Introduction to Hong Kong Business Law (6th ed). Pearson Education

Clement Shum. (1998). General Principles of Hong Kong Law. (3rd ed). Longman

Land law:

S.H.Goo., & Alice S.C.Lee. (2015). Land Law in Hong Kong. (4th ed). LexisNexis.

Sihombing, J., & Wilkinson, M. (2014). A Student's Guide to Hong Kong Conveyancing. (7th ed). LexisNexis

Nield, S. (1997) Hong Kong Land Law. (2nd). Addison Wesley Longman China Limited.

Planning and Land Resumption:

John, Litton., & Kate, Olley. (2018) Planning Law in Hong Kong. LexisNexis.

Richard, E. Smith. (2006) Planning Control: Development, Permission and Enforcement. RICS Boooks.

Gordon N, Cruden, Lisa Jane Cruden. (2017) Land Compensation and Valuation Law in Hong Kong. (4th ed). LexisNexis

Building Management:

Merry M. (2016) Building Management in Hong Kong. (3rd ed). LexisNexis

Tenancy law:

Merry, M. (2016) Hong Kong Tenancy Law, (6th ed). LexisNexis

Security transactions:

S.H.Goo, & Alice S.C.Lee (2015), 4th edition. LexisNexis.

V Stott. (2015) Hong Kong Company Law. (14th ed). Pearson Education Asia Limited.

Supplementary:

Authorized Hong Kong Law Report and Digest, Sweet & Maxwell.

Government Publications.

Halsbury Laws of Hong Kong, Butterworths.

Hong Kong Cases, Butterworths

Useful websites

Polytechnic University library database: Westlaw

HKSAR Judiciary: https://www.judiciary.hk/en/home/index.html
Hong Kong Legal Information: http://www.hklii.org/
Hong Kong e-legislation: https://www.elegislation.gov.hk/

Subject Code	BRE542
Subject Title	Construction Law
Credit Value	3
Level	5
Pre-requisite / Co-requisite/ Exclusion	Nil
Objectives	Through interactive teaching/learning process between lecturers/students, prepare students to achieve the Intended Learning Outcomes in the area of construction law.
Intended Learning	Upon completion of the subject, students will be able to:
Outcomes	a. describe the principles of construction contracts;
	b. explain key concepts and principles in construction law and management;
	c. analyse construction law and practice in major legal systems;
	d. apply knowledge of construction law to their practice areas in the construction industry.
Subject Synopsis/ Indicative Syllabus	Context: Overview of the legal issues in the context of the construction industry; Development control laws in general; Construction law in the context of China practice.
	Principles of Construction Contracts: Contracting systems and standard forms, Procurement and contract arrangement; Law related to tendering; Obligations of contracting parties.
	Legal issues in Procedures and Conditions: Certification; Payment and time; Remedies and damages for breach of contract, Sub-Contracts and nomination; Insurance and bonds; Law and practice in major legal systems.
	Key Issues in Substantial Disputes: Suspension and Determination of Contracts; Design and Quality Responsibility; Statutory Controls; Law of Tort for Defective Buildings and Subsequent Owners.
Teaching/Learning Methodology	Topics related to construction law and management will be introduced by lectures. Students will be guided to various reference materials and carry out reading according to reading plans recommended by the lecturers.
	Practitioners will be invited to give lectures on specialist areas and current legal issues. Seminars in small groups for case studies will be organized in which students will be required to select a topic of particular interest to them and carry out research into some aspect of that topic and share their views with their classmates through presentations and discussion. Constructive criticism and feedback will be provided by the lecturer/tutor.
	Case study reports and assignments will be used in the continuous assessment. The final examination will be an open book examination.

- Lectures and seminars
- Tutorials
- Workshops
- Independent study
 - Self-study material
 - Assignments

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)			es to		
		a.	b.	C.	d.		
Continuous assessment*	50%	V	V	V	V		
2. Examination*	50%	1	V	V	V		
Total	100%						

^{*}Students are required to pass both the continuous assessment and examination to pass the subject.

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

Continuous assessment with course assignments allows both developmental and judgmental assessment of the intended learning outcomes. Students learn to explain and analyze through discussions with peer group and tutors, and to apply their knowledge through searching, reflection from mistakes and presentation of their findings.

Examination allows assessment of individual's ability and of performing tasks under constraints and examination environment. Open book examination can achieve these results whilst not subject students to rote learning, but analyze and apply information available.

Reading List and References

Burr Andrew (Ed), Construction Law Journal, (8 Issues a year), ISSN: 0267-2359Sweet & Maxwell

Chan E.H. & Yiu ECY. (2008) *Contractual and Regulatory Innovations*, PACE Pub. Ltd. Hong Kong.

Chan E.H.W. & Au M.C.Y. (2010) Enforceability Considerations for Deleting the Extension of Time Provisions in Building Contracts, (2010) 26 *Const. L.J.*, Part 4, (July 2010) 18-39.

Cheng, T. Y.W. & Soo, G. (2013) Construction Law and Practice in Hong Kong, 3rd Edition, Hong Kong: Sweet & Maxwell Asia.

Chitty on contracts. Hong Kong specific contracts (6th Ed), Hong Kong: Sweet & Maxwell Asia. 2019.

Cleland D.I. and Gareis R. (2010) *Global Project Management Handbook*, 2nd Ed. (USA: McGraw-Hill, Inc.

Construction Industry Council (CIC) Construction Adjudication, http://cic.org.uk/services/adjudications.php

CIC (2015) Reference Materials Dispute Resolution (August 2015), Construction Industry Council, Hong Kong.

Development Bureau (2015) Proposed Security of Payment Legislation for the Construction Industry, Consultation Document, DEVB, HKSAR (https://www.devb.gov.hk/filemanager/en/content_880/SOPL_Consultation_Document.pdf)

Fisher, M J & Greenwood, D G (2011) Contract Law in Hong Kong, 2nd Ed, HKU Press.

Furmston M. (2012) Powell-Smith & Furmston's *Building Contract Casebook*, 5th Ed., Oxford; Malden, Mass.: Blackwell Science.

Furst S. & Ramsey V. (2019) *Keating on Construction Contracts*, 10th Ed., London: Sweet & Maxwell.

Mark Wright, R.W. Thomas (2016), *Construction Contract Claims*, 4th Ed., Macmillan, U.K.

Mau, S.D. (2013) Hong Kong Legal Principles: Important Topics for Students and Professionals, Hong Kong University Press.

Murdoch, Champion and Hughes (2015) *Construction Contracts: Law and Management*, 5th Ed. E & FN Spon, U.K.

Nicholas Dennys, Robert Clay, Atkin Chambers (2019) Hudson's Building and Engineering Contracts, 14th Ed., (London: Sweet & Maxwell).

Soo G. (2013) Construction Law and Practice in Hong Kong, 3rd Ed.Sweet & Maxwell.

Uff, J. (2017) Construction Law: Law & Practice relating to Construction industry, 12th Ed. Sweet & Maxwell. U.K.

Wong W.S. & Chan E.H. (2000) *Building Hong Kong: Environment Considerations*, Hong Kong University Press.

Subject Code	BRE544
Subject Title	Principles and Practices of Law
Credit Value	3
Level	5
Pre-requisite/ Co-requisite/ Exclusion	Nil
Objectives	To engage in critical thinking, analysis and problem-solving within the legal context of the Hong Kong construction industry.
Intended Learning Outcomes	 Upon completion of the subject, students will be able to: a. consolidate their knowledge of the general principles of law in Hong Kong, in particular in the context of the construction industry; b. identify legal problems in the construction industry by application of the principles of contract and tort; c. use legal knowledge, reasoning and research skills to respond appropriately to construction-related issues; d. build up a firm foundation for advancing further legal studies in the construction-related areas.
Subject Synopsis/ Indicative Syllabus	General principles of Hong Kong law - a consolidation The Hong Kong legal system - including sources of law; the court system. Contracts - including general principles of contract law; nature of contractual liability; standard forms of building contract; remedies. Torts - including nature of tortuous liability; negligence; nuisance; trespass; Rylands v Fletcher; occupier's liability; breach of statutory duty; remedies. Property law - concept and classification of property; introduction to land law. Note: this topic will only be covered briefly. This coverage is only an introduction to the Property Law module offered by BRE. Legal personality Sole proprietorship, partnerships and corporations. Legal reasoning and analysis This is an important component of this subject which helps the students grasp the basic skills in legal research and reasoning including retrieval of the useful data from legal references, like on-line databases. Real-life cases will be analysed by the students in form of a continuous assessment or research project.
Teaching/Learning Methodology	Teaching and learning methodology will include in activities are intended to result in: Learning through participation. Learning by reflection. Learning through sharing. Learning through feedback.

Relevant topics will be explored and discussed, and guidance on legal research will be provided. If appropriate, legal practitioners will be invited to attend the seminars to discuss matters of topical interest and relevance. Every student is required to participate actively in classroom dialogues.

For the graded coursework component of summative assessment, students will select a topic of particular interest to them and carry out research into that topic.

- Lectures and seminars
- Tutorials
- Independent study
 - Self-study material
 - Assignments
 - Library work

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)			es to		
		a.	b.	C.	d.		
1. Course Work*	50%		V	1	1		
2. Examination*	50%	V	V	V	V		
Total	100%						

^{*}Students are required to pass all the specific assessment methods/tasks to pass the subject..

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

Course Work: demonstration of students' abilities to conduct independent research, consolidation and integration of information, critical analysis of collected data, culminating in a presentation. In short, the Course Work will assess legal research skills, legal analysis and application of law to real-life problems.

Examination: assesses students' comprehension and application of legal principles.

Reading List and References

Arjunan, Krishnan et al (2nd Ed., 2009). *Business Law in Hong Kong*, LexisNexis.

Bartholomew, SH (2nd Ed., 2002). *Construction Contracting: Business and Legal Principles*, Prentice Hall.

Chan, A (3rd Ed., 2009). *Hong Kong evidence law handbook: Evidence Ordinance (Cap.8)* [electronic resource], Butterworths.

Cheng, T & Soo, G (3rd Ed., 2013). *Construction Law and Practice in Hong Kong,* Sweet & Maxwell.

Cottrell J (1999). *Legal Research: a Guide for Hong Kong Students*, Hong Kong University Press, Hong Kong.

Fisher, M J & Greenwood, D G (2nd Ed., 2011). Contract Law in Hong Kong,

HKU Press.

Furst, S & Ramsay, V (Eds.) (10th Ed., 2016). *Keating on Construction Contracts*, Sweet & Maxwell.

Glofcheski, R (3rd Ed., 2012). Tort Law In Hong Kong, Sweet & Maxwell.

Hills, M J (2001). Building Contract Procedures in Hong Kong, Longman.

Mau, S D (2nd Ed., 2016). *Contract Law in Hong Kong: An Introductory Guide*, HKU Press.

Mau, S D (2nd Ed., 2013). Hong Kong Legal Principles: Important Topics For Students and Professionals, HKU Press.

Mau, S D (2nd Ed. 2014). *Property Law in Hong Kong: An Introductory Guide*, HKU Press.

Mau, S D (2nd Ed. 2015). *Tort Law in Hong Kong: An Introductory Guide*, HKU Press.

McInnis, J A (1997). Hong Kong Construction Law, [Loose-leaf] Butterworths.

Stott, V (4th Ed., 2010). *An Introduction to Hong Kong Business Law*, Pearson Education South Asia.

Uff, J (11th Ed., 2013). Construction Law: Law and practice relating to the construction industry, Sweet & Maxwell.

Subject Code	BRE545
Subject Title	Dispute Management and Law for International Projects
Credit Value	3
Level	5
Pre-requisite / Co-requisite/ Exclusion	Nil
Objectives	Through interactive teaching/learning process between lecturers/students, prepare students to achieve the Intended Learning Outcomes in the area of construction dispute management.
Intended Learning Outcomes	 Upon completion of the subject, students will be able to: a. identify the different factors that contribute to disputes in international construction projects; b. explain the principles of dispute management and law for international construction projects; c. differentiate different dispute resolution practices in major legal systems; d. analyse the legal issues in the different dispute resolution methods in international construction; e. apply knowledge of dispute management and law to their practice areas in the construction industry.
Subject Synopsis/ Indicative Syllabus	Context: Overview of the legal issues in the context of international construction project; Characteristic of International construction project; Contract strategies and international contract forms. Dispute Theory: Theory of causes and prevention of dispute; Cultural considerations; Contractual avoidance of dispute; Conflict management style; Negotiation skill and theory. Dispute Resolution Methods: Overall review of ADR; Law and practice for binding and non-binding Dispute Resolution Methods; Legal issues in multi-tiered dispute resolution mechanism; Current research on selection of dispute resolution methods; Enforceability of decisions: international comparative study. Claims Management and Procedures: Management of contractual claims; Law and practice for Experts; Participating in legal proceedings.
Teaching/Learnin g Methodology	Topics related to dispute management and law will be introduced by lectures in the context of international construction projects. Students will be guided to various reference materials and will carry out critical reviews as recommended by the lecturers. Practitioners in construction contracts and dispute resolution will be invited to give lectures on specialist areas and current issues. Students are required to select a topic of particular interest to them and carry out in-depth research as cases studies. Seminars in small groups will be organized

in which, with the guidance of tutors, students will share their views through presentations and discussions on their case studies. Constructive criticism and feedback will be provided by the lecturer/tutor. Students are encouraged to use their own initiative to gain real-life experience in dispute resolution processes, such as attending court hearings etc., and provide reflective journals.

Research reports/case studies will be used in the continuous assessment. The final examination will be an open book examination.

- Lectures and seminars
- Tutorials and Workshops
- Independent study
 - Self-study material
 - Assignments

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)			es to		
		a.	b.	C.	d.	e.	
Continuous assessment*	50%	√	V	V	√	√	
2. Examination*	50%		V	V	V	V	
Total	100%					,	

^{*}Students are required to pass both the continuous assessment and examination to pass the subject.

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

Continuous assessment with course assignments allows both developmental and judgmental assessment of the intended learning outcomes. Students learn to identify factors, explain, differentiate and analyze issues through discussions with peer group and tutors, and to apply their knowledge through searching, reflection from mistakes and presentation of their findings.

Examination allows assessment of individual's ability and of performing tasks under constraints and examination environment. Open book examination can achieve these results whilst not subject students to rote learning, but analyze and apply information available.

Reading List and References

Blackaby, Partasides, et al. (2015) Redfern and Hunter on International Arbitration (Hardback and eBook), Sixth Edition, Oxford University Press.

Bramble B. & Callahan MT (2018) Construction Delay Claims, (Construction Law Library) 6th Edition, Kluwer.

Brett J.M., 'Culture and Negotiation' (2000) Vol. 35, No. 2, International Journal Of Psychology, p.97-104.

Brown H.J. & Marriott A.L., (2011) *ADR Principles and Practice*, 3rd Ed. (London: Sweet & Maxwell).

Carnevale P.J. and Choi D.W., (2000) 'Culture in the Mediation of International Disputes' Vol.35, No.2, International Journal of Psychology, p. 105-110.

Chan, E. (2003) "Disputology" in the International Construction Industry. Construction Research Congress: pp. 1-9.doi: 10.1061/40671(2003)11

Chan E. H., Suen H. (2005) Legal Issues of Dispute Management in International Construction Projects Contracting, Construction Law Journal, Vol.21(4), 291-305.

Chan E. H. & Suen H. (2005) Disputes and dispute resolution systems in Sino-Foreign Joint Venture (SFJV) Construction Projects in China, ASCE Journal of Professional Issues in Engineering Education and Practice, Vol.131(2),141-148.

Chan E.H.W. Dispute Resolution Model (Interactive on-line platform) website (http://www.drm.hk/)

Chan E.H.W. & Yiu E.C.Y. (2008) *Contractual and Regulatory Innovations*, Pace Pub. Ltd., Hong Kong.

Construction Industry Council (CIC) Construction Adjudication, http://cic.org.uk/services/adjudications.php

Coulson, P. (2015) Coulson on Construction Adjudication, Third Edition Oxford University Press.

Development Bureau (2015) Proposed Security of Payment Legislation for the Construction Industry, Consultation Document, DEVB, HKSAR (https://www.devb.gov.hk/filemanager/en/content_880/SOPL_Consultation_Document.pdf)

Fan, K (2013) Arbitration in China: A Legal and Cultural Analysis, Bloomsbury Publishing.

Fenn, P., O'Shea M. and Davies E., (1999) Dispute Resolution and Conflict Management in Construction: An International Review (London: E&FN Spon,), p. 858.

Furst S. & Ramsey V. (2019) Keating on Building Construction Contracts, 10th Ed., London: Sweet & Maxwell.

Hofstede, G., (2010) *Culture and Organizations: Software of the Mind*, (NY: McGraw-Hill,).

Hong Kong Mediation Ordinance Cap 620

Hunter, M., Paulsson, J., Rawding, N., & Redfern, A., (2010) *The Freshfields Guide to Arbitration and, Clauses in International Contracts,* (Boston, Deventer: Kluwer Law and Taxation Publishers, 3rd Edition).

Kendall, J. (2014) Expert Determination, 5th Ed., (London: Sweet & Maxwell).

Mawhinney, Mark, (2008) International Construction, John Wiley & Sons.

Mustill & Boyd, (2014) *Commercial Arbitration*, 3rd Ed. (London: Butterworths) and Noter-up of *Commercial Arbitration 2nd Ed. 2001 Companion*, London: Butterworths, 2001).

Nicholas Dennys, Robert Clay, Atkin Chambers (2019) Hudson's Building and Engineering Contracts, 14th Ed., (London: Sweet & Maxwell).

Potter, P. (2005) The Chinese Legal System: Globalization and Local Legal Culture, $2^{\rm nd}$ Ed, Routledge

Redfern, A. and Hunter, (2015) Redfern & Hunter on International Arbitration 6th edition, Oxford University Press.

Uff, J. (2017) Construction Law: Law & Practice relating to Construction industry, 12th Ed. Sweet & Maxwell. U.K.

Subject Code	BRE546
Subject Title	Mediation Training
Credit Value	3
Level	5
Pre-requisite / Co-requisite/ Exclusion	Nil
Objectives	Through interactive teaching/learning process between lecturers/students, prepare students to achieve the Intended Learning Outcomes in the area of mediation.
	NOTE: Students enrolling in BRE546 Mediation Training, which involves mediation training run by approved trainers, will be required to pay an extra fee in addition to the tuition fee for 3 credits.
Intended Learning Outcomes	Upon completion of the subject, students will be able to:
Outcomes	 a. evaluate the characteristics of mediation to appreciate its major differences in comparison with other dispute resolution;
	b. clearly communicate key concepts, principles and findings related to mediation issues;
	c. apply knowledge, reasoning and research skills to deal with mediation issues arising in a real-life context;
	d. carry out a mediation process to resolve problems associated with the construction and real estate industries.
Subject Synopsis/ Indicative Syllabus	The Mediation Training provides an international standard training package fully recognised by dispute resolution professional bodies. The syllabus reflects the requirements specified from time to time by the professional body which provides accreditation to the subject. Not only will successful completion of the workshop provide students with the 3 credits associated with this subject but it will also lead to membership of dispute resolution professional bodies subject to passing the respective qualifying examinations.
Teaching/Learning Methodology	Students are required to attend 40 hours of Mediation Training conducted by authorized mediation trainers and coordinated by academic staff from the BRE Department. The training will be carried out within a few days in order to provide an intensive and focused experience. Students will be briefed on the requirements of the mediation training at the beginning of the semester.
	In addition to the contact hours provided by the training workshop, students will be expected to have regular contact with BRE academic staff in the form of consultation and discussion session during which mediation issues will be addressed.
	Throughout the semester, students will be required to conduct guided self-study related to mediation and to submit a reflective journal of the study at the end of the semester.
	Successful completion of the training, as assessed satisfactory by the authorised trainers, and the reflective journal will provide students with the 3 credits associated with this subject and will also lead to membership of dispute

resolution professional bodies subject to passing the respective qualifying examinations.

Teaching/Learning:

- Briefing and tutorials with BRE staff
- Training Workshops
- Independent self-study

Assessment Methods in Alignment with Intended Learning Outcomes

	1	1					
Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)			es to		
		a.	b.	C.	d.		
1. Training Workshops	80%	√	√	V	√		
2. Reflective Journal	20%	1	1				
Total	100%						

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

The workshop by the approved trainer will provide continuous assessment with course assignments and role-plays, which allows both developmental and judgmental assessment of the intended learning outcomes. There will be a mock up role-play which will be conducted by the approved trainer to assess students learning outcomes.

Continuous assessment of students' academic performance based on their reflective journals and participation in tutorials. This allows assessment of individual's ability and a student's critical analysis of the learning process and learning outcomes.

Students are required to achieve grade D or above in overall subject grade to pass the subject.

Reading List and References

Brooker P., & Wilkinson S. (2010) Mediation in the Construction Industry: An International Review, Spon Press.

Chan E.H.W. (2022) Dispute Resolution Model by Edwin Chan You can access the interactive teaching /learning web site at Dispute Resolution Model (http://www.drm.hk/)

Construction Industry Council (CIC) Construction Adjudication, http://cic.org.uk/services/adjudications.php

CIC (2015) Reference Materials Dispute Resolution (August 2015), Construction Industry Council, Hong Kong.

Fisher, R.; Patton, B. M.; & Ury, W. L. (1992) *Getting to Yes: Negotiating An Agreement Without Giving In*, 2nd Ed. London: Random House. (Online version ©2011 Roger Fisher, William Ury, and Bruce Patton (P)2011 Simon & Schuster)

Hong Kong Mediation Ordinance Cap 620

Pickavance J. (2015) A Practical Guide to Construction Adjudication, Wiley Blackwell

Pickavance, K (2013) Construction Law and Management, Infoma law

Qiang, Shigong (2001) *Mediation, Legality and Modernity: Mediation in China* / 強世功編, Beijing : Zhongguo fa zhi chu ban she.

Strasser, Freddie (2004) *Mediation: A Psychological Insight into Conflict Resolution*. London: Continuum.

Ury, W. L. (1993) *Getting Past No: Negotiating Your Way From Confrontation To Cooperation*. New York, N.Y.: Bantam Books. (Online Audio version: Bantam Doubleday Dell Audio Publishing, A Division of Random House, Inc.)

Subject Code	BRE547
Subject Title	Construction Law Project
Credit Value	3
Level	5
Pre-requisite/ Co-requisite/ Exclusion	Nil
Objectives	Through collaborative teaching/learning process between lecturers/students, prepare students to achieve the Intended Learning Outcomes in the area of construction law and research.
Intended Learning	Upon completion of the subject, students will be able to:
Outcomes	a. understand key concepts and principles in construction law and management;
	b. clearly communicate key concepts, principles and findings related to construction law issues;
	c. apply knowledge, reasoning and research skills to deal with construction law issues arising in a real-life context;
	d. propose solutions to complex construction law problems associated with the construction and real estate industries.
Subject Synopsis/ Indicative Syllabus	The Project requires candidates to identify a construction law related problem and then, as part of a team, formulate a number of alternative arguments. This will involve exploring the whole range of construction law issues involved in the problem. The intention is to improve students' comprehension of construction law and provide them with an opportunity of applying the principles and practice of construction law to practical situations.
Teaching/Learning Methodology	A team of tutors is responsible for the Project, which spans one 13-week semester. At the beginning of the semester, students are briefed on the requirements of the Project. They will then be required to orally present their proposals during a half-day workshop by around Week 4 and, based on the research interest of the students, they will be required to form themselves into teams of three to which one of the tutors will be assigned. A one-day seminar is held at the end of the semester for presentation and discussion of each team's completed project, at which time each project will be assessed by all the tutors. Small group tutorials will be held with the assigned team tutor throughout the duration of the project.
	The pedagogical philosophy for this subject is student-centered learning. For the most part, students are required to work using their own initiative to find information and discover ways in which to apply it to their project. The project tutors act principally as mentors, facilitators, and assessors.
	Workshops
	Small group tutorials One day cominer for presentations
	One-day seminar for presentations

Independent study

- · Individual and group project
- Self-study

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)			es to		
		a.	b.	C.	d.		
Project Proposal	25%	1	1	1	V		
Project Development	75%	V	V	V	V		
Total*	100%		•	•	•	•	

^{*}Students are required to achieve grade D or above in overall subject grade to pass the subject.

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

Assessment is based on 100% coursework. Students will be assessed, individually and as a team, on their ability to analyse, critically evaluate, and synthesis knowledge gained from a variety of sources into their chosen project. The Project is divided into two distinct phases; Phase A and Phase B. Phase A will be carried out individually, whilst Phase B will be carried out in teams with a maximum of three members. Each component (Phase A and Phase B) must receive at least a passing grade in order to gain the 3 credits associated with the subject (it is not possible to pass one component and fail the other and still gain an overall pass). To ensure equitability, each project will be assessed by all of the tutors, not just the tutor assigned to a particular team. The assessment of each phase, based on a presentation to peers and tutors, and a written report, will be in accordance with PolyU's prevailing grading scheme.

Phase A, Project Proposal, is an individual piece of work which requires each student to identify a construction law problem and present it to the class. The students, with advice from tutors, will evaluate the feasibility of the proposals and, based upon their research interest, form themselves into teams of three. Within each team, members will then select one of the proposals that their team members have put forward for further development. Phase B, Project Development, requires the team to explore all the issues associated with the chosen proposal and suggests possible solutions the problem. Although this phase is developed and presented as a team, each member will also be assessed on his or her individual contribution. The following shows the assessment weighting for the Project:

	<u>Individual</u>	<u>Team</u>
Phase A - Project Proposal	25%	N/A
Phase B - Project Development		75%

	Total Weighting	25%	75%			
Reading List and References	Chitty on contracts. Hong Kong s & Maxwell Asia. 2019.	pecific contracts (6th E	d), Hong Kong: Sweet			
	Burr, Andrew (Ed), Construction 2359 Sweet & Maxwell.	Law Journal, (8 Issues	a year), ISSN: 0267-			
	Chan, E.H.W. & Au, M.C.Y. (20 the Extension of Time Provisions Part 4, (July 2010) 18-39.					
	Chan, E.H.W. & Yiu, E.C.Y. (20 Hong Kong: Pace Pub. Ltd.	08) Contractual and R	Regulatory Innovations,			
	Cheng, T.Y.W. & Soo, G. (201 Kong, 3rd Ed. Hong Kong: Sweet		and Practice in Hong			
		obert Clay, Atkin Chambers (2019) Hudson's Building tracts, 14th Ed., (London: Sweet & Maxwell).				
	Fisher, M.J. & Greenwood, D.G. HKU Press.	(2011) Contract Law ii	n Hong Kong, 2 nd Ed.,			
	Furmston, M.P. (2012) <i>Power Casebook</i> , 5 th Ed., Chichester, U		's Building Contract			
	Furst S. & Ramsey V. (2021) K Sweet & Maxwell.	eating on Construction	Contracts, 11th Ed.,			
	McInnis, J.A. (Ed.) <i>Emden's Cotimes per year</i>) LexisNexis.	onstruction Law Hong	Kong (updated three			
	Ramsey, V. (2007-2018) Cons Telford.	truction Law Handboo	ok. London: Thomas			
	Uff, J. (2021) Construction Law: L	aw & Practice relating to	o Construction industry,			
	14 th Ed. Sweet & Maxwell. U.K. Wallace I.D. (2021) <i>Hudson's But</i>		Contracts, 14th Ed., 1st			
	Supplement (London: Sweet & Max	well).				

Subject Code	BRE548
Subject Title	Dispute Resolution Project
Credit Value	3
Level	5
Pre-requisite/ Co-requisite/ Exclusion	Nil
Objectives	Through collaborative teaching/learning process between lecturers/students, prepare students to achieve the Intended Learning Outcomes in the area of construction dispute resolution and research.
Intended Learning Outcomes	Upon completion of the subject, students will be able to:
	a. differentiate the characteristics of the different dispute resolution methods;
	b. identify the substance and nature of a dispute, and match it with the appropriate dispute resolution method;
	c. communicate, using appropriate legal wording, findings such that a neutral third party to a dispute might arrive at when required to assist in its resolution;
	d. apply knowledge, reasoning and research skills to the resolution of disputes in the construction and real estate industries.
Subject Synopsis/ Indicative Syllabus	The Project requires candidates to identify a dispute resolution related problem and then, as part of a team, formulate a number of alternative solutions. This will involve exploring the whole range of dispute resolution activities involved in the problem. The intention is to improve students' comprehension of dispute resolution techniques and provide them with an opportunity of applying them to practical situations.
Teaching/Learning Methodology	Students will be expected to use a work related case study or current issues in industry to develop a topic for the project, which is intended to combine the students' knowledge of construction with the law related to dispute resolution. The project will span one semester and will be supervised by a team of tutors. After having received a briefing on the requirements of the Project during the first week of the semester, students will be required to present individual proposals to the tutors and other class members during a half-day workshop on week four. At this presentation workshop, students will divide into groups of three and, with advice from the tutors, choose one case study to use as the basis for their group project. A one-day seminar will be held during the last week of the semester in order that each team's completed project may be presented and discussed; at this time the projects will also be assessed by the tutors. Throughout the duration of the semester, each group will meet at regular intervals with the tutor assigned to their group. The pedagogical philosophy for this subject is student-centered learning. For the most part, students are required to work using their own initiative to find information and discover ways in which to apply it to their project. The project tutors act principally as mentors, facilitators, and assessors.

- Workshops
- Small group tutorials
- One-day seminar for presentations
- Independent study
 - Individual and group project
 - Self-study

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					
		a.	b.	C.	d.		
Project Proposal*	25%	V	1	1	1		
Project Development*	75%	1	1	1	V		
Total	100%			•	•	•	

^{*}Students are required to pass all the specific assessment methods/tasks to pass the subject.

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

Assessment is based on 100% coursework. Students will be assessed, individually and as a team, on their ability to analyse, critically evaluate, and synthesis knowledge gained from a variety of sources into their chosen project. The Project is divided into two distinct phases;

Phase A and Phase B. Phase A will be carried out individually, whilst Phase B will be carried out in teams with a maximum of three members. Each component (Phase A and Phase B) must receive at least a passing grade in order to gain the 3 credits associated with the subject (it is not possible to pass one component and fail the other and still gain an overall pass). To ensure equitability, each subject will be assessed by all of the tutors, not just the tutor assigned to a particular team. The assessment of each phase, based on a presentation to peers and tutors, and a written report, will be in accordance with PolyU's prevailing grading scheme.

Project Proposal (Phase A) is an individual piece of work which requires each student to develop a case study drawn from their present or past work situation or to identify current issues in industry for research and then analyse the issues related to dispute resolution that it raises. This case will then be presented to the tutors and class as a proposal for further study. With advice from the tutors, each team of three students (assigned by the tutors) will evaluate the feasibility of each proposal and select one for their team to further develop. Development of the project (Phase B) requires each team to explore the issues associated with the chosen case study or research topic and suggest appropriate dispute resolution methods for tackling the problems involved. Although this phase is developed and presented as a team, each

	member will also be assessed on his or her individual contribution. The following shows the assessment weighting for the Project:							
	<u>Individual</u>	<u>Team</u>						
Phase A - Project Proposal	25%	N/A						
Phase B - Project Development	10%	65%						
Total Weighting	35%	65%						

Reading List and References

Anderson, R.N.M. (2001) *Construction Adjudication Casebook*. England: Butterworths.

Berkeley, A. & Mimms, J. (2001) *International Commercial Arbitration: Practical Perspectives*. London: Centre of Construction Law & Management.

Bernstein, R., Tackaberry, J., Marriott, A. & Wood, D., (1998) *Handbook of Arbitration Practice*. London: Sweet & Maxwell.

Burr, Andrew (Ed), *Construction Law Journal*, (8 Issues a year), ISSN: 0267-2359 Sweet & Maxwell.

Chan E.H. & Suen H. (2005) Disputes and dispute resolution systems in Sino-Foreign Joint Venture (SFJV) Construction Projects in China, ASCE Journal of Professional Issues in Engineering Education and Practice, Vol.131(2),141-148.

Chan E.H., Suen H. (2005) Legal Issues of Dispute Management in International Construction Projects Contracting, Construction Law Journal, Vol.21(4), 291-305.

Chan, E.H.W. & Au, M.C.Y. (2010) Enforceability Considerations for Deleting the Extension of Time Provisions in Building Contracts, (2010) 26 Const. L.J., Part 4, (July 2010) 18-39.

Chan, E.H.W. & Yiu, E.C.Y. (2008) *Contractual and Regulatory Innovations*, Hong Kong: Pace Pub. Ltd.

Chan, E.H.W. (2008) Dispute Resolution Model (on interactive on-line platform) website http://drm.hkiac.org/

Chee, Simon (2016) Construction Dispute Prevention and Resolution in Hong Kong 2016, Hong Kong: Sweet & Maxwell

Chee, Simon (2013) From Right to Interest – Specialised Facilitative Mediation (Construction), Thesis

Cheng, T.Y.W. & Soo, G. (2013) Construction Law and Practice in Hong Kong, 3rd Ed. Hong Kong: Sweet & Maxwell Asia.

Cheung C.C. and Chuah K.B., 'Conflict management styles in Hong Kong industries' (1999) Vol. 17, Issue 6, International Journal of Project Management, p. 393-399.

Chitty on contracts. Hong Kong specific contracts (6th Ed), Hong Kong: Sweet & Maxwell Asia. 2019.

Development Bureau, HKSAR Govt (2015) Proposed Security of Payment Legislation for Construction Industry Consultation Document

Development Bureau, HKSAR Govt (2017) Practice Notes for New Engineer Contract – Term Service Contract for Public Works Projects in Hong Kong

Development Bureau, HKSAR Govt (2017) Library of Standard Additional Conditions of Contract

Eilenberg, I.M. (2003) *Dispute Resolution in Construction Management*. Sydney: UNSW.

Fenn, P.; O'Shea, M.; & Davies, E. (1998) Dispute Resolution and Conflict Management in Construction: An International Review. London: E & FN Spon.

Fisher, M.J. & Greenwood, D.G. (2011) *Contract Law in Hong Kong*, 2nd Ed., HKU Press.

Fisher, R.; Patton, B.M.; & Ury, W.L. (1991) *Getting to Yes: Negotiating An Agreement Without Giving In*, 2nd Ed. London: Random House.

Furmston, M.P. (2012) *Powell-Smith & Furmston's Building Contract Casebook*, 5th Ed., Chichester, UK: Wiley-Blackwell.

Furst, S. & Ramsey, V. (2019) *Keating on Building Contracts*, 10th Ed., London: Sweet & Maxwell.

Gordon, K., (1998) *Adjudication in the Construction Industry*, London: Sweet & Maxwell.

Hibberd, P.R. (1999) *ADR and Adjudication in Construction Disputes*. Oxford: Blackwell Science.

HKIA / HKIS / HKICM Standard Forms of Building Contracts (2005, 2006 Editions)

Hong Kong Arbitration Ordinance Cap. 609

Hong Kong Mediation Ordinance Cap 620

Jaques, M.S. (2001) *The Construction Law Minefield of Hong Kong*. Hong Kong: Butterworths.

The Judiciary of Hong Kong, (2001) *Hong Kong Civil Justice Reform – Interim Report*

Ma, Geoffrey, Editor-in-Chief., (3rd Ed., 2014) *Arbitration in Hong Kong: A Practical Guide*, Hong Kong: Sweet & Maxwell.

Mackie, K.J. (2000) *The ADR Practice Guide: Commercial Dispute Resolution*. London: Butterworths.

Matyas, R.M., (1996) *Construction Dispute Review Board Manual*, New York: McGraw-Hill.

McInnis, J.A. (Ed.) *Emden's Construction Law Hong Kong (updated three times per year)* LexisNexis.

Moser, M.J., and Cheng, T. Y.W. (2004) *Arbitration in Hong Kong: A User's Guide*, Aspen Publishers, USA.

NEC4 Contracts

Nicholas Dennys, Robert Clay, Atkin Chambers (2019) *Hudson's Building and Engineering Contracts*, 14th Ed., (London: Sweet & Maxwell).

Ramsey, V. (2007-2018) *Construction Law Handbook*. London: Thomas Telford.

Redmond, John, (2001) *Adjudication in Construction Contracts*, John Wiley & Son, First Ed.

Simmonds, D. (2003) Statutory Adjudication: A Practical Guide. Oxford: Blackwell.

Stephenson, D. A. (2001) *Arbitration Practice in Construction Contracts*. Oxford: Blackwell Science.

Tang Houzhi, 'Is there an Expanding Culture that Favors Combining Arbitration with Conciliation or other ADR Procedures?' in Van Den Berg, A.J. (ed.) International Dispute Resolution: Towards an International Arbitration Culture, Kluwer Law International, (London/Boston: The Hague, 1999), p. 101-120.

Uff, J. (2009) Construction Law: Law & Practice relating to Construction industry, 10th Ed. Sweet & Maxwell. U.K.

Uff, J. (2017) Construction Law: Law & Practice Relating to the Construction Industry, 12th Ed. London: Sweet & Maxwell.

Ury, W. (1993) *Getting Past No: Negotiating Your Way From Confrontation To Cooperation*. New York: Batam Books.

Related websites

Hong Kong Legal Information Institute: http://www.hklii.hk

Westlaw China, Westlaw Hong Kong and Westlaw International with all of them can be had in the databases of the University Library.

Website of the Department of Justice of the HKSAR: http://www.doi.gov.hk

Note: The latest version of the above-mentioned readings should be used.

Subject Code	BRE549
Subject Title	Arbitration Law and Practice
Credit Value	3
Level	5
Pre-requisite/ Co-requisite/	Recommended background knowledge:
Exclusion	A general knowledge of contract law
Objectives	Through workshop activities and interactive teaching/learning process between lecturers/students, prepare students to achieve the Intended Learning Outcomes in the area of arbitration.
Intended Learning Outcomes	Upon completion of the subject, students will be able to:
Outcomes	a. describe the principles in arbitration proceedings;
	b. explain holistically and analytically the preparation for arbitration proceedings;
	c. analyze with creative thinking to generate practical and innovative solutions; and
	d. apply skills and knowledge on recognizing and addressing legal issues arising from construction dispute.
Subject Synopsis/ Indicative Syllabus	Keyword Syllabus
malcative dynabas	a. Introduction
	The nature of Arbitration; Domestic and International Arbitration; conflict of laws; substantive and Procedural laws; the UNCITRAL Model and domestic laws such as the Hong Kong Arbitration Ordinance.
	b. The Arbitration
	The Arbitration agreement; the commencement of Arbitration; the appointment of Arbitrators; fees and expenses of Arbitration; privacy and confidentiality.
	c. Procedure of Arbitration
	Procedures for preliminary issues; concurrent proceedings; choice of procedures; preliminary meeting; submissions; evidence; experts. Awards and Costs; appeal.
	d. Enforcement
	New York Convention and Enforcement of Awards (Hong Kong and mainland China).

Teaching/Learning Methodology

Lectures will provide fundamental knowledge relating to the arbitration proceedings. Students will be required to undertake various activities including tutorials and workshops, which will enable them to thoroughly digest the taught contents.

Tutorials will provide opportunities for students and lecturer to communicate and discuss any difficulties relating to the lecture programme.

Workshops will provide students with opportunities to experience conducting arbitration through the use of proceedings real cases in order to facilitate their learning.

Independent study and associated reading will require students to conduct some problem-solving exercises independently, analyze the case law and prepare submissions for the workshops.

Practitioners will be invited as guest lecturer to share professional practice experience in arbitration.

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					nes
		a.	b.	C.	d.		
Continuous Assessment	100%	√	√	√	√		
Total	100%						

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

Continuous assessment will be based on 3 assignments, 1 case study and 2 small group workshops. The assignments include written submissions and self-study on reading materials/video, etc. Students are required to pass all the specific assessment methods/tasks and attend all the workshops to pass the subject.

Reading List and References

Brown, H.J. and Marriott, A., (2011) *ADR Principles and Practice*, London: Sweet & Maxwell.

Chee, Simon (2016) Construction Dispute Prevention and Resolution in Hong Kong 2016, Hong Kong: Sweet & Maxwell

Cheung, Kwok Kit., (2014) A Simple Guide to Arbitration in Hong Kong and Mainland China.

http://www.deaconslaw.com/eng/knowledge/knowledge_42.htm

Hong Kong Arbitration Ordinance Cap. 609

Hong Kong Mediation Ordinance Cap 620

HKIA / HKIS / HKICM Standard Forms of Building Contracts (2005, 2006 Editions)

Ma, Geoffrey, Editor-in-Chief., (3rd Ed., 2014) Arbitration in Hong Kong: A

Practical Guide, Hong Kong: Sweet & Maxwell.

Moser, M.J., and Cheng, T. Y.W. (2004) *Arbitration in Hong Kong: A User's Guide*, Aspen Publishers, USA.

Singapore Arbitral Awards 2010, LexisNexis

Stephenson, D. A. (2001) *Arbitration Practice in Construction Contracts*. Oxford: Blackwell Science.

Tackaberry, J., Marriott, A. & Wood, D., (2003) Bernstein's Handbook of Arbitration and Dispute Resolution Practice, London: Sweet & Maxwell.

Essential Textbook

Blackaby, N., (6th Ed., 2015) *Redfern and Hunter on International Arbitration*, Oxford: Oxford University Press.

Subject Code	BRE550
Subject Title	Statutory Framework for Construction Practice
Credit Value	3
Level	5
Pre-requisite/ Co-requisite/ Exclusion	Nil
Objectives	To provide students with an overview and understanding of the regulations currently enforced in the construction industry. Responsibilities of the engineers will be highlighted and this will equip students with sound knowledge to appreciate the relationship between regulations and practice of the construction industry.
Intended Learning	Upon completion of the subject, students will be able:
Outcomes	a. to possess in-depth knowledge in construction related ordinances;
	b. to possess skills in managing disputes by reference to construction related ordinances;
	c. to think holistically and analytically in dealing with complex problems and situations pertinent to construction disputes; and
	d. to make use of the ordinances to general practical argument.
Subject Synopsis/	Keyword Syllabus
Indicative Syllabus	i) Statutory Control Framework and Building Control
	Enactment history and Buildings Ordinance, regulations, PNAP, Offences. Minor Works Control System.
	Control of buildings and appeal.
	Practice Notes in force and authority.
	Procedures for approval, consent and permit to occupy.
	Supervision plans.
	ii) Exemptions and Unauthorized Building Works
	Exemptions (s41) and Buildings Ordinance (Application to the NT).
	Unauthorized building works.
	Order for demolition, removal or alteration, and appeal.
	iii) <u>Building Management Ordinance</u>
	Deed of mutual covenant and general duties under BMO.
	Common parts. Owners incorporated and Management.
	iv) Environmental Legislation and Administration
	Town planning system and environmental impact assessment.
	Environmental legislation and regulations.

v) Construction Safety

Principle of construction safety.

Ordinances and Regulations.

Vi) Prosecution and Appeal arising from Construction Practice

Civil v. Criminal Prosecution

Judicial Review.

Administrative Appeal

Other Consequences of non-compliance and exemptions.

Teaching/Learning Methodology

Lectures will provide fundamental knowledge and application examples relating to the construction-related ordinances. Students will be required to undertake various activities including tutorials to enable them to thoroughly digest the taught contents.

Tutorials will provide opportunities for students and lecturer to communicate and discuss any difficulties relating to the lecture programme. It will also provide a forum for students and lecturer to discuss the ongoing coursework.

Coursework will provide students with opportunities to tackle complex real problems to facilitate their learning.

Independent study and associated reading will require students to conduct some problem-solving exercises independently, analyze the cases and prepare practical and innovative arguments.

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject le outcomes to be as (Please tick as app		e ass	essec	ı	
		a.	b.	C.	d.		
1.Coursework (PPT slide and report)*	30 %	√	✓	√	✓		
2. Written Examination*	70%	✓	✓	✓	✓		
Total	100%						

^{*}Students are required to pass all the specific assessment methods/tasks to pass the subject.

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:Coursework will be set such that students will be asked to completed tasks to align with intended learning outcomes, including:

- research related to in-depth knowledge in construction related ordinances,
- prepare presentation and discussion with party group work to learn managing disputes and exercise problem solving skills and

 prepare and submit a final report to cover the subject area holistically and analytically.

Written examination:

To align with intended learning outcomes, at least 4 questions will be set to cover the key knowledge area of the subject and they are separated into two sections that students have to attempt both sections. Students can answer the questions with open-book examination approach. As such, students can be examined on the in-depth understanding of a broad range of knowledge and the ability to search and use information critically. Some of the questions will be problem solving type on practical issues and the others are essay type to discuss controversial issues in order to test student both holistically and analytically.

Students must attain at least Grade D in both coursework and final examination (whenever applicable) in order to attain a passing grade in the overall result.

Reading List and References

Ordinances

Cap 59, Factories and Industrial Undertaking Ordinance

Cap 123, Buildings Ordinances

Cap 344, Building Management Ordinance

Cap 499, Environmental Impact Assessment Ordinance

Cap 509, Occupational Safety and Health Ordinance

References

- Environment, Transport and Works Bureau: www.etwb.gov.hk technical circulars
- Butterworths, *Hong Kong Building Law Handbook.* . (2017, Fourth Edition)
- Chan E.H.W., Mok P. & Scott D. (2001) Statutory Requirements for Construction Professionals, Published by HK Institute of Construction Managers and Pace Publishing Ltd. ISNB:962-7723-28-2, Hong Kong.
- Christopher Tung, Keeping It Clean and Safe: The Impact of Safety and Environmental Regulations on The Hong Kong Construction Industry, Chapter 2, The Construction Law Minefield of Hong Kong, Butterworths, 2001.
- Halsbury's Laws of Hong Kong Building & Construction. (2011, Second Edition)
- Lawrance W. C. Lai and Daniel C. W. Ho, Planning, Buildings for a High-rise Environment – A Review of Building Appeal Decisions, HKU Press, 2002.
- Practice Notes for AP and RSE issued and updated from time to time from the Buildings Department.
- Sihombing and Wilkinson, Students' Guide to Hong Kong Conveyancing. (2021, Ninth Edition (Student))
- Steve Rowlinson, Hong Kong Construction Site Safety Management,

Sweet & Maxwell, Asia, 2003.	

Subject Code	BRE562
Subject Title	Project Appraisal
Credit Value	3
Level	5
Pre-requisite/ Co-requisite/ Exclusion	Nil
Objectives	This subject aims to:
	a. introduce basic valuation concepts of international real estate;
	b. develop knowledge and understanding of international approaches to standards of appraisals;
	c. familiarize students with a broad spectrum of appraisal approaches and to integrate them in comprehensive project appraisals.
Intended Learning	Upon completion of the subject, students will be able to:
Outcomes	a. have an understanding of basic valuation concepts of international real estate;
	b. have a knowledge of international approaches to standards of appraisals;
	c. gain a broad spectrum of appraisal approaches and to apply them in comprehensive project appraisals.
Subject Synopsis/	Indicative syllabus:
Indicative Syllabus	Real estate valuation techniques
	International real estate valuation standard
	Economic appraisal: theory and methods
	Financial appraisal and development decisions
Teaching/Learning Methodology	Lectures and directed reading will be used to outline the techniques and approaches determined by international valuation practice; conventional economic appraisal and environmental appraisal.
	Visiting speakers from international agencies will illustrate practical applications. Coursework will be used to test understanding and application of the relevant methodologies and ability to undertake a critical appraisal of each method. Case studies will be used.
	• Lectures
	Seminars and workshops
	Independent study
	Assignment Self-aturdu
	Self-study

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)			es to		
		a.	b.	C.			
1. Coursework	50%	V	V	√			
2. Examination	50%	V	√	V			
Total	100%				•	•	

^{*}Students are required to pass all the specific assessment methods/tasks to pass the subject.

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

Both coursework and examination will be used to test understanding and application of the relevant methodologies and ability to undertake a critical appraisal of each method.

Reading List and References

Indicative Reading List:

Asian Development Bank (1996) *Economic Evaluation of Environmental Impacts*, Asian Development Bank, Manila.

Baum A., Mackmin D., Nunnington N., (1997) *The Income Approach to Property Valuation:* 4th ed., International Thompson Business Press.

Best P., (1998), Implementing Value at Risk, Wiley, New York.

Champness, (1997), Approved European Property Valuation Standards, Estates Gazette Limited.

Copeland T., Koller T., Murrin J., (1995), *Valuation: Measuring and Managing the Value of Companies 2nd Edition*, Wiley, New York.

Eckert, Joseph K., (1990), Property Appraisal and Assessment Administration. Chicago, International Association of Assessing Officers.

Economist Intelligence Unit, (1997), Global Direct Investment and the Importance of Real Estate, EIU, London.

Field, (1997), *The Appraisal of Real Estate*, 11th ed., Appraisal Institute, Chicago.

Gelbtuch H.C., Mackmin D., (1997) *Real Estate Valuation in Global Markets*, Appraisal Institute, Chicago.

HKIS, (2005), *The HKIS Valuation Standards on Properties*, The Hong Kong Institute of Surveyors.

Johansson P., (1993) Cost-Benefit Analysis of Environmental Change, CUP, Cambridge.

Li Ling-hin, (1997) *Development Appraisal of Land in Hong Kong*, Chinese University Press, Hong Kong.

Lumby S., (1994), *Investment Appraisal and Financial Decisions*, 5th Edition, Chapman & Hall.

Millington, A. F., (2000) An Introduction to Valuation, Estate Gazette

Nevitt P.K., Fabozzi F., (1995) *Project Financing*, Euromoney.

Royal Institution of Chartered Surveyors, (1997), Calculation of Worth: An Information Paper, RICS, London.

Sirota D., (1998), *Essentials of Real Estate Finance:* 9th ed., Real Estate Education Co., Chicago.

Squire, van der Tak H.G., (1975, seventh printing 1992) *Economic Analysis of Projects*, Johns Hopkins University Press, Baltimore.

Ventolo, Williams, (2004), *Fundamentals of Real Estate Appraisal*, 8th ed., Dearborn Real Estate Education.

Ward W.A., Deren B.J., (1991), *The Economics of Project Analysis: A Practitioner's Guide,* Economic Development.

Subject Code	BRE565
Subject Title	Real Estate Asset Management
Credit Value	3
Level	5
Pre-requisite/ Co-requisite/ Exclusion	Nil (Students are expected to possess some knowledge of the real estate development process and an understanding of basic organizational management theory)
Objectives	This subject aims to provide an integrated and consolidated intellectual framework for students to comprehend and analyse the current factors and issues in the management of corporate real estate as a business asset.
Intended Learning	Upon completion of the subject, students will be able to:
Outcomes	a. explain the institutions or rules of the game (formal and informal) in the context of real estate management, which focuses on the real estate, the organization that use it and the people that manage it;
	b. develop knowledge and understanding of the strategic management of and the corporate real estate;
	c. familiarize with theoretical models and concepts in analyzing issues in asset management and performance applied to real estate assets;
	d. communicate and present ideas in a clear and articulate manner using appropriate academic convention.
Subject Synopsis/	Institutions:
Indicative Syllabus	Legal framework setting out ownership rights of organizations over real estate. Formal and informal rules and conventions adopted by organizations in management of real estate assets. Types of governance – markets or hierarchies, risk management by real estate assets.
	Organizational Theory:
	Relationship between real estate ownership and use within organizations – objectives of organizations, organizational structure, allocation of resources, behavioural theory of the firm.
	Management Strategy:
	Alignment of organizational real estate strategy with organizational objectives. Structure of real estate management unit within organization. Performance monitoring and procurement of real estate assets and management skills.
	Real Estate:
	a. as a factor of service and production;

		b. as a financial investment. Real estate asset performance, value creation and management relating to different asset management model and investment vehicles.						
Teaching/Learning Methodology	materials. Case studies learning' environment in and procedures for the enhance the information	Independent studyAssignment						
Assessment Methods in Alignment with Intended Learning	Specific assessment methods/tasks	% weighting	be a		d (Plea	earning se tick		nes to
Outcomes			a.	b.	C.	d.		
	Assignment/case studies*	40%	√	√	√			
	2. Examination*	50%	1	1	V			
	3. Participation/ presentation*	10%				√		
	Total	100%						
	*Students are required to pass all the specific assessment methods/tasks to pass the subject. Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:						sessing	
	Assignment questions are distributed to students to practice applying investment strategies and analysis to evaluate real estate asset management decision. Selected problems/case studies will be discussed in tutorial sessions, and students are required to present their solution apply to those case studies.					gement tutorial		
	The final examination a problems of real estate gained from the subject.			•		•		•
Reading List and References	Cinquini, L., Minin A. & Creation: A Service Scient							d Value
	Haynes, B., Nunnington, Management: Strategy a Routledge.							
	Hewlett, C. & Kaufman	n, G. (2008	3), Stra	ategy f	or Rea	l Estat	e Com	npanies,

Washington, DC: ULI – Urban Land Institute.

Kaplan, R.S. & Norton, D.P., (2004) Strategy Maps: Converting intangible assets into tangible outcomes, Boston: Harvard Business School Press.

Parker, D. (2018) *The Routledge REITs Research Handbook*, Abingdon, Oxon: Routledge.

REITs in Asia: from Concept to Completion, Hong Kong: Asia Law & Practice (2005).

Seabrooke, W., Kent, P. & How, H. (2004), *International Real Estate: An Institutioanl Approach*, Oxford, U.K; Malden, MA: Blackwell Pub.

Then, D S S,, (2012) Real Estate Asset Management: Operational Property Assets and Facilities Support Services as a Business Resource, Saarbrucken, Germany: LAP Lambert Academic Publishing.

Weatherhead, M. (1997) Real Estate in Corporate Strategy, MacMillan Press.

Subject Code	BRE567
Subject Title	International Real Estate: China
Credit Value	3
Level	5
Pre-requisite/ Co-requisite/ Exclusion	Nil (Recommended Background Knowledge: Reliable general understanding of real estate would be a plus)
Objectives	This subject will outline structures of property rights, property markets, market-players interaction and provide analysis of user requirements, value creation and appraisal of property value, with particular reference to China. Students will be required to absorb geographically specific information and to apply this information within an analytical framework. It will bring together the 'core' themes of real estate, illustrating institutional differences in China. It will develop 'real-time' understanding of current real estate issues in the respective areas of study.
Intended Learning Outcomes	 Upon completion of the subject, students will be able to: a. identify sources of information concerning the major features of real estate in China; b. undertake an intensive market research and site visit to apply value improvement in selected case studies; c. apply this understanding to the requirements of developers and investors outside China; d. identify areas for further research.
Subject Synopsis/ Indicative Syllabus	 This subject will take place in China and will address the following themes: a. Latest property development trend; b. China investment and property markets including systems of regulation (formal and informal rules of the game); c. Incorporating real estate into business strategy to enhance project competitiveness.
Teaching/Learning Methodology	Participants will bring to this subject their own knowledge and experience of real estate principles and practice plus some newly developed analytical frameworks for investigating national differences in the dynamics of real estate investment and management in 'other' countries. They will be provided with briefing material and a broadly structured assignment project anchored to their own practice environment in their local cities. The coursework project will focus participants' attention on the learning outcomes of the whole subject. The subject will be presented in a concentrated learning block lasting for 4/5 days of study tour (Participants MUST be present for the whole study tour in China).

	Participants will have le main themes and issues to make a group presenta	contained	in the	progra	mme. 🤄	Student		
Assessment								
Methods in Alignment with Intended Learning Outcomes	Specific assessment methods/tasks	% weighting	Intended subject learning of be assessed (Please tick as appropriate)					nes to
			a.	b.	C.	d.		
	1.Coursework	100%	✓	✓	✓			
	(In-class participation and site visit, Individual performance in group presentation plus group report)*							
	Total	100%						
	*Students are required to pass the subject. Explanation of the approach the intended learning out Assignment questions are and experience of real developed analytical frame dynamics of real estate in will be required to preserve to the subject of the subject	opriateness ocomes: e distributed estate prineworks for their fin	of the I to stu nciples r inves nd ma dings	dents to and stigating nagemin wor	o apply praction g nation ent in '	method their of thei	s in assown knows some erences countries submitte	sessing owledge newly s in the s. They ed their
Reading List and References	Most of the reading for to f which are listed below part of the briefing inform	v. Full detai	ls of f	urther				
	China Real Estate							
	China Real Estate Marke	et						
	Foreign Urban Planning							
	Journal of Property Rese	earch						
	Journal of Real Estate Fi	nance and E	Econor	nics				
	Journal of Real Estate Li	terature						
	Journal of Real Estate Re	esearch						
	Real Estate Economics							

Subject Code	BRE572
Subject Title	Real Estate Development
Credit Value	3
Level	5
Pre-requisite / Co-requisite/ Exclusion	Nil
Objectives	This subject adopts a multi-disciplinary approach and covers both the theoretical, conceptual and essential aspects of property development. It is intended to provide an integrated, intellectual and critical framework for students to comprehend and analyze the contemporary problems of and key issues affecting the production and consumption of the built environment in our society.
Intended Learning	Upon completion of the subject, students will be able to:
Outcomes	identify and describe the literature for a broad-based research topic related to land and property development;
	b. appraise the complex and dynamic process of real estate development, with special reference to the local context;
	 evaluate the significance of all the key social, political, economic, physical and regulatory factors and their trends in affecting the operation of the property development industry;
	d. assess the strengths and weaknesses of the theoretical models and concepts in analyzing the current issues affecting property development in our society;
	e. synthesize important insights and knowledge from various intellectual disciplines and apply them in addressing contemporary problems in the production and consumption of built environment in our cities.
Subject Synopsis/	Real Estate Development Features, Models and Processes:
Indicative Syllabus	Models of Development Process; Transformation of Urban Built Environment.
	Public Sector Regulations and Development Potential:
	Concepts of Project Feasibility; Approaches in Development Control Decision Analysis.
	Current Issues in Real Estate Development:
	Globalization of Real Estate; Land Development in China; Property-led Urban Regeneration.
	Different Types of Real Estate Development:
	Office, Residential and Industrial Development.
Teaching/Learning Methodology	This subject consists of a series of lectures, workshops and tutorials to introduce the theories, models and literature relevant to the subject syllabus. Students are required to read the assigned readings and complete some directed self-learning activities to assess their understanding of the subject syllabus.

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject le outcomes to be as (Please tick as app			asse	sessed		
		a.	b.	C.	d.	e.		
Coursework*	50%		$\sqrt{}$			√		
Final Examination*	50%	1	1	1	1	V		
Total	100%							

^{*}Students are required to pass all the specific assessment methods/tasks to pass the subject.

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

For coursework, students are required to participate into class discussions and undertake some assessments in the form of term paper, project, and/or presentation. Final Examination cover essay-type questions, allowing students to further synthesize the theories and apply them to practical scenarios and specific situations.

Indicative Reading List and References

Brown, P. H. (2015). *How Real Estate Developers Think: Design Profit and Community*. USA: University of Pennsylvania Press.

Buitelaar, E. (2004). A transaction-cost analysis of the land development process. *Urban Studies*, *41*(13), 2539-2553.

Charney, I. (2007). Intra-metropolitan preferences of property developers in greater Toronto's office market. *Geoforum*, 38(6), 1179-1189.

Cho, C.-J. (2010). An analysis of the housing redevelopment process in Korea through the lens of the transaction cost framework. *Urban Studies*, *48*(7), 1477-1501.

Coiacetto, E. (2007). The role of the development industry in shaping urban social space: a conceptual model. *Geographical Research*, *45*(4), 340-347.

Fainstein, S. S. (2008). Mega-projects in New York, London and Amsterdam. *International Journal of Urban and Regional Research*, *32*(4), 768-785.

Gielen, D. M., & Tasan-Kok, T. (2010). Flexibility in planning and the consequences for public-value capturing in UK, Spain and the Netherlands. *European Planning Studies*, *18*(7), 1097-1131.

Gospodini, A. (2006). Portraying, classifying and understanding the emerging landscapes in the post-industrial city. *Cities*, 23(5), 311-330.

Guo, J., B. Sun, Z. Qin, S. W. Wong, M.S. Wong, Yeung C.W. and Q.P. Shen (2017). A study of plot ratio/building height restrictions in high density cities using 3D spatial analysis technology: A case in Hong Kong. *Habitat International*, 65, 13-31.

Hutton, T. A. (2004). Post-industrialism, post-modernism and the reproduction

of Vancouver's central area: retheorising the 21st-century city. *Urban Studies*, 41(10), 1953-1982.

Tang, B.S., Wong, S.W. and Liu. S.C. (2011) Institutions, property taxation and local government finance in China. *Urban Studies*, 48 (5), 847-875.

Li, Y., Chen, X., Tang, B. S., & Wong, S. W. (2018). From project to policy: Adaptive reuse and urban industrial land restructuring in Guangzhou City, China. Cities 82, 68-76.

Wong, S.W. (2015). Land requisitions and state-village power restructuring in Southern China. *The China Quarterly*, 224 (December), 888-908.

Wong, S.W., Tang, B.S. and Liu, J. (2018). Village Redevelopment and Desegregation as a Strategy for Metropolitan Development in Southern China: Some Lessons from Guangzhou City. *International Journal of Urban and Regional Research*, 42(6), 1064-1079.

Wu, J. (2011). Globalization and emerging office and commercial landscapes in Shanghai. *Urban Geography*, 32(4), 511-530.

Subject Code	BRE574					
Subject Title	Construction Process Management					
Credit Value	3					
Level	5					
Pre-requisite / Co-requisite/ Exclusion	Nil					
Objectives	The objectives of this subject focus towards the application of building/construction management techniques by integrating site operational management with strategic and project management activities.					
Intended Learning	Upon completion of the subject, students will be able to:					
Outcomes	understand the concept and significance of construction process management in project development;					
	b. appraise the impacts of project time, cost, resource productivity, and constructability to construction process management;					
	c. optimize the construction process for improving project time, project cost, resource productivity;					
	d. apply the operational functions of time, information, material, resource, contract, site environment for process management.					
Subject Synopsis/ Indicative Syllabus	Process management concepts: process productivity (work cycle balancing; work sampling; method productivity delay model), process simulation (types of process simulation; Monte Carlo simulation; hand simulation; CYCLONE simulation), process optimization (linear programming technique; model formulation).					
	Management functions and processes: time management; information management; materials management; resource management; sub-contracting management; site environment management, procurement management.					
Teaching/Learning	• Lectures					
Methodology	Seminars					
	Independent study					
	Assignments					
	Self-study					

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					
		a.	b.	C.	d.		
Continuous Assessment* (Assignments and class participation)	60%	V	V	V	V		
2. Examination	40%	V	V	V	V		
Total	100%						

^{*}Students are required to pass both the continuous assessment and examination to pass the subject.

Reading List and References

AbouRizk, S. (2010). "Role of simulation in construction engineering and management." Journal of construction engineering and management. 136(10), 1140-1153.

Siu, M., Lu, M., and AbouRizk, S. (2016). "Resource supply-demand matching scheduling approach for construction workface planning." Journal of construction engineering and management. 142 (1), 04015048.

Tang, S.L. (1999). Linear optimization in applications. Hong Kong University Press, Hong Kong.

Tang, S.L., Ahmad, I.U., Ahmed, S.M., and Lu, M. (2004). Quantitative techniques for decision making in construction. Hong Kong University Press, Hong Kong.

Tang, S.L., Poon, S.W., Ahmed, S.M., and Wong K.W. (2003). Modern construction project management. Hong Kong University Press.

Tatum, C.B. (2005). "Building better technical support for construction." Journal of construction engineering and management, 131(1), 23-32.

Tatum, C.B. (2012). "Integrated construction engineering activities to satisfy challenging project objectives." Construction research congress 2012, 139-148.

The Hong Kong Institute of Architects, The Hong Kong Institute of Surveyors. (2005). Agreement and schedule of conditions of building contract for use in the Hong Kong Special Administrative Region, Private Edition - with quantities, 2005 Edition.

The Hong Kong Institute of Architects, The Hong Kong Institute of Surveyors (2006). Agreement and schedule of conditions of building contract for use in the Hong Kong Special Administrative Region, Private Edition - without quantities, 2006 Edition.

The Hong Kong Institute of Architects, The Hong Kong Institute of Surveyors (2005). Agreement and schedule of conditions of nominated sub-contract for use in the Hong Kong Special Administrative Region, 2005 Edition.

Subject Code	BRE581				
Subject Title	International Construction Projects				
Credit Value	3				
Level	5				
Pre-requisite / Co-requisite/ Exclusion	Nil				
Objectives	This subject aims to enrich students' knowledge and skills in procurement management and relational contracting systems used for international construction projects.				
Intended Learning	Upon completion of this subject, students should be able to:				
Outcomes	a. demonstrate an understanding of international trade and the nature of international construction.				
	b. describe and select appropriate procurement options and management techniques used for international construction projects.				
	c. apply concepts and principles of relational contracting to the implementation of construction projects.				
Subject Synopsis/	Keyword syllabus:				
Indicative Syllabus	International construction: Opportunities in local, Chinese and overseas market, managing multi-disciplinary and multi-national projects, cultural and political risks, "One Belt, One Road 一帶一路" initiative of Mainland China, cross-cultural management of international project teams.				
	Procurement of international projects: Design-build, management contracting and construction management, international standard forms of contract such as the FIDIC form of contract and the New Engineering Contract (NEC).				
	Relational contracting: Overview, partnering, alliancing, public-private partnerships (PPP) and joint ventures, measures of success for international projects, target cost contracting, risk assessment models, New Engineering Contract (NEC), and case studies.				
Teaching/Learning Methodology	Lecture topics are introduced through a printed study guide and a recommended textbook, which are supplemented by materials delivered during the lectures. Seminars provide an opportunity for students to further explore topics in greater depth through case study analysis, and critical evaluation of established protocols. The coursework assignment comprises in-class exercise and a group term paper supported by individual guided readings and group discussions.				

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subje outcomes to be (Please tick as		to be	asse	e)	
		a.	b.	C.			
Continuous assessment (In-class exercise)	10%	√	V	1			
Continuous assessment (Group term paper or report)	40%	√	V	V			
2. Examination (2 hours)	50%	1	1	1			
Total	100 %		•	•	•	•	

^{*}Students are required to pass both the continuous assessment and examination to pass the subject.

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

The designed term paper question attempts to test the level of students' knowledge and understanding of various procurement options and relational contracting systems used for construction projects, and then to determine the most appropriate one for implementation with strong justifications or sound recommendations.

The examination questions attempt to test students' knowledge and understanding of various procurement options and relational contracting systems used for construction projects, and then to cite relevant both local and international case study projects for proper illustration and justified arguments.

Students must complete and pass each of the two assessment components of the subject (i.e. coursework and examination) in order to obtain an overall pass of the subject.

Reading List and References

Construction Industry

Construction Industry Institute – Hong Kong (2008). *Proceedings of the CII-HK Conference 2008 – Building a Stronger Construction Industry for Hong Kong: Opportunities and Challenges* (Thomas Ng, Albert Chan, Daniel Chan and James Wong as Editors), 26 November 2008, Hong Kong, China, ISBN 978-988-99558-9-2, 185 pages.

Construction Industry Review Committee (2001). *Construct for Excellence*, Report of the Construction Industry Review Committee, Hong Kong SAR, Hong Kong, 207 pages.

Construction Procurement

Chan, A.P.C and Yung, E.H.K. (2003). *Procurement Selection Model for Hong Kong*, Research Monograph, Department of Building and Real Estate, The Hong Kong Polytechnic University, ISBN 962-367-285-3, 143 pages.

Masterman, J.W.E. (2002). An Introduction to Building Procurement Systems.

2nd Edition, E & FN Spon.

Construction Contracts

Bunni, N.G. (1997). *The FIDIC Form of Contract: The Fourth Edition of the Red Book*. Blackwell Science.

Hills, M.J. (2001). *Building Contract Procedures in Hong Kong*, Hong Kong: Pearson Education.

Construction Partnering

Broome, J. (2002). *Procurement Routes for Partnering – A Practical Guide*, London: Thomas Telford, Chapter 2.

Chan, A.P.C., Chan, D.W.M. and Yeung, J.F.Y. (2010). *Relational Contracting for Construction Excellence: Principles, Practices and Case Studies*, Spon Press of the Taylor & Francis Group: UK, 334 pages, ISBN 978-0-415-46669-1 (hardback).

(URL: http://www.routledge.com/books/details/9780415466691)

Target Cost Contracting

Broome, J. (2002). *Procurement Routes for Partnering – A Practical Guide*, London: Thomas Telford, Chapter 8.

Chan, D.W.M., Chan, A.P.C., Lam, P.T.I., Lam, E.W.M. and Wong, J.M.W. (2007). *An Investigation of Guaranteed Maximum Price (GMP) and Target Cost Contracting (TCC) Procurement Strategies in Hong Kong Construction Industry*, Research Monograph, Department of Building and Real Estate, The Hong Kong Polytechnic University, 152 pages, ISBN 978-962-367-593-2, October 2007.

(URL: http://ira.lib.polyu.edu.hk/handle/10397/2376)

Chan, D.W.M. and Chan, J.H.L. (2017). *Target Cost Contracting Strategy in Construction: Principles, Practices and Case Studies*, Routledge of the Taylor & Francis Group: United Kingdom, 172 pages, January, ISBN 978-1-138-65190-6 (hardback).

[URL: https://www.routledge.com/Target-Cost-Contracting-Strategy-in-Construction-Principles-Practices/Chan-Chan/p/book/9781138651906]

Public-Private Partnerships (PPP)

Chan, A.P.C., Chan, D.W.M. and Yeung, J.F.Y. (2010). *Relational Contracting for Construction Excellence: Principles, Practices and Case Studies*, Spon Press of the Taylor & Francis Group: UK, 334 pages, ISBN 978-0-415-46669-1 (hardback).

(URL: http://www.routledge.com/books/details/9780415466691)

Chan, A.P.C., Lam, P.T.I., Chan, D.W.M., Cheung, E. and Ke Yongjian (2009). Drivers for Adopting Public Private Partnerships - Empirical Comparison between China and Hong Kong Special Administrative Region. *Journal of Construction Engineering and Management*, ASCE, 135(11), November, 1115-1124.

Chan, A.P.C. and Cheung, E. (2014) *Public Private Partnerships in International Construction: Learning from Case Studies*. Routledge of the Taylor & Francis Group: United Kingdom, 190 pages, ISBN 978-0-415-52975-4 (hardback).

[URL: https://www.routledge.com/Public-Private-Partnerships-in-International-Construction-Learning-from/Chan-Cheung/p/book/9781138233744]

Subject Code	BRE582
-	
Subject Title	Development Finance and Investment
Credit Value	3
Level	5
Pre-requisite / Co-requisite/ Exclusion	Nil
Objectives	This subject aims to introduce the concept and practice of project financing and property investment in a portfolio context for project managers.
Intended Learning	Upon completion of the subject, students will be able to:
Outcomes	 a. articulate the roles of property as an investment asset to enhance the value of a portfolio, by assessing returns and risks, and their relationships to risk diversification;
	b. appraise real estate investment/development by use of capital budgeting;
	 c. identify the sources and considerations for financing building and infrastructure projects, together with an examination of associated risks and application of mitigation measures.
Subject Synopsis/ Indicative Syllabus	The investment environment and historical perspective Review of financial institutions, markets and instruments. Review of historical performance of property and financial investment, capital budgeting.
	Modern portfolio theory
	Net present value and discounting rates, returns and risks, Markowitz model and its application in portfolio selection. Capital asset pricing model. Systematic and unsystematic risks of property investment as compared with alternative investments including bonds and equities. Capital structure. Weighted average cost of capital (WACC). Efficient Market Hypothesis.
	Behavioural Finance Limitations of classical portfolio theories and validity of their rationality assumptions. Introduction of behavioural finance, and the psychological factors of investors' decision making.
	Concept of Project Financing
	Interest rate spread, collateral vs non-recourse, debt vs equity, credit rating.
	Financing of property and infra-structure projects
	Financing instruments available, syndication, government involvement, functions of World Bank/ADB, financial institutions, financing model, innovative financing approaches (e.g., FRN, CMBS, private equity placement), lending documentation, financing for sustainable development.
	Risk management in Financing
	Risk identification, risk transfer and mitigation measures, loan monitoring.
	Case studies

	Case studies of major proje	ect financing	j in de	velopir	ng and	develo	ped co	untries.		
Teaching/Learning Methodology	Lectures are supplemented by student-centered learning activities (reading, self-assessment questions and case studies).									
Assessment Methods in Alignment with Intended Learning	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)							
Outcomes			a.	b.	C.					
	Individual assignment and group project*	50%	1	1						
	2. Written exam*	50%	√		√					
	Total	100%			,					
	*Students are required to pass the subject.	pass all th	e spe	cific a	ssessm	ent m	ethods	/tasks to		
	Explanation of the appropri intended learning outcomes		he as	sessm	ent met	thods i	n asse:	ssing the		
	Assessment (50%) via indimanipulate calculations communication skills.									
	Closed book examination relationships through discu scenario-based questions.									
Reading List and References	Indicative reading list and r	eferences:								
References	Bodie, Z., Kane, A., & Marc	cus, A. J. (20	013). I	nvestn	nents. N	/IcGra	w Hill.			
	Brown, G.R. and Matysial Market Approach, Financia				Estate i	Investn	nent: A	A Capital		
	Brueggeman, W.B. and Fis 15 th edition, McGraw-Hill/In		6), <i>R</i> e	eal Esta	ate Fina	ance ar	nd Inve	estments,		
	Brealey, R.A. and Myers, S Hill.	S.C. (2017)	Princi	ples of	Corpoi	rate Fii	nance,	McGraw		
	Chesterton, J. & Ghose, Butterworths.	T.K. (199	98), N	1ercha	nt Ban	king ii	n Hon	g Kong,		
	Elton, E. J., Gruber, M. J., Portfolio Theory and Invest						(2009).	Modern		
	Issac, D. (2003), Property I	Finance, 2 nd	Editio	n, Pal	grave M	/lacmill	an.			
	Merna, T and Al-Thani, Practical Guide, Thomas T	` ,	, Fina	ancing	Infrast	ructure	e Proje	ects – A		
	Nevitt, P.K. and Fabozzi, F	. (2000), <i>Pro</i>	oject F	-inanci	ng, 7th	e ed., E	Euromo	oney.		
	Pretorius, F., Lejot, P., Mo	olnnis, A., A	rner,	D., &	Fong-C	hung I	Hsu, B	. (2008).		

Project Finance for Construction & Infrastructure. Principles & case studies. Blackwell Publishing.

Taleb, N.N. (2010) *The Black Swan: The Impact of the Highly Improbable, 2nd edition*, Random House Trade Paperbacks.

Tan, W. (2007) Principles of Project and Infrastructure Finance, Taylor & Francis.

Asiamoney, Trade & Project Finance, Journal of Property Finance and Investment.

Journal of Property Research, Journal of Real Estate Portfolio Management.

Journal of Real Estate Research, Real Estate Economics, Journal of Real Estate Finance and Economics.

Subject Code	BRE586
Subject Title	Construction Information Technology
Credit Value	3
Level	5
Pre-requisite/ Co-requisite/ Exclusion	Nil
Objectives	The objectives of this subject focus towards the application of IT in construction with emphasis on construction project management, construction information modeling and information technology service management.
Intended Learning	By the end of this subject, participants should be able to:
Outcomes	a. understand the ways of construction management workflow and dataflow analyses for the implementation of integrated construction management systems;
	b. understand the state of art of the information technologies and their applications in construction;
	c. understand the importance of disruptive technologies and information technology service management.
Subject Synopsis/	Unit 1. Construction Integrated Management System - Site Management.
Indicative Syllabus	Unit 2. Construction Integrated Management System - Web-based PM and WPIS.
	Unit 3. BIM concept and applications.
	Unit 4. BIM and construction virtual prototyping technology.
	Unit 5. Case studies of using BIM and Construction Virtual Prototyping technology.
	Unit 6. Internet Technology and its Application to Construction.
	Unit 7. Database applications; Information Technology Service Management.
Teaching/Learning Methodology	 Lectures and seminars Independent study Assignments Case study
	Self-studyComputing

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)							
		a.	b.	c.					
1. Assignment*	50%	V	V	V					
2. Examination*	50%	V	V	V					
Total	100%								

^{*}Students are required to pass all the specific assessment methods/tasks to pass the subject.

Assignment requires students to work individually and submit an individual report that is focused on topics of IT applications on construction projects.

Examination will test students' understanding of fundamental knowledge of the application of IT in construction with emphasis on construction project management, construction information modeling and information technology service.

Reading List and References

ASCE Journal of Computing in Civil Engineering. www.asce.org.

Automation in Construction. An International Research Journal. www.elsevier.com/locate/autocon.

CIC, Construction Industry Council (2014), Roadmap for Building Information Modelling in Hong Kong's Construction Industry.

CIC, Construction Industry Council (2015), CIC Building Information Modelling Standards (Phase One) September 2015.

Electronic Journal of Information Technology in Construction, www.itcon.org.

Abid N, Wong K.D, Wong K.W "Bill of Quantities with 3D Views Using Building Information Modeling" in April 2015. Arabian Journal for Science and Engineering DOI 10. 1007/s13369-015-1657-2, ISSN 1319-8025.

Wong K.D. (2010) "Attributes of Building Information Modelling Implementation in Various Country" Journal of Architectural Engineering and Design Management", Special Issue in Integrated Design and Delivery Solutions, Page 288 to 302, Volume 6(4), November 2010, ISBN 978-1-84971-275-0.

Wong K.D. (2003) Construction Integrated Management System for Contractors, Journal of Building and Construction Management, Volume 8, Number 1, 2003, ISSN 102419540, pp. 12-18.

Wong K.D. (2013), "Implementation of web-based construction project management system in China projects by Hong Kong developers", Journal of Construction Innovation: Information, Process, Management, Jan 2013, Vol. 13 DOI/10.1108/14714171311296048 pp. 26 – 49.

Wong K.D. (2006), "Use of Smart Card for Enhancing Construction Site Human Resources Management" Journal of Building and Construction Management. Page 63 Volume 10 Number 1 2006 ISSN 102419540.

Subject Code	BRE587
Subject Title	Research Methods for Construction and Real Estate
Credit Value	3
Level	5
Pre-requisite/ Co-requisite/ Exclusion	Mutually exclusive with MM501
Objectives	To meet the need of those who wish to contribute to the identification of business and project problems, to select appropriate techniques for their solution and to present and communicate their findings in a logical way.
Intended Learning Outcomes	 Upon completion of the subject, students will be able to: a. define research and distinguish between research and other forms of enquiry; b. describe the features of the scientific method and to apply them to problems in construction and property; c. properly define and undertake a specific problem orientated research; d. formulate questions in a way which renders them amenable to rigorous investigation; e. know where and how to search for literature/information for research and consultancy work; f. assess the usefulness of research methods for particular problems using as criteria the hallmarks of good research; g. identify, collect, analyse and present information appropriate to finding a solution to the problem; h. describe broadly the strengths and limitations of basic approaches to qualitative and quantitative research; i. effectively communicate the findings of their work orally and in written form.
Subject Synopsis/ Indicative Syllabus	 Introduction to research methodologies Formulation of a research problem Library session on information management Guest speakers on consultancy strategies and tactics; Research methods in construction management

•	Qualitative and quantitative data analysisPreparation of research proposal
	and research paper

• Dissertation writing

•

Teaching/Learning Methodology

Students are required to attend the seminars presented by guest speakers.

They are also required to attend the library workshop and complete a quiz administered by the Faculty Librarian of the University Library.

There will be a take-home assignment in the form of a case study report. Students are required to set assumptions, collect data, decide the test methods and draw conclusions from the results.

Students are also required to present the research proposal and research findings in class.

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	Intended subject learning outcomes to be assessed (Please tick as appropriate)										
		a	b	c	d	e	f	g	h	i	
Take-home assignment: write research proposal	40%	✓	√	✓	✓	✓	✓				
2. Take-home assignment: report research findings	40%					✓	✓	✓	✓	✓	
3. Oral presentation for research proposal	10%	✓	√	✓	✓	√	√				
4. Oral presentation for research paper	10%					√	√	✓	✓	√	
Total (Continuous Assessment*)	100%										

^{*}Students are required to achieve grade D or above in overall subject grade to pass the subject.

Writing research proposal will develop students' academic skill in the preparation of a research proposal for a chosen topic.

Reporting research findings will develop students' academic skill in the presentation of research findings using appropriate research methods.

	Oral presentation will develop students' presentation skills, and practice their summarizing skills.		
Reading List and	Recommended Readings:		
References	Bell, J. and Waters, S. (2018). <i>Doing your Research Project</i> . A Guide for First-time Researchers, 7th Edition, Open University Press, London.		
	Fellows, R. and Liu, A. (2015). <i>Research Methods for Construction</i> . 4th Edition, Blackwell, Wiley.		
	Pallant, J. (2010) SPSS survival manual: a step by step guide to data analysis using SPSS, 4th Edition, Open University Press/McGraw-Hill, Maidenhead.		
	Rowntree, D. (2000). Statistics Without Tears: An Introduction for Non-Mathematicians, Penguin Science.		

Subject Code	BRE5731				
Subject Title	Managing People in Projects				
Credit Value	3				
Level	5				
Pre-requisite/ Co-requisite/ Exclusion	Nil				
Objectives	Students are expected to possess knowledge of: a. human behavioural context of project-based industries; b. organisation culture and the role of a manager within it; c. the nature of group behaviour and conflict management; and d. personal skills in selected areas of people management.				
Intended Learning Outcomes	 Upon completion of the subject, students will be able to: a. understand the human behavioural context of project-based industries; b. develop knowledge of organisation culture and the role of a manager within it; c. understand the nature of group behaviour and conflict management; and d. develop personal skills in selected areas of people management. 				
Subject Synopsis/ Indicative Syllabus	Context: Overview of the context and processes of management; employer resourcing; and professional ethics.				
	Individual Behaviour: Motivation of project professionals; individual differences; stress management; and job design.Small Group Behaviour: Group formation; types of groups; interpersonal				
	communication; and leadership of projects. Organisation Behaviour: Organisational culture; organisational development and the management of change; Temporary Multi-Organisations (TMO); subcontract management; joint venture management; and cross-cultural aspects of management. Manager Skills: Selection interviews - appraisal interviews; discipline/grievance interviews; negotiating; meetings (project/site				
Teaching/Learning	meetings); investigation of incidents (site accidents); and team building. Topics are introduced through a study guide, supplemented by materials				
Methodology	delivered through workshops and lectures. The independent study comprises individual and group work as well as guided reading. Students are part of small study groups who discuss to share views and enhance the learning through information exchange.				
	 <u>Face-to-face teaching</u>: Lectures, workshops and presentation <u>Independent study</u>: Assignments (Self-awareness Exercise and Term Paper) and Self study (Guided reading) 				

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)				
		a.	b.	C.	d.	
Continuous Assessment*		V	√	√	√	
 Self awareness Exercise 	10%				√	
Term paper	30%	V	V	V		
Presentation	10%		V	V	V	
2. Examination*	50%	√	√	V	√	
Total	100%					

^{*}Students are required to pass both the continuous assessment and examination to pass the subject.

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

- a. to complete 'self-awareness exercise' and self-reflection report (individual work);
- b. to complete the Term Paper individually. (Student presentation and reflection journal are required if in group work);
- c. to complete the written examination and to demonstrate the knowledge of managing people in projects.

Reading List and References

Essential readings

Morris, P.W.G. and Pinto, J.K. (ed) (2007). The Wiley guide to project organization and project management competencies. John Wiley & Sons, Inc. New Jersey.

Robbins, S.P. and Hunsaker, P.L. (2014). *Training in interpersonal Skill: Tips for Managing People at work*, 6th Ed., Pearson Education Limited, England.

Recommended readings

Cheung, S.C. (2004). *Human resource management strategies and practices in Hong Kong*: research report, Hong Kong: Hong Kong Institute of Human Management.

Dainty A. et al (ed) (2007). *People and culture in construction: A reader.* Taylor & Francis: London.

Hong Kong (China), Construction Industry Review Committee (2001). Construct for Excellent: Report of the Construction Industry Review Committee, Report of the Construction Industry Report Committee Hong Kong, HKSAR.

ICAC (2003) *Ethics for construction professionals*, A resource portfolio for Hong Kong university, Hong Kong Ethics Development Centre, Hong Kong

Turner, J.R., Huemann, M. and Keegan, A. (2008). *Human resource management in the project-oriented organization*, Project Management Institute.

Subject Code	BRE5751
Subject Title	Strategic Management
Credit Value	3
Level	5
Pre-requisite/ Co-requisite/ Exclusion	Nil
Objectives	a. To provide students with in-depth understanding of the subjects relating to strategy and strategic management.b. To develop the students' ability in applying strategic management theories and techniques in practice in the area of construction and real estate.
Intended Learning Outcomes (Note 1)	 Upon completion of the subject, students will be able to: a. understand strategy and strategic management; b. possess knowledge in strategic management techniques throughout the development and project cycle; c. apply theories and techniques in practice in the area of strategic management.
Subject Synopsis/ Indicative Syllabus (Note 2)	Strategy & strategic management Organization competitiveness Eastern theories on strategy Strategy in a changing world; strategy & leadership Systems Approach to strategic management Tactics and SWOTE Analysis Strategic management in practice; strategy tools Designing organizations and strategies Sustainable development; Sustainability principle, environmental impact, environmental performance assessment and protection. Challenges of major programme management Strategic management in construction; project management: strategic time, cost & quality management Corporate strategy and real estate Risk management, Risk concept, principles of the management of risks, risk management techniques, risk attitude, decision making and application of risk management Quality management, quality management system (QMS)

Teaching/Learning Methodology

(*Note 3*)

Topics are introduced through a study guide and recommended texts supplemented by materials delivered through lectures and seminars. The independent study comprises individual and group work as well as cases for tutorials. Students are part of small study groups who use face-to-face or web-based media to share views and interact with group members.

- Face-to-face teaching & learning: Lectures, Tutorials,
 Seminars and Discussion
- Independent study: Assignments (Individual Report) and Guided-study (Cases for discussion and presentation at tutorials)

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					ed
		a	b	c			
1. Continuous Assessments*	50%	√		V			
• Individual Report	40%						
In-class participation	10%						
2. Examination*	50%		V	1			
Total	100 %						

^{*}Students are required to pass both the continuous assessment and examination to pass the subject.

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

Students are required to submit a Term Paper and to demonstrate the ability to apply theory and techniques in practice.

In examination, students are required:

- to demonstrate knowledge in strategic management techniques throughout the development and project cycle;
- to apply theories and techniques in practice in the area of strategic management.

Reading List and References

Recommended readings:

Evans V (2014) *Strategy Tools* FT Publishing, Pearson Galbraith J (2014) *Designing Organizations* Jossey-bass, Wiley

Harvard Business Review *HBR's Must-Reads on Strategy* (Article Collection: Product 12601)

Langford D and Male S (2001) Strategic Management in Construction Blackwell Science, Oxford

Shen, L.Y. Lu W.S and Fan L.C.N. (2009). *Strategic Management*, The Hong Kong Polytechnic University.

Sun Tze *The Art of War* (Chinese &/or English Translations)

Weatherhead M. (1997) Real Estate in Corporate Strategy MacMillan

Selected journal and conference papers

CIOB (2014) "Strategy" in Code of Practice for Project Management for Construction and Development 5th ed. (85-110) John Wiley & Sons.

Flanagan, R., Lu, W.S., Shen, L.Y. and Jewell, C. (2007). Competitiveness in Construction: A Critical Review of Research, Construction Management and Economics, Vol. 25, 989-1000.

Shen L.Y. (1999). 'Risk Management', Building in Value: Predesign Issues, (Ed., Best & De Valence) Arnold Publishers, ISBN: 0340741600, pp.248-267.

Subject Description Form

Subject Code	BSE534
Subject Title	Legislation Aspects of Fire Safety Management
Credit Value	3
Level	5
Pre-requisite/ Co-requisite/ Exclusion	Nil
Objectives	To equip the students with knowledge of the Legislation Aspects of Fire Safety Management.
	The purpose is to provide the students with legislation knowledge with respect to fire safety management, so that they can learn about the regulations in relation to the fire services installation and the recommended practices for buildings of different uses; and integration with the fire safety for the building as a whole. Comparison with the overseas regulations and the use of fire statistical records to improve the fire safety provisions and management strategies will also be discussed.
	It will be at the level of practicing building services engineers who are working in the area of fire engineering or interested to learn more.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: a. have a clear understanding of the legislation knowledge with respect to fire safety management;
	b. understand the regulations in relation to the fire services installation;
	c. appreciate the recommended practices for buildings of different uses; and integration with the fire safety for the building as a whole;
	d. understand merits and limitations of existing prescriptive fire safety code and the performance based code;
	e. improve the fire safety provisions and management strategies.
Subject Synopsis/ Indicative Syllabus	Introduction: The principles and philosophy of fire regulation; Introduce the sources of various fire safety regulations and authorities concerned.
	Review of regulations: A brief review of existing regulations and authority governing the design of fire safety systems.

Legal system: A critical analysis of the local legal system relating to fire safety and the role of legal system in fire safety aspect of construction industry.

Authorities: The structure and role of Fire Services Department, Buildings Department, Independent Commission Against Corruption, Labour Department, Health and Safety Ordinance, etc., in legal system and their roles in fire safety.

Codes of practice: Minimum fire service installations and equipment, and inspection and testing and maintenance of installations and equipment (FSI), means of escape (MoE), means of access (MoA), fire resisting construction (FRC).

Human Behaviour: Crowd movement, evacuation in fire, individual capability to evacuate, crowd behaviour and management, evacuation time.

Review of standards: Standards used in fire safety regulations; Review of British Standard, National Fire Protection Association codes including Life Safety Code, Australian Standard etc.

Fire safety and the community: Community fire losses, HK Fire statistics and their implications to fire safety provisions and management strategies in building, public fire safety education.

Comparison of legislation from other developed countries: Review legislation in UK, USA, China, Canada and Australia and comparison.

Performance-Based Fire Codes: Fire Engineering approach in development of fire safety regulation and its impact to local building industry. Implementation with reference to MoE, MoA, FRC and FSI codes. Fire modelling and design fire.

Case studies and application of research: Legislation in hotels, commercial buildings, places of assembly and entertainment, residential buildings, industrial buildings, hospitals, special buildings such as tunnels, air-supported structures.

Teaching/Learning Methodology

- Lectures and seminars
- Student seminars/tutorials

Assessment
Methods in
Alignment with
Intended Learning
Outcomes

Specific assessment methods/tasks	% weighting	Intended subject lead outcomes to be asset (Please tick as approximation)			assess	sed
		a.	b.	C.	d.	e.
1. Examination	60%	✓	✓	✓	√	
Continuous assessment	40%		✓			✓
Total	100%		•			

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

Based on examination mark (60%) and continuous assessment mark (40%). The continuous assessment is made up of course work, seminar and case study.

Tutorial work

Tutorial work will mainly focus on problem solving based on examination type questions and practical examples.

Reading List and References

Barry, F.T. (2002). *Risk-Informed, Performance-Based Industrial Fire Protection: An Alternative to Prescriptive Codes*, TFBarry Publications.

BS 7974:2019 (2019). Application of Fire Safety Engineering Principles to the Design of Buildings – Code of Practice, London, UK.

Buildings Department (2015). Code of Practice for the Fire Safety in Buildings 2011. Hong Kong: Buildings Department, Hong Kong SAR Government.

Custer, R.L.P. and Meacham, B.J. (1997). *Introduction to Performance-Based Fire Safety*, Society of Fire Protection Engineers, Boston, MA, USA.

Della-Giustina, D.E. (2014). *The Fire Safety Management Handbook, American Society of Safety Engineers*, 3rd Ed., Des Plaines, Illinois, USA.

Fire Protection Association (2014). Essentials of Fire Safety Management, The UK's National Fire Safety Organization.

Fire Services Department (2022). Codes of Practice for Minimum Fire Service Installations and Equipment and Inspection and Testing and Maintenance of Installations and Equipment, Hong Kong: Fire Services Department, Hong Kong SAR Government.

Hurley M. J. and Rosenbaum E.R. (2015), *Performance-Based Fire Safety Design*, CRC Press.

Malhotra, H.L. (1987). *Fire Safety in Buildings*, Building Research Establishment Report, Department of the Environment, Building Research Establishment, Fire Research Station, Borehamwood, Herts, WD6 2BL, UK.

Miller, R. (2003). Tolley's Fire Safety Management Handbook, LexisNexis UK.

NFPA 101 (2021). *Life Safety Code*, National Fire Protection Association, Quincy, MA, USA.

NFPA 550 (2022). *Guide to the Fire Safety Concepts Tree*, National Fire Protection Association, Quincy, MA, USA.

Scott, K. (2012). Building Code Basics: Fire, Based on the 2012 International Fire Code, International Code Council.

Society of Fire Protection Engineers and National Fire Protection Association (2015). SFPE Engineering Guide to Performance-Based Fire Protection Analysis and Design of Buildings, MA, USA.

Wolski, A. Dembsey, N.A. & Meacham B.J. (2000). Accommodating Perceptions of Risk in Performance-based Building Fire Safety Code Development, *Fire Safety Journal*, Vol. 34, Issue 3, April, p. 297-309.

Subject Description Form

Subject Code	CSE565
Subject Title	Construction Technology
Credit Value	3
Level	5
Pre-requisite/ Co-requisite/ Exclusion	Nil
Objectives	Construction works are relatively complex and are completed through the combined efforts of different trades. To resolve a construction dispute, it is essential to understand both the operation and technologies involved. The objectives of this subject are to facilitate students to understand different types of construction works and the sequence of construction operations.
Intended Learning Outcomes	 Upon completion of the subject, students will be able: a. to apply the different construction techniques to formulate effective solutions to construction practice in Hong Kong; b. to identify technological considerations on demolition, maintenance and repair of buildings; c. to work with others in group works and take responsibility for an agreed area of shared activities; and d. to have creative and critical thinking and ability to work independently.
Subject Synopsis/ Indicative Syllabus	 i) Introduction The parties: client, architect, consultants, contractor and government officers; types of main contractors and subcontractors; site supervision on substructure and superstructure works. ii) Earthworks Advanced techniques and plants used in excavating and transporting soil or rock; methods in dumping/compacting earth. iii) Basement Construction Basic construction methods - top down and bottom up methods; retaining wall systems and modern water-tight systems; layout of shoring system for large and small site.

	iv)	Substructure							
		Shallow foundation	ons – from si	imple	footi	ng to	raft fo	undatio	on;
		Piled foundations – displacement/replacement piles; pile loading tests, coring and latest advances in pile tests; acceptance criteria.							
	v)	Reinforced Conc Concrete	erete, Pre-st	ressec	d Co	ncrete	e and	Pre-c	<u>east</u>
		Reinforced concrequality control; compaction, corin	formwork						ete, and
		Pre-stressed conc concrete; applicat	-		_		post-t	ension	ing
		Pre-cast concret procedure.	e - produc	ction,	erec	ction	and	handl	ing
	vi)	Structural Steelwo	<u>ork</u>						
		Material specific different types an handling and proprotection.	nd testing tec	chniqu	ues; e	rectio	n - m	ethods	of
	vii)	<u>Demolition work</u>							
		Methods of demo measures.	lition; proced	dures	of de	moliti	on wo	ork; saf	ety
	viii) Maintenance and repair								
	Visual inspection, advances on destructive and non-destructive testing techniques; repair of external façade; waterproofing; structural repair; -chemical treatment; desalination; realkalization.							ng;	
Teaching/Learning Methodology	Lectures will provide updated knowledge relating to the construction practice in Hong Kong.								
	There will be 3 assignments, 1 mid-term test and 1 case study. Case studies will be conducted in groups. Each and every student will have to present his/her part to the class.								
	Independent study and associated reading will require students to conduct some problem-solving exercises independently.								
Assessment									\neg
Methods in Alignment with Intended Learning	_	ecific assessment ethods/tasks	weighting Intended subject learning outcomes to be assessed (Please tick as appropriate)						
Outcomes				a.	b.	c.	d.		

Assignments 1 and 2	33.3%	✓		✓		
Assignment 3	16.7%	✓	✓	✓		
Mid-term test	25%	✓			✓	
Case study	25%	✓	✓	✓	✓	
Total	100 %					

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

Continuous assessment will be based on 3 assignments, 1 mid-term test and 1 case study.

Students must attain at least grade D in both coursework and final examination (whenever applicable) in order to attain a passing grade in the overall result.

Reading List and References

Essential Textbook

Construction Planning, Equipment, and Method, R.L. Peurifoy, C.J. Schexnayder and A. Shapira, McGraw Hill, 7th Edition, 2006.

Practice Notes, Construction Standards and Regulations.

Reference Textbook

Advanced Construction Technology, R. Chudley, Harlow, England, 1999.

Introduction to Civil Engineering Construction, 3rd Ed., R. Holmes, Reading: College of Estate Management, 1995.

Building Construction and Design, J.E. Ambrose, Van Nostrand Reinhold, New York, 1992.

Construction Technology for Tall Buildings, M.Y.L. Chew, Singapore University Press, 2001.

Part 4 Appendices

Appendix A Regulations

CHAPTER I: INTRODUCTION

1. Preamble

The three self-financed taught postgraduate programmes, namely Master of Science in Construction and Real Estate, Master of Science in Construction Law and Dispute Resolution and Master of Science in Project Management, are hosted by the Department of Building and Real Estate (BRE). They have been designed to establish a structure whereby graduates in employment with appropriate qualification and relevant experience can undertake programmes of postgraduate study which will meet their own needs particular to their employment and are professionally coherent. Students progress by accumulating credits for each subject passed. Successful completion of a programme of study will lead to a PolyU postgraduate award.

2. The Nature of BRE's Postgraduate Education

- 2.1 Depending on needs, a student's selected programme of study can be designed for one or more of the following:
 - 2.1.1 an in-depth treatment of an area beyond the student's first degree level in the same area;
 - 2.1.2 updating of the knowledge of those engaged in a field especially where the discipline at undergraduate level is subject to rapid expansion or change;
 - 2.1.3 a re-orientation or conversion to an area new to the student (an area not directly related to the student's first degree); and
 - 2.1.4 a synthesis and integration of a number of disciplines or subjects, particularly if the combination cannot be pursued adequately at undergraduate level.

3. The Subject

- 3.1 The syllabus and/or level of treatment for all subjects is postgraduate in standard. Each subject offered is subject to a process of review and approval which looks for the achievement of an appropriate standard in terms of subject matter, teaching approach and professional standing of the lecturers. The aim is the provision of the best possible programme in each field presented by lecturers who are expert in the field rather than offering a multiplicity of programmes by different Departments covering similar material. Teaching methods for each subject will vary to suit the nature of the material. However, all subjects require a similar amount of student effort. All subjects are first and foremost designed for students with experience and are of high standard in terms of relevance to modern practice, up-to-date content and intellectual challenge.
- 3.2 The size of the standard subject is defined in terms of the approximate total time which would need to be spent by an average postgraduate student. The effort required of a student on one subject is equivalent to 13 weeks of full-time study. On passing (i.e. obtaining a grade "D" or above) a standard subject, the student earns 3 credits. Exceptionally, there can be subjects which are not equivalent to 3 credits. Students will be informed in writing at the beginning of a subject of the assessment structure, number of pieces of coursework required, and submission deadlines. Subject lecturers are required to estimate the amount of time an average student should spend on different aspects of assessed and non-assessed work.
- 3.3 Each programme will cover a particular discipline and subjects within each programme will have the following classifications: *Core subjects* and *Elective subjects*. Students are requested to give due consideration to the appropriate combination of subjects that may be required for accreditations by particular professional institutions.

3.3.1 Core Subjects

Students will have to enroll for a specified number of core subjects as required by the award. <u>Core Subjects</u> are subjects which are taken as part of the award and regarded as core within the particular specialization chosen for the discipline. Some of these core subjects are compulsory. <u>Compulsory Core Subjects</u> are subjects which must be taken as part of the award. Students must select the relevant number of core subjects within their discipline specialization.

3.3.2 Electives

These are elective subjects which are taken as part of the award. The choice of elective subjects extends beyond the discipline or specialization and is aimed at broadening the knowledge base of the students.

4. Pre-requisites, Recommended Background Knowledge, Exclusions, Mutual Exclusions and Exemptions without Credits

- 4.1 Certain subjects can be specified as "pre-requisites" for a particular subject, in which case the subject titles and code numbers of the pre-requisites will be specified in the subject description form. Students will not be allowed to take that subject unless they have completed and passed the pre-requisite subjects, or unless they have obtained approval from the subject lecturer.
- 4.2 "Recommended background knowledge" may be stipulated in the subject description form of a subject and students who do not possess the recommended background knowledge should be counselled not to take the subject. However, they would not be barred from taking a subject simply on the ground that they do not have the recommended background knowledge. It is the students' responsibility to judge whether they have adequate background knowledge before registering on any subject.
- 4.3 A student's previous education experience may preclude his enrolment in certain subjects (i.e. he will not be allowed to take those subjects), such that taking that subject will give him an unfair advantage over other students. Such exclusion is most likely to occur in some subjects provided within conversion programmes. It will be necessary for the student to take another subject in order to satisfy the credit requirement for the award. Another example that a student may be excluded from a subject is when the subject is specially designed for those with a specific professional qualification.
- 4.4 If a subject from which a student is excluded is a compulsory subject for the award in question, then the student is considered to be exempted from that subject. The credits associated with the exempted subject will not be counted towards the credit requirement for the award. This exemption will be without credits.
- 4.5 Students wishing to be exempted from any compulsory subject must apply in writing to the subject offering Department via their Programme Leader providing evidence of previous postgraduate study equivalent to the subject(s) from which exemption is claimed.
- 4.6 If there is a large degree of overlap between two subjects, the two may be mutually exclusive (i.e. a student who has passed one of the subjects will not be allowed to take the other). This will be specified in the subject description forms of both subjects.

5. A Student's Programme of Study

All students enrolled in the Master of Science programmes should satisfy the minimum entry requirements. While students are admitted for Master's degree study, they may be allowed to graduate with an exit award of Postgraduate Diploma subject to approval. Students satisfactorily completing a set of subjects in accordance with the given regulations for a specific award will be eligible for the award of a Master's degree or a Postgraduate Diploma with that specific award title. Students are required to accumulate a minimum of 30 credits in order to

be eligible for a Master's degree, and 21 credits for a Postgraduate Diploma. Students may be given credit transfer for appropriate study they have earlier successfully undertaken at postgraduate level.

- 5.2 Students seeking a designated award must generally select at least a specified number of taught subjects from those listed as core to that award. The specific details of the requirements for an award are contained in Part 2 Programme Curriculum of this programme requirement document. The dissertation component is optional and in a Master's degree programme it worths 9 credits. The dissertation topic selected by a student must be approved as appropriate to the award. The minimum number of core subjects which are required to be selected represents an optimum balance between ensuring that participants have completed at least the minimum acceptable amount of in-depth study of the discipline in which they aim to achieve their designated award and at the same time providing maximum freedom in individual selection.
- 5.3 Subjects are offered either in the evenings over a 13-week period or in the form of 3 full-day workshops over weekends. Subject to demand and viability, classes may be scheduled during the day for full-time students as an alternative to evening lectures and/or weekend workshops

6. Deferment and Zero Subject Enrolment

A student may be allowed to interrupt his/her studies for a certain amount of time. This can be done by seeking either "deferment of study" or "zero subject enrolment". Both applications will have to be approved by BRE. Zero subject enrolment will only be considered for one semester at a time. Prior approval must be obtained. In order to gain approval for a deferment application, the student will have to provide strong justification for deferring his studies for one semester or longer (See Sections 4 and 5 of Chapter II).

7. Student Counselling

The Programme Leaders will be available to answer applicants' questions and provide advice and information particularly on individual programme design.

8. Admission

- 8.1 The general minimum entry qualification for admission to a programme of study leading to a Master's degree award is a recognized bachelor's degree. Specific entry requirements for individual programmes are described in Part 2 Programme Curriculum of this programme requirement document. The University regulations governing the admission of mature applicants or applicants without approved qualifications are also applicable.
- 8.2 Relevance of the selected programme of study to the career development of the students should be sought.
- 8.3 Additional specific requirements or recommendations may be stated for admission to certain subjects and programmes. Students should pay particular attention to those in drawing up their programme of study to ensure that they are qualified to be admitted. Details appear in the programme curriculum and on the subject description forms.
- 8.4 Using the details on pre-requisites, core and compulsory subjects for designated awards and exclusion conditions, and referring to the published schedule, students will be able to plan their studies well in advance.

CHAPTER II: REGULATIONS

1. Credit Transfer

- 1.1 At the discretion of BRE, students may be given credit for previous postgraduate study. A fee will be charged for credit-fee-paying students for credits successfully transferred.
- 1.2 Credit transfer will only be granted to subjects with B or above but without the grade being counted in the students' Grade Point Average (GPA). The policy takes effect starting from 2021/22 intake cohort. The credits transferred will count towards the credit requirement for the award. All credit transfers approved will take effect only in the semester for which they are approved. A student who applies for transfer of credits during the re-enrolment or add/drop period for a particular semester will only be eligible for graduation at the end of that semester, even if the granting of the credit transfer will immediately enable the student to satisfy the total credit requirement for the award.
- 1.3 The validity period of subject credits earned is eight years from the year of attainment, i.e. the year in which the subject is completed, unless otherwise specified by the Department responsible for the contents of the subject. Credits earned from previous studies should remain valid at the time when the student applies for transfer of credits. For exceptional cases such as those stated in 1.3.1 to 1.3.3 below, subject offering Departments shall have the discretion to approve the transfer of credits which have exceeded the validity period on a case-by-case basis. All such exceptional cases must be reported to the Faculty Board with full justifications.
 - 1.3.1 Mature learners whose previous studies were mostly completed a long time before their admission to this University, but who have working experience which would have kept them actively involved in the relevant area of study. The flexibility to be granted to these students based on academic comparability of subjects is in line with the policy of the University in promoting life-long learning.
 - 1.3.2 Students for whom the expiry of validity of credits is beyond their control, e.g. due to medical reasons.
 - 1.3.3 Students have been approved for deferment of study.
- 1.4 No more than 30% of the normal credit requirement for an academic award may be transferred from programmes either within or outside of the University.
- 1.5 The combined credit transfer from programmes within and outside the University may not exceed 30% of an award.
- 1.6 Credits earned from subject-based studies at PolyU which have never been used for another degree may be applied to credit transfer up to 67% as per University regulations.

2. Exclusion and Exemption without Credit

Students may be excluded from taking some subjects or "exempted without credit" which is a particular case of "exclusion". The credits associated with excluded subjects will not be counted towards the award requirements (See also Sections 4.3, 4.4 and 4.5 of Chapter I).

3. Registration/Academic Probation/Progression/Deregistration

- 3.1 On admission students will be registered with the University as a student studying for a Master's degree award.
- 3.2 All three MSc programmes covered in this programme requirement document are mixed-mode programmes. Students enrolling on mixed-mode programmes are classified as mixed-mode

students. They may engage in a full-time or part-time study load and attend classes in the evenings, weekends, daytime or a combination of all. The class attendance pattern for individual programmes will be specified in the admission/programme curriculum. If the mixed-mode students take subjects with a study load reaching the minimum requirement of a full-time student, they will be given full-time status in that semester. Otherwise, they will be given part-time status.

- 3.3 If it is approved that a student can defer his/her study (see Section 5 below), then the deferment period will not be counted towards the total period of registration.
- 3.4 Students who have a GPA lower than 1.7 will be put on academic probation in the following semester. Once when these students are able to pull their GPA up to 1.7 or above at the end of the probation semester, the status of "academic probation" will be lifted. The status of "academic probation" will be reflected in the assessment result notification, but not in transcript of studies.
- 3.5 To improve the academic performance of students on academic probation, these students are required to seek academic advice on their study load and subjects to be taken. They should complete the Form "Study Load for Students on Academic Probation" (Form AR150, downloadable at https://www.polyu.edu.hk/ar/), indicating the proposed study plan and meet with the Programme Leader to finalize the subjects and number of credits to be taken in the semester following academic probation within one week of assessment results announcement.
- 3.6 The Board of Examiners shall, at the end of each semester, determine whether each student is:
 - (i) eligible for progression towards an award; or
 - (ii) eligible for an award; or
 - (iii) required to be de-registered from the programme.
- 3.7 A student will have "progressing" status unless he/she falls within any one of the following categories, which may be regarded as grounds for deregistration from the programme:
 - 3.7.1 the student has reached the final year of the normal period of registration for as specified in the Programme Requirement Document, unless approval has been given for extension; or
 - 3.7.2 the student has reached the maximum number of retakes allowed for a failed compulsory subject; or
 - 3.7.3 the student's GPA is lower than 1.7 for two consecutive semesters and his/her Semester GPA in the second semester is also below 1.7; or
 - 3.7.4 the student's GPA is lower than 1.7 in 3 consecutive semesters

When a student falls within the categories as stipulated above, except for section 3.7.1 with approval for extension, the Board of Examiners shall de-register the student from the programme without exception.

- 3.8 If the student is not satisfied with the de-registration decision of the Board of Examiners, he/she can lodge an appeal. All such appeal cases will be referred directly to the Academic Appeals Committee (AAC) for final decision. Views of Faculty/Departments will be sought and made available to AAC for reference.
- 3.9 The progression of students to the following academic year will not be affected by the GPA obtained in an optional Summer Term and that the Summer Term study does not constitute a requirement for graduation, unless otherwise specified by BRE.

- 3.10 Notwithstanding Sections 3.7.3 and 3.7.4 above, students may be deregistered from the programme enrolled before the time specified in these two Sections if their academic performance is poor to the extent that the Board of Examiners deems that their chance of attaining a GPA of 1.7 at the end of the programme is slim or impossible.
- 3.11 No extension of time will be granted on grounds of timetable conflict or non-availability of subjects.

4. Zero Subject Enrolment

- 4.1 Students must apply to BRE for not taking any subjects in a semester; otherwise they will be classified as having unofficially withdrawn from their programme. Applications should be submitted before the commencement of the semester concerned or in exceptional circumstances before the end of the add/drop period.
- 4.2 All semesters in which the students are allowed to take zero subjects will be counted towards the total period of registration. A fee for retention of study place will be charged.
- 4.3 Students should refer to the University Student Handbook for relevant procedures and regulations.

5. Deferment of Study

- 5.1 Students may apply for deferment of study if they have a genuine need to do so such as illness or posting to work outside Hong Kong. Approval from BRE is required. The deferment period will not be counted towards the total period of registration.
- 5.2 Deferment will normally be granted for no more than 2 semesters at a time. The total period of deferment cannot exceed 4 semesters.
- 5.3 Students should refer to the University Student Handbook for relevant procedures and regulations.

6. Transfer of Study

- 6.1 Students who have not completed their programme of study may apply to transfer to another programme, and may be admitted, provided that the total period of registration will not exceed the normal duration of the original or new study programme whichever is longer. Such proposed transfer should be discussed with the Programme Leader.
- 6.2 New students will not be considered for transfer to another programme offered in the same mode of study during their first semester of registration
- 6.3 Students should seek the agreement of the Programme Leader of the new programme to which they would like to transfer their study. Application should be submitted to the host Department of the new programme for consideration and at the same time the host Department of the current programme be informed of such applications.

7. Withdrawal of Study

If students wish to formally discontinue their study at the University before completing the programme, they should complete the withdrawal procedure via eStudent. Fees paid for the semester in which students are studying will not be refunded. Applications for withdrawal of study for the current semester must be submitted before the commencement of the examination

period. Students should refer to the University Student Handbook for relevant procedures and regulations.

8. Subject Registration and Withdrawal

- 8.1 Students need to register for the subjects at specified periods prior to the commencement of the semester. An add/drop period will also be scheduled for each semester/term. Students officially dropping a subject during the add/drop period will be considered not to have registered for the subject. It is a student's responsibility to check if his/her subject registration will fulfil the graduation requirements. The maximum study load per semester is 21 credits.
- 8.2 Dropping of subjects after the add/drop period is not allowed. Students may apply for withdrawal of their registration on a subject after the add/drop period and before the commencement of the examination period if they have a genuine need to do so. The application will require the approval of both the subject leader and the Programme Leader concerned. Applications submitted after the commencement of the examination period will not be considered. For approved applications, the tuition fee paid for the subject will be forfeited and the withdrawal status of the subject will be shown in the assessment result notification and transcript of studies but will not be counted towards the calculation of GPA.
- 8.3 Students should refer to the University Student Handbook for subject registration procedures and relevant regulations.

9. Dissertation and Dissertation Assessment

- 9.1 Students are expected to submit a dissertation proposal to their Academic Advisors no later than the last teaching day of the semester in which they first register for dissertation.
- 9.2 Students will be required to complete their dissertations within the normal period defined in the Dissertation Handbook (Appendix B).
- 9.3 The normal period for completion of a dissertation is 3 semesters (including summer term). Those who are not able to complete their dissertations within the normal period may apply on the advice of the supervisor to extend the dissertation registration beyond the normal period but within the maximum period of 4 semesters (including summer term). The application must be endorsed by the relevant Programme Leader and must be approved by the Chairman of BRE Taught Postgraduate Programme Committee. Applications for extension beyond the normal period will only be approved under exceptional circumstances.
- 9.4 When permission is granted to extend the dissertation registration beyond the normal period, the student will be required to pay an extension fee, which is set out in the Student Handbook, for each additional semester. If the student's study will exceed the normal duration of the programme after extending the dissertation, he/she is also required to apply for extending their study period in the programme.
- 9.5 Break of study is normally not permitted once a student registers for dissertation and students are expected to pursue their dissertation in consecutive semesters.
- 9.6 The assessment panel will consist of two categories of members, namely:
 - 9.6.1 Academic supervisor
 - 9.6.2 A moderator to provide quality control.

- 9.6.3 In case the supervisor and the moderator have a very different view on the assessment, the Programme Leader concerned will make the final decision.
- 9.7 An electronic copy of the dissertation should be sent to the academic supervisor before the oral examination.
- 9.8 After receiving the electronic copy from the student, the academic supervisor should make arrangement on a mutually convenient time and place for an oral examination
- 9.9 After conducting the oral examination the assessment panel will jointly allocate a grade guided by the following weightings which may vary depending on the nature of the project. Individual programmes may modify key items and the recommended weightings according to the needs of each programme.

Progress 20%	Dissertation 50%	Oral 30%	Total 100%
--------------	------------------	----------	------------

- 9.10 The academic supervisor shall write a report on the assessment outcome.
- 9.11 Students failing their dissertations will not be allowed to re-take their dissertation subjects.

10. Assessment of Taught Subjects

- 10.1 The extent to which a student has met the aims of a particular subject is assessed and recorded immediately upon its completion. Assessment of students takes place exclusively within subjects. This allows students to assess their position and make informed choices and decisions on their continuing programme of study.
- 10.2 The assessment of a subject is based on one or two components, namely continuous assessment and/or examination. The weighting of continuous assessment and examination as well as the intended subject learning outcomes to be assessed with each component are listed out in the subject description form of each subject.
- 10.3 Continuous assessment is all forms of assessment other than examination, which may include tests, assignments, projects, laboratory work, field exercises, presentations and other forms of classroom activities undertaken either individually or in groups. The contribution made by each student in continuous assessment involving a group effort shall be determined and assessed separately, which can result in different grades being awarded to students in the same group.
- 10.4 Examination shall take place on-campus and be invigilated and its duration is 3 hours in most subjects. When on-campus invigilated examination cannot be arranged under exceptional circumstances deemed by the University, online invigilated or take-home examination or alternative assessment methods may be arranged as substitution.
- 10.5 Assessment of all students on a subject is based on the same format of continuous assessment and/or examinations. No distinction is made on the grounds of students' field of study or status. Subject leaders are not allowed to set special questions in an examination which are compulsory for some groups of students and not others. However, students are expected to bring to a subject and in examination to use perspectives related to their own background and experience.

- 10.6 In general, students are required to pass in both the Continuous Assessment component (which may consist of several assessment tasks) and the Examination component (if applicable) in order to pass a subject, unless specified otherwise by the subject leader.
- 10.7 Assessment grades shall be awarded on a criterion-referenced basis. A student's overall performance in a subject shall be graded as follows:

<u>Grade</u>	Short Description	<u>Grade</u> Point	Elaboration on subject grading description
A+ A A-	Excellent	4.3 4.0 3.7	Demonstrates excellent achievement of intended subject learning outcomes by being able to skillfully use concepts and solve complex problems. Shows evidence of innovative and critical thinking in unfamiliar situations, and is able to express the synthesis or application of ideas in a logical and comprehensive manner.
B+ B B-	Good	3.3 3.0 2.7	Demonstrates good achievement of intended subject learning outcomes by being able to use appropriate concepts and solve problems. Shows the ability to analyse issues critically and make well-grounded judgements in familiar or standard situations, and is able to express the synthesis or application of ideas in a logical and comprehensive manner.
C+ C C-	Satisfactory	2.3 2.0 1.7	Demonstrates satisfactory achievement of intended subject learning outcomes by being able to solve relatively simple problems. Shows some capacity for analysis and making judgements in a variety of familiar and standard situations, and is able to express the synthesis or application of ideas in a manner that is generally logical but fragmented.
D+ D	Pass	1.3 1.0	Demonstrates marginal achievement of intended subject learning outcomes by being able to solve relatively simple problems. Can make basic comparisons, connections and judgments and express the ideas learnt in the subject, though there are frequent breakdowns in logic and clarity.
F	Failure	0.0	Demonstrates inadequate achievement of intended subject learning outcomes through a lack of knowledge and/or understanding of the subject matter. Evidence of analysis is often irrelevant or incomplete.

[&]quot;F" is a subject failure grade and all others ("D" to "A+") are subject passing grades. No credit will be earned if a subject is failed.

11. Retaking of Subjects

- 11.1 After the announcement of subject results in a semester, students should check whether they have failed any subject via the eStudent and arrange for retaking of the subject during subject registration.
- 11.2 Students may only retake a subject which they have failed (i.e. Grade F or U), and the number of retake is restricted to a maximum of two (i.e. a maximum of three attempts for each subject). The second retake of a failed subject requires the approval of the Faculty Board Chairman. Students who have failed a compulsory subject after two retakes will be deregistered. An appeal can be submitted to the Academic Appeals Committee (AAC) for a third chance of retaking the subject. In case AAC does not approve further retakes of a failed compulsory subject or the taking of an equivalent subject with special approval of the Faculty, the student concerned would be de-registered and the decision of the AAC shall be final within the University.
- 11.3 Students paying credit fee will be charged for the subjects retaken.
- 11.4 In cases where a student takes another subject to replace a failed elective subject, the fail grade will be taken into account in the calculation of the GPA, despite the passing of the replacement subject.

12. Appeal against Assessment Results

A student may appeal against assessment results. Students should refer to the University Student Handbook for application procedures and relevant regulations.

13. Eligibility for Award

- 13.1 A student would be eligible for the award of Master of Science if they have met all of the following conditions:
 - (i) Accumulating 30 credits for the award including credits from a required number of subjects in a specified core list of the respective programme and have passed the dissertation in an approved topic (or have passed the dissertation replacement subjects if they opt for the non-dissertation route)
 - (ii) Having a GPA of 1.7 or above
 - (iii) Fulfilling all other graduation requirements as specified by the University
- 13.2 A student should be awarded a Postgraduate Diploma if he/she falls within any one of the following categories:
 - (i) The Board of Examiners agrees that the student is eligible for a Postgraduate Diploma award and he/she cannot be eligible for the Master's degree award even though the Master's degree award was his/her intended award; or
 - (ii) The student has reached the end of the normal period of dissertation registration but has not obtained approval to extend his/her dissertation registration period and has fulfilled the graduation requirements for a Postgraduate Diploma award; or
 - (iii) The student applies to graduate with a Postgraduate Diploma award based on personal reasons and has fulfilled the relevant graduation requirements and is agreed by the Board of Examiners.
- 13.3 The graduation requirements for Postgraduate Diploma include all of the following:
 - (i) Accumulating 21 credits for the award including credits from a required number of subjects in a specified core list of the respective programme
 - (ii) Having a GPA of 1.7 or above

(iii) Fulfilling all other graduation requirements as specified by the University

A student, however, will not be granted the same PgD award (in the same area) for the second time despite his/her satisfying the above conditions, if he/she has been granted the award before.

- 13.4 For both the Master's degree and PgD awards, students must satisfy the residential requirement for at least one-third of the credits required for the award to be completed under the current enrolment at PolyU, unless professional bodies stipulate the otherwise.
- 13.5 If a student's registration status has been set to "Study ended" due to non-compliance with PolyU regulations, for example, failure to pay fees, he/she will not be eligible for the award unless his/her registration status has been reinstated.
- 13.6 The awards of Master's degree and PgD are classified as: Distinction, Credit, and Pass.
- 13.7 A student is required to graduate as soon as he/she satisfies all the conditions for award. Upon confirmation of the eligibility to graduate or leaving the University, registration for subjects (including the follow-on term of consecutive subjects) in the following semester / summer term will be nullified and removed.
- 13.8 A student may be allowed to take more taught subjects than he/she needs to graduate in or before the semester within which he/she becomes eligible for an award. Subject to the maximum study load of 21 credits per semester and availability of places, a student may take elective subjects, up to a maximum of 9 credits on top of the prescribed credit requirements for award, in or prior to the final semester before graduation.

14. Grade Point Average (GPA)

14.1 At the end of each semester/term, a GPA will be computed as follows, and based on the grade points of all the subjects:

$$\mathsf{GPA} = \frac{\sum_{n=1}^{N} Subject\ Grade\ Point_n \times Subject\ Credit\ Value_n}{\sum_{n=1}^{N} Subject\ Credit\ Value_n}$$

Where N = number of all subjects (inclusive of failed subjects) taken by the student up to and including the latest semester/term. For subjects which have been retaken, only the grade point obtained in the final attempt will be included in the GPA calculation.

If the student has registered for a dissertation, the credits and grade point for the dissertation will also be included in the above sums upon the completion of the dissertation.

The credits and grade point of any additional subjects taken on top of the prescribed credit requirements for award will also be taken into account.

Subject which has been given an 'S' subject code, i.e. absent from all assessment components, will be included in the GPA calculation and will be counted as "zero" grade point.

- 14.2 The following subjects will be excluded from the GPA calculation:
 - (i) Exempted subjects
 - (ii) Ungraded subjects
 - (iii) Incomplete subjects

- (iv) Subjects for which credit transfer has been approved, but without any grade assigned
- (v) Subjects from which a student has been allowed to withdraw (i.e. those with the code 'W')
- 14.3 All taught subjects offered within BRE are at the same level and contribute equally to the calculation of the GPA.
- 14.4 GPA is thus the unweighted cumulative average calculated for a student, for all relevant subjects taken from the start of the programme to a particular point of time. GPA is an indicator of overall performance, and ranges from 0.00 to 4.3. GPA is capped at 4.3.

15. Guidelines for Award Classification

15.1 The following <u>GUIDELINES</u> will be used by the Scheme Board of Examiners to recommend the classification of the award:

Guidelines

Distinction The student's performance/attainment is *outstanding*, and identifies

him/her as exceptionally able in the field covered by the programme

in question.

Credit The student has reached a standard of performance/attainment which

is more than satisfactory but less than outstanding.

Pass The student has reached a standard of performance/attainment

ranging from just adequate to satisfactory.

15.2 Award GPA Ranges for Award Classification

Award Classification Award GPA Range

 Distinction
 3.60 - 4.30

 Credit
 3.00 - 3.59

 Pass
 1.70 - 2.99

15.3 For the purpose of determining the award classification, any subjects passed after the graduation requirement has been met or subjects taken on top of the prescribed credit requirements for award shall not be taken into account in the award GPA calculation. However, if a student passes more elective subjects than the requirement for graduation in or before the semester within which he becomes eligible for an award, the elective subjects with higher contribution (with the exception of the additional subjects taken out of interest and not for satisfying the award requirements) shall be counted in the award GPA calculation for award classification (i.e. the passed subjects with lower contribution, will be excluded from award GPA calculation for award classification), irrespective of when the excessive elective subjects are enrolled. If a student passes more core subjects than the requirement for graduation, the extra core subject(s) with lower contribution to the GPA will be considered along with the elective subjects for the purpose of award GPA calculation for award classification.

Appendix B Dissertation Handbook (For BRE591 Dissertation)

Notes:

This handbook may be updated from time to time. Students will be informed of the changes as and when appropriate.

1. Introduction

The dissertation is a very significant component of a Master's programme. It carries a weight equivalent to three or four taught subjects and represents around 420 - 560 hours of student effort.

The dissertation should be an exposition of a student's own work and ideas. Where others have had an input (e.g. in a team situation) this should be clearly identified. Plagiarism is unacceptable. Expulsion may be imposed in cases of proven plagiarism (See Annex One).

Since the subject areas of dissertations are so diverse it is impossible to define a standard approach to content, but included, should be an introduction and definition of objectives, a literature survey, a review of the problem followed by a description of the student's approach to solving the problem, the results or findings, an intellectual analysis of the results or findings, and finally a logical review of the conclusions drawn.

2. The Dissertation Process: Preparation, Progress and Assessment

The procedures for preparing a dissertation can be divided into three different stages. The entire process is summarised in a diagram in Section 7.

Student wishing to write a dissertation proposal must register on the subject BRE591 MSc Dissertation.

BRE587 Research Methods for Construction and Real Estate is the co-requisite/pre-requisite requirement for taking dissertation.

A Dissertation Co-ordinator will be appointed by the Head of Department to co-ordinate students, supervisors and Programme Leaders in the process of dissertation.

2.1. Proposal

- 2.1.1. Students are expected to learn how to prepare a research proposal in the corequisite/pre-requisite subject BRE587 Research Methods for Construction and Real Estate. Students may identify a relevant academic supervisor themselves through the list of academic staff published on the BRE's website, or consult the Dissertation Co-ordinator or their Programme Leaders for recommendation. Academic supervisors will be assigned by the Dissertation Co-ordinator if students cannot identify any one themselves. Only student who have registered on BRE591 Dissertation will be assigned supervisors and permitted to submit proposals.
- 2.1.2. The subject BRE587 Research Methods for Construction and Real Estate enables students to identify and define a problem for valid research, to develop their abilities to identify and evaluate appropriate research methods, and to provide a framework from which students can begin their own research work. The contents will include research methods, research design, analysis of data, presentation of findings, and ethical and legal considerations.
- 2.1.3. A student is expected to prepare a dissertation proposal in consultation with his/her academic supervisor and submit it no later than the last teaching day of the semester in which the student first registers for dissertation.
- 2.1.4. The proposal shall be typewritten. When a proposal is not found to be acceptable a student may be requested to resubmit it.

- 2.1.5. A dissertation proposal should consist of the following:
 - 2.1.5.1. Objectives
 - 2.1.5.2. Content which includes innovative features, challenge, academic value and applicability
 - 2.1.5.3. Methodology
 - 2.1.5.4. References
 - 2.1.5.5. Scheduled programme of work
 - 2.1.5.6. Description of facilities and justification
 - 2.1.5.7. Starting data
 - 2.1.5.8. Expected completion date
- 2.1.6. Regulations concerning dissertation registration
 - 2.1.6.1. Once a dissertation proposal is approved the student shall proceed at once to carry out the work. The maximum number of dissertation proposals which a student may submit is two.
 - 2.1.6.2. Students should be aware that approval to commence a dissertation is by no means automatic. There will be cases where a student is not permitted to proceed with a dissertation and therefore such student will be required to leave the programme on completion of the requirements for a Postgraduate Diploma award.
 - 2.1.6.3. The normal period for completion of a dissertation is 3 semesters (including summer term). Students are required to pay for all of the 9 credits the dissertation carries in the first semester when he/she enrols on the dissertation. Fees paid will not be refunded even if the student withdraws from his/her dissertation or from the programme during the course of his/her registration. The registration period for the dissertation is set at a maximum of 4 semesters (including summer term) from the date of registration, subject to the regulations on the normal period of registration and subject to satisfactory reports on progress from the academic supervisor. The minimum period for the dissertation work to be completed is unlikely to be less than 1 semester. Break of study is normally not permitted once a student registers for dissertation and students are expected to pursue their dissertation in consecutive semesters.
 - 2.1.6.4. Subject to satisfactory reports on progress from the academic supervisor, students whose dissertation proposal has been approved will continue to register on their dissertation until either the completion of their dissertation or the normal dissertation registration period expires.
 - 2.1.6.5. The student should plan to submit the completed dissertation before the commencement of the examination period of the last semester of the normal period.

2.2. Progress Reports

- 2.2.1. Students are expected to submit a progress report to their academic supervisor at least once every semester to ensure smooth progress of the dissertation.
- 2.2.2. Students should inform their academic supervisor immediately when difficulties arise.

2.3. Submission of Dissertation before Assessment

- 2.3.1. Under normal circumstances, with the agreement of the supervisors, students may prepare for assessment after satisfactory progress.
- 2.3.2 An electronic copy of the dissertation in Adobe Acrobat PDF format shall be submitted to the academic supervisor.

2.4. Assessment

2.4.1. Oral examination

After receiving the electronic copy of the dissertation from student, the academic supervisor should make arrangement on a mutually convenient time and place for an oral examination.

2.4.2. Assessment panel

The assessment panel will consist of two categories of member, namely:

- 2.4.2.1. Academic supervisor
- 2.4.2.2. A moderator to provide quality control.
- 2.4.2.3. In case the supervisor and the moderator have a very different view on the assessment, the programme leader concerned will make the final decision.

2.4.3. Regulations concerning dissertation assessment

2.4.3.1. After conducting the oral examination the assessment panel will jointly allocate a grade guided by the following weightings which may vary depending on the nature of the project. Individual awards may modify key items and the recommended weightings according to the need of each award.

Progress	Report	Oral	Total
20%	50%	30%	100%

- 2.4.3.2. The academic supervisor shall write a report on the assessment outcome and forward it to the Dissertation Co-ordinator.
- 2.4.3.3. Applications to defer submission should <u>NOT</u> normally be considered or approved except under exceptional circumstances such as illness. In such cases, students' applications for deferment of study can be considered.
- 2.4.3.4. If a student wishes to delay the submission of the completed dissertation beyond the normal period but within the maximum period of 4 semesters (including summer term), he/she may apply on the advice of the supervisor.

The application must be endorsed by the relevant Programme Leader and must be approved by the Chairman of BRE Taught Postgraduate Programme Committee before the end of the examination period of the last semester of the normal period.

2.4.3.5. When permission is granted to extend the dissertation registration beyond the normal period, the student shall be required to pay a fee which is set out in the University's Student Handbook, which shall entitle him/her to register for one additional semester. If the student's study will exceed the normal duration of the programme after extending the dissertation, he/she is also required to apply for extending their study period in the programme.

3. Dissertation Supervision

The amount of effort required by students in the dissertation should clearly be reflected in the quantity and quality of the final submission. In assessing the standard of dissertations supervisors will be seeking to ensure that the student has met with the aims of this part of the programme.

3.1. Role of Academic Supervisor

- 3.1.1. The student and academic supervisor should contact each other from time to time to discuss progress against his agreed programme. The responsibility for arranging meetings between student and academic supervisor is shared by both parties.
- 3.1.2. The academic supervisor will advise the student about the style of presentation of the dissertation and the academic supervisor will be available for consultation on a regular basis.

4. Dissertation Moderation

The moderator should ensure that proper procedures are followed and the assessment is consistent.

5. Format and Presentation of Dissertations

5.1. Style

- 5.1.1. The text shall be placed on one side or both sides, the latter being encouraged wherever possible.
- 5.1.2. Pagination of the body of the text is to be in Arabic numerals in the upper right hand corner of the page. The pagination begins with the first page of the first chapter and runs through material following the body of the text. Pages with tables, maps, photographs etc. are to be numbered as well.
- 5.1.3. Pagination of material preceding the body of the text is to be in small Roman numerals.
- 5.1.4. The body of the text is to be double spaced; footnotes are to be single spaced.
- 5.1.5. Footnotes shall be placed at the bottom of each page rather than at the end of each chapter or at end of the dissertation. A line shall be drawn beneath the text across the page to separate the text from the footnote. Care should be taken to complete a footnote on the page where it is mentioned in the text, in order to avoid continuing it on the following page. Footnotes may be numbered consecutively through a chapter

- or start with number one -(1) on each page, which is the most practical of the two methods of numbering.
- 5.1.6. Reference shall be presented alphabetically, using the reference citation format for academic journal papers, conference papers, research reports and books in an internationally accepted format used by the discipline in which the study lies. (See Annex One for more advice)
- 5.1.7. The dissertation shall be submitted on A4 size paper (210 mm x 297mm) of good quality. There shall be a margin (before trimming) of 40mm at the left hand (binding) edge, 25 mm at the top and right margins and 15 mm below the last line of footnotes.
- 5.1.8. All physical measurements reported in the dissertation shall be in the SI system of units (Systeme Internationale d'Unites). Where, for example, in the review of literature, quantities are expressed in other units, the corresponding SI values should also be quoted.
- 5.2. Material Preceding Body of Text
 - 5.2.1. A blank sheet.
 - 5.2.2. Title page of dissertation this shall not be numbered and should be identical with the cover.
 - 5.2.3. Copyright notice (if any)
 - 5.2.4. An abstract of not less than two hundred and not more than five hundred words shall be a part of each dissertation and will contain information on all the substantive features of the work. The top page of each abstract shall contain the following statement:

Abstract of dissertation entitled:						
submitted by						
for the degree of MSc in						
at The Hong Kong Polytechnic University in (month and year).						

- 5.2.5. Acknowledgements should be made to supervisors and to persons who have provided special assistance.
- 5.2.6. A table of contents should be provided which lists the abstract and all main sections thereafter. Material preceding the body of the text shall be paginated using small Roman numerals. Arabic numerals shall be used for the main body of the text.
- 5.2.7. A list of Illustrative Materials should be provided, if needed. The listing of page references for illustrative materials such as tables, maps and figures will immediately follow the table of contents on a separate page or pages having the same style as the table of content page. Illustrative materials shall have titles and be numbered in Arabic numerals.
- 5.3. Material Following the Body of the Text. (This shall be numbered in Arabic numerals)
 - 5.3.1. Appendix or appendices

- 5.3.2. Bibliography
- 5.3.3. Oversize maps etc. in map pockets

6. Retention of Dissertation

For dissertation which has been graded B+ or above, the electronic copy will be uploaded to BRE website and sent to the University Library for digitisation for permanent retention.

7. Diagram of the Process of Dissertation

The entire process of dissertation is summarised below I. Proposal Stage Student Learning of Preparation and \rightarrow Approval of submission of dissertation proposal research registers on by academic proposal Dissertation dissertation writing in proposal supervisors no later BRE587 than the last teaching day of the semester* in which the student first registers for dissertation II. Progress Stage Conducting research Submission of Preparation of under a supervisor semester progress dissertation reports to supervisor III. Assessment Stage Submission of Oral presentation Supervisor to write electronic copy of before an a report on the dissertation to assessment panel assessment academic supervisors outcome *(December for *(before the last semester 1, May for * (within one month teaching day of the semester 2, July for after oral semester) summer term) presentation)

^{*} Indicative date

8. Assessment Rubrics for BRE591 Dissertation

1. Assessment Criteria

Elements	Weighting	Criteria		
1. Progress	20%	Consultations, diligence, enthusiasm, planning		
2. Oral Presentation	30%	Adequacy, structure, clarity, conciseness, graphics		
		Adequacy, structure, clarity, originality, length		
	50%	Presentation		
		Aim and objectives		
3. Final Dissertation		Research methodology		
		Literature review		
		Data collection & analysis		
		Conclusions and findings		
Total	100%	Overall Component Grade		

2. Grading Criteria

Grade	Description	Detail Grading Description
A+	Exceptionally outstanding	The student's work is outstanding. It demonstrates the achievement of all assessment criteria and far exceeds the threshold standard required by
Α	Outstanding	the subject area in all regards. The student's work is excellent. It demonstrates the achievement of all assessment criteria and far exceeds
A-	Excellent	the threshold standard required by the subject area in nearly all regards.
B+	Very good	The student's work is very good. It demonstrates the achievement of all assessment criteria and is well above the threshold standard required by
В	Good	the subject area in the majority of regards. The student's work is good. It demonstrates the achievement of all assessment criteria and is well
B-	Wholly good	above the threshold standard required by the subject area in all of the assessment criteria.
C+	Wholly satisfactory	The student's work is wholly satisfactory. It meets the threshold standard
С	Satisfactory	required by the subject area in all of the assessment criteria. The student's work is satisfactory. It largely meets the threshold standard
C-	Barely satisfactory	required by the subject area in essentially all of the assessment criteria.
D+	Barely adequate	The student's work is barely adequate. It fails marginally to meet the threshold standard required by the subject area in a few key assessment criteria. The student's work is weak. It fails marginally to meet the
D	Weak	threshold standard required by the subject area in several of the key assessment criteria.
F	Inadequate	The student's work is inadequate. It fails to meet the threshold standard required by the subject area in many of the assessment criteria OR fails badly to meet some crucial assessment criteria.

Guidance Notes on Avoiding Plagiarism, on Bibliographic Referencing and on Photocopying of Copyright Materials

The University views plagiarism and copying of copyright materials, without the license of the copyright owner, as a serious disciplinary offence. These guidance notes aim to help students of the University comply with the Institution's policy on plagiarism in continuous assessment, bibliographic referencing and photocopying of copyright materials.

What is plagiarism?

To take (words, ideas, etc.) from someone else's work and use them in one's own work without admitting one has done so.' (*Longman Dictionary of Contemporary English*, 1987)

- ".. The action of using or copying someone else's idea or work and pretending that you thought of it or created it." (Collins Cobuild English Language Dictionary, 1987)
- "... The taking and using as one's own of the thoughts, writings, or inventions of another." (Shorter Oxford English Dictionary, 1973)

'To steal or pass off (the ideas or words of another) as one's own: [to] use (a created production) without crediting the source: [to] commit literary theft: [to] present as new and original idea or product derived from an existing source.' (Webster's Ninth New Collegiate Dictionary, 1987)

'The appropriation or imitation of another's ideas and manner of expressing them.. to be passed off as one's own.' (*Macquarie Dictionary*, 1985)

The above definitions all suggest that plagiarism involves the idea of intending to plagiarise; it is important to realize that this dishonest intention will be assumed. Excuses such as 'having forgotten' to insert quotation marks, or 'not having remembered' that an idea was someone else's, or 'having thought the reader would understand' that a passage was a paraphrase of someone else's words cannot be accepted. In a similar way, it will be assumed that those who walk out of a shop carrying goods which they have not paid for, and do not intend to pay can be accused of shoplifting.

In short, it is the students' responsibility to avoid any possible suggestion of plagiarism in their work. The golden rule is 'if in doubt, acknowledge' – this should be followed in all 'grey areas', i.e. cases in which you are not sure whether the acknowledgement of a source is necessary or not.

You can visit the website at https://www.polyu.edu.hk/ar/academic-integrity/introduction/ and Student Handbook at https://www.polyu.edu.hk/ar/students-in-taught-programmes/student-handbook/ for more detailed explanations on plagiarism.

How are sources referred to?

There are two ways of referring to a source: by using direct quotations, or by paraphrasing the author's words. Each of these is exemplified below.

Using direct quotations

• A quotation integrated with the text, e.g.

'The coal reserves,' said Thomas J. Johnson (1982, p.21) 'will not deplete as rapidly as oil reserves,' and this claim is already being borne out by experience.

A quotation presented as in indented paragraph, e.g.

Conflict within the marketing channel required its own definitions, and one of the first of these was established by Stern and Gorman (1969, p.58). Their view was that a conflict was a process of system changes: '... a change occurs in the task environment or within a channel member's organization that eventually has implications for the channel members... when the other affected members perceive the change as cause of frustration, a conflict situation emerges.'

Note the use of the three-full-stop device (...), separated by one space from the preceding and/or following words, to indicate a word or words have been omitted from the original. (The assumption is, of course, that the omission has not changed the sense of that author's words.)

Secondly, note the use of square brackets, [], to indicate that a word has been added or replaced to clarify (but not of course to alter) the author's original meaning, e.g.

Original Registers are, then, types of text, not types of discourse, since they are not defined in

terms of what kind of communication they represent.

Quotation '... [registers] are not defined in terms of what kind of communication they represent'

(H.G. Widdowson, 1973).

Thirdly, note that where the original itself includes a word or words between inverted commas or quotation marks, a quotation should reproduce this by using double inverted commas between single ones, or vice versa, e.g.

Original One obvious development within a pedagogical grammar would be to use Searle's

illocutionary acts to fill in Halliday's "relevant models of language".

Quotation As Widdowson (1973) points out: 'One obvious development within a pedagogical grammar would be to use Searle's illocutionary acts to fill in Halliday's "relevant models

of language", but this suggestion has yet to be followed up. (Alternatively: "...Halliday's

relevant models of Language"

Fourthly, note that italics in the original may be reproduced by underlining in a quotation. If the underlining is not the original's, then this should be made clear. The usual method is to add a note in brackets after the quotation: (my emphasis), (my underlining) or (emphasis added). If one wants to make it quite clear that the emphasis is the original's, one can add: (emphasis as in the original).

Paraphrasing the author's words

Paraphrasing is not simply altering a word here and there, but rather rewording the original – either to shorten/summarize or to expand/clarify. Paraphrasing often leads into 'grey areas' where one may be unsure of whether or not plagiarism could be alleged, so remember the golden rule: 'if in doubt, acknowledge'. In particular, a lengthy piece of paraphrasing (say, several paragraphs) should remind the reader at frequent intervals – at least once per paragraph – of the source.

Paraphrasing which shortens/summarizes, e.g.

Original

'There are many abusive parents for whom [therapy] groups may be the only answer, not only because of the quality of services offered, or the potential benefits they promise, but chiefly for the fact that a group of this type is the only service that some abusive parents will attend and participate in.' Blizinsky, M. (1982, p.311)

Paraphrase Martin Blizinsky (1982:311) believes that therapy-group sessions may be the only answer for some abusive parents, being the only programme in which they will participate.

Paraphrasing which expands/clarifies, e.g.

Original 'Although photosynthesis is the principal autotrophic process, chemosynthesis also occurs' (I. Pearson, 1978:135)

Paraphrase As Pearson points out (*English in Biological Sciences*, 1978, p.135), although photosynthesis – the process by which plants make their own food with the help of sunlight – is the major self-feeding process, synthesis involving chemical reactions also takes place.

How to cite bibliographic references

The following guidance notes, which aim to help students with bibliographic referencing, address the question of how, rather than whether, to acknowledge the sources.

Bibliographic references identify the work in question (usually either a book or an article), and give sufficient information on the author, title, publisher and date of publication for this identification to be quite clear and unambiguous. Such references are normally written according to fixed conventions, which it is sensible to follow; one set of these conventions is outlined below.

For books: author's surname first, followed by the initials of his/her other name(s), then by the full title of the book *underlined*; this underlining will be replaced by italics in printed text (as opposed to typescript or handwriting). There then follows the place of publication – usually a city – then the name of the publisher, and lastly the date of publication, e.g.

Crane, D. *Invisible Colleges*. Chicago: University of Chicago Press, 1972.

Where there is more than one author, the examples are:

- Crystal, D. and Davy, D. Advanced Conversational English. Harlow: Longman, 1975.
- Brazil. D., Coulthard, M. and Johns, C. Discourse Intonation and language Teaching. Harlow: Longman, 1980.

Where the book is a collection (of articles or monographs) rather than a single text, the examples are:

- Pride, J.B. ed. Sociolinguistic Aspects of Language Learning and Teaching. Oxford: Oxford University Press, 1979
- Richards, J.C. and Nunan, D. eds. Second Language Teacher Education. Cambridge: Cambridge University Press, 1990.

For articles in a collection: similar to book references, but the author and title of the article come first, e.g.

Penninton, M.C. A professional development focus for the language teaching practicum. In Richards, J.C. and Nunan, D. eds. *Second Language Teacher Education*. Cambridge: Cambridge University Press, 1990.

For articles in a journal (serial): much as above, except that information on the journal replaces that on the book (collection), e.g.

Stieg, M.F. The information needs of Historians. *College and Research Libraries*, 1981, 42(6), 549-560.

The figures '42(6)' mean 'volume 42, no.6'; the figures '549-560' mean 'pages 549 to 560'. Note also that capital letters are not usual in the titles of articles (though in those of books, of course, they are).

Bibliographic references can be placed as footnotes to the text, or far better, listed alphabetically (by author) in a 'bibliography' at the end of the text. If a bibliography is used, references in the text need only state the author(s) and the publication date, e.g. Conflict within the marketing channel required its own definitions, and one of the first of these was established by Stern and Gorman (1969).

If the bibliography contains two or more publications by the same author(s) in the same year, identify them as 1969a, 1969b, etc.

If the text does make references to books/articles in this way, then the bibliography should put the publication date after the author's name, rather than at the end, e.g.

Crane. D., 1972. *Invisible Colleges*. Chicago: University of Chicago Press.

Finally, minor differences from the above conventions may be found, as between one published bibliography and another, but these are unimportant; what does matter is that consistency in following one set of conventions is ensured. Not only should the information in the bibliography be correct in every detail (author's name and initials, publisher's name, etc.), complete typographical accuracy – spacing, punctuation, etc. is also very important. Thorough proofreading is essential here, as in the rest of the text, and is a measure of the care that have been taken; conversely, a text full of 'typos' (typographical errors), misspellings, inconsistencies, etc. is not only evidence of carelessness but also very irritating for the audience – the reader – and thus obviously counter-productive.

Photocopying of Copyright Materials

The University considers the protection of intellectual property as a serious matter and copying of copyright materials, without the licence of copyright owner, may be regarded as a statutory offence. Students should comply with the Copyright Ordinance then prevailing at all times.

Under the Copyright Ordinance, a copyright in a work is infringed by a person who, without the licence of the copyright owner, among other things, copies the work, issues or makes available copies of the work to the public. Copying of a work means reproducing the work in any material form, including storing the work in any medium by electronic means. Making copies of the work available to public includes putting it on the internet.

Any printed material in book or volume form which carries a claim to copyright either on the reverse side of the title page, or next to it, is copyright protected. All materials in all periodicals are normally presumed to be copyright protected.

Under Hong Kong Law:

A person who, without the licence of the copyright owner sells, offers for sale or distributes an
infringing copy of the work for the purpose of trade or business commits an offence punishable
by a fine of HK\$50,000.00 in respect of each infringing copy and imprisonment for 4 years,
the person is also subject to action for damage (or for handing over the profits) by the copyright
owner.

• It is also an offence if a person who, without the licence of the copyright owner, distributes otherwise than for the purpose of trade or business to such an extent as to affect prejudicially the owner of the copyright, an infringing copy of a copyright work, the person will also be liable in the same way as mentioned above.

There are certain acts permitted in relation to copyright works. In general, fair dealing with work of any description for the purposes of research or private student does not infringe any copyright in the work.

Librarian of a "specified library" may, if the prescribed conditions are complied with:

- (i) Make and supply a copy of an article in a periodical without infringing any copyright in the text; Or
- (ii) Make and supply from a published edition a copy of part of any other work.

The prescribed conditions include the following:

- That copies are supplied only to persons satisfying the Librarian that they require them for purposes of research or private study, and will not use them for any other purpose;
- That (i) no person is furnished with more than one copy of the same article or with copies of
 more than one article contained in the same issue of a periodical; or (ii) a copy of more than
 a reasonable proportion of any other work; and
- That persons to whom copies are supplied are required to pay for them a sum not less than the cost attributable to their production.

Every person to whom a copy is supplied must personally sign a declaration (a stamped or typed signature, or the signature of an agent is not sufficient) available at Library counters.