

# Senior Year Intake into 4-year Degree Programme

# BSc (Hons) in Building Engineering & Management BSc (Hons) in Property Management BSc (Hons) in Surveying

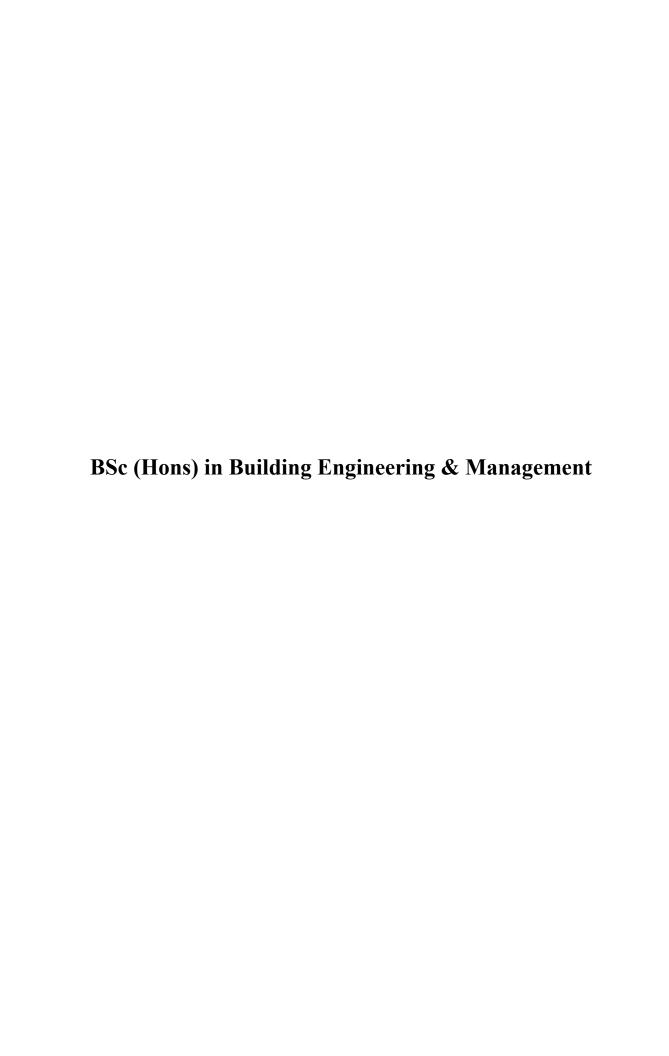
For Student Intake 2017/2018

September 2017

This Definitive Programme Document is subject to review and changes which the programme offering Faculty / Department / School can decide to make from time to time. Students will be informed of the changes as and when appropriate.
This document should be read in conjunction with the AS Handbook on Academic Regulations and Procedures.
Department of Building and Real Estate Faculty of Construction and Environment
September, 2017

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#### 1. GENERAL INFORMATION

## Summary of Programme Details:

Name of University: The Hong Kong Polytechnic University

Faculty: Construction and Environment (FCE)

Department: Building and Real Estate (BRE)

Programme: BSc (Hons) in Building Engineering and Management

(BEM)

Mode of Attendance: Full-time

Mode of Operation: Credit-Based Programme

Mode of Finance: UGC Funded

Duration: Normally two years

Maximum four years

Total Credits Requirements: 69 credits (plus 2 training credits)

Commencing: September 2017

Level of Award: BSc (Hons) in Building Engineering and Management

## Contributing Departments / Centres

Host Department: Building and Real Estate (BRE)

Contributing Departments and Centre:

- Department of Applied Mathematics (AMA)
- English Language Centre (ELC)
- Department of Chinese & Bilingual Studies (CBS)

#### **Programme Planning Committee**

Head of the Department Associate Head (Teaching) Scheme Chair BEM Programme Leader Deputy Programme Leader

#### 2. PROGRAMME AIMS, OBJECTIVES AND OUTCOMES

#### Programme Aims

The BEM programme aims to produce graduates who can develop into highly competent and professional building engineers for Hong Kong, China and the international market. It aims to equip students with the knowledge and ability in the production of buildings and facilities so that they will be able to contribute effectively to project and facilities management teams engaged in complex building projects.

#### **Programme Outcomes**

Programme outcomes refer to the intellectual abilities, knowledge, skills and attributes that an all-rounded preferred graduate from BEM programme should possess.

To ensure fulfillment of the goal of developing all-round students with professional competence, it is required that outcome statements encompass the following two categories of learning outcomes:

#### Professional/Academic Knowledge and Competence

Upon successful completion of the programme, the graduate is expected to have acquired the ability:

- (i) to possess knowledge of building engineering principles, processes and methods for the successful completion of all types of construction projects.
- (ii) to use the techniques, skills and engineering principles for different types of construction.
- (iii) to apply construction management knowledge and skills in personnel, financial and operational practices and communication aspects required for efficient building production.
- (iv) to identify, structure and analyse diverse problems arising from the changing social, economic, environmental and technological pressures.
- (v) to solve identified construction problems with appropriate solutions.
- (vi) to evaluate alternative strategic options.
- (vii) to select appropriate construction materials, practices and methods in compliance with sustainable development.
- (viii) to exercise professional judgement in the consideration of alternatives in complex situations.

#### **Attributes for All-roundedness**

As all undergraduate programmes are under the BRE Degree scheme, the attributes for all-roundedness listed are the same under the scheme.

Upon successful completion of the programme, the students are expected to possess the following attributes for all-roundedness:-

- (i) to possess skills to identify, analyse and solve problems.
- (ii) to have an understanding of professional, social and ethical responsibilities.
- (iii) to communicate effectively.
- (iv) to reflect on knowledge gap for life time learning.
- (v) to contribute as team member and to lead effectively.
- (vi) to identify contemporary issues.

**Note:** PolyU aspires to develop all its students as all-round graduates with professional competence, and has identified a set of highly valued graduate attributes can be developed through the curricular activities of this programme, some (including the all-rounded attributes of 'to reflect on knowledge gap for life time learning' and 'to identify contemporary issues' contained therein in the curriculum mappings of the Majors in BSc (Hons) in Building Engineering & Management) are primarily addressed through co-curricular activities offered by faculties, departments, and various teaching and learning support units of the University. Students are encouraged to make full use of such opportunities to develop these attributes.



#### 1. GENERAL INFORMATION

## Summary of Programme Details:

Name of University: The Hong Kong Polytechnic University

Faculty: Construction and Environment (FCE)

Department: Building and Real Estate (BRE)

Programme: BSc (Hons) in Property Management (PMT)

Mode of Attendance: Full-time

Mode of Operation: Credit-Based Programme

Mode of Finance: UGC Funded

Duration: Normally two years

Maximum four years

Total Credits Requirements: 72 credits (plus 2 training credits)

Commencing: September 2017

Level of Award: BSc (Hons) in Property Management

#### Contributing Departments / Centres

Host Department: Building and Real Estate (BRE)

Contributing Departments and Centre:

- Applied Social Sciences (APSS)
- English Language Centre (ELC)
- Department of Chinese & Bilingual Studies (CBS)

#### **Programme Planning Committee**

Head of the Department Associate Head (Teaching) Scheme Chair Programme Leader

#### 2. PROGRAMME AIMS, OBJECTIVES AND OUTCOMES

#### Programme Aims

The PMT Programme aims to provide students with a broad-based and inter-disciplinary education in the context of property and housing management as well as facilities and corporate asset management and to develop them as all-rounders who can understand and work with the interplay between social, economic, political, legal, technological and commercial issues and problems incidental to the property management. Students are equipped with the ability to identify the issues and to solve the operational problems in property management. It is intended to prepare students for a professional career in property management in Hong Kong and the region with the essential knowledge and prerequisite skills for the profession.

## **Programme Outcomes**

Programme outcomes refer to the intellectual abilities, knowledge, skills and attributes that an all-rounded preferred graduate from PMT programme should possess.

To ensure fulfillment of the goal of developing all-round students with professional competence, it is required that outcome statements encompass the following two categories of learning outcomes:

#### **Professional/Academic Knowledge and Competencies**

Upon successful completion of the programme, the students are expected to attain the following abilities:-

- (i) to apply professional and vocational knowledge in property management, including its operational logistics and multi-disciplinary facets.
- (ii) to identify and solve problems in property management practices.
- (iii) to communicate effectively with social skills as a competent property manager.
- (iv) to practise as a professional property manager in compliance with the legal and ethical requirements of the profession.
- (v) to appreciate the multi-disciplinary dimensions of property management practices and the interests of the stakeholders in the industry.
- (vi) to explore options for the property management practices with creative and critical mindset.

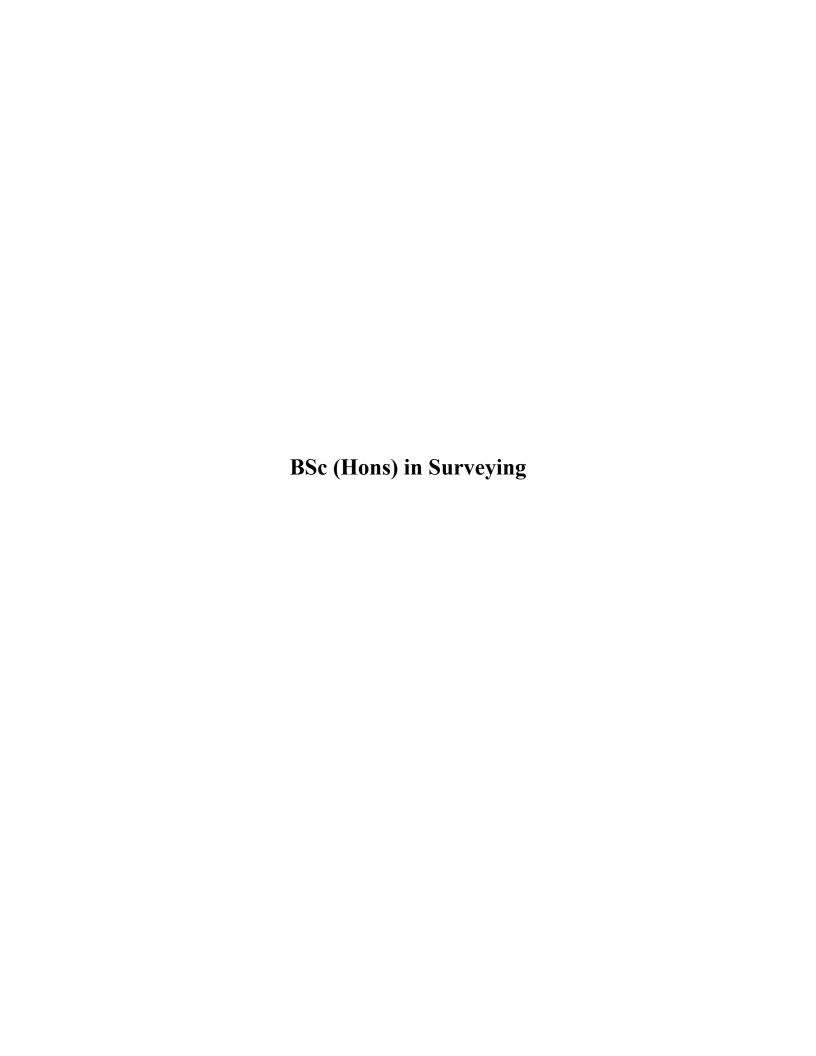
#### **Attributes for All-roundedness**

As all undergraduate programmes are under the BRE Degree scheme, the attributes for all-roundedness listed are the same under the scheme.

Upon successful completion of the programme, the students are expected to possess the following attributes for all-roundedness:-

- (i) to possess skills to identify, analyse and solve problems.
- (ii) to have an understanding of professional, social and ethical responsibilities.
- (iii) to communicate effectively.
- (iv) to reflect on knowledge gap for life time learning.
- (v) to contribute as team member and to lead effectively.
- (vi) to identify contemporary issues.

**Note:** PolyU aspires to develop all its students as all-round graduates with professional competence, and has identified a set of highly valued graduate attributes that can be developed through the curricular activities of this programme, some (including the all-rounded attributes such as 'to reflect on knowledge gap for life time learning and to identify contemporary issues' contained therein in the curriculum mappings of the Majors in BSc (Hons) in Building Engineering & Management, BSc (Hons) in Property Management and BSc (Hons) in Surveying) are primarily addressed through co-curricular activities offered by faculties, departments, and various teaching and learning support units of the University. Students are encouraged to make full use of such opportunities to develop these attributes.



#### 1. GENERAL INFORMATION

## Summary of Programme Details:

Name of University: The Hong Kong Polytechnic University

Faculty: Construction and Environment (FCE)

Department: Building and Real Estate (BRE)

Programme: BSc (Hons) in Surveying (SUV)

Mode of Attendance: Full-time

Mode of Operation: Credit-Based Programme

Mode of Finance: UGC Funded

Duration: Normally two years

Maximum four years

Total Credits Requirements: 72 credits (plus 2 training credits)

Commencing: September 2017

Level of Award: BSc (Hons) in Surveying

#### Contributing Departments / Centres

Host Department: Building and Real Estate (BRE)

Contributing Departments and Centre:

• English Language Centre (ELC)

• Department of Chinese & Bilingual Studies (CBS)

## **Programme Planning Committee**

Head of the Department Associate Head (Teaching) Scheme Chair Surveying Programme Leader Deputy Programme Leader

#### 2. PROGRAMME AIMS, OBJECTIVES AND OUTCOMES

## **Programme Aims**

The Programme aims to prepare students with fundamental knowledge and skills in the interdisciplinary professions of land, property and construction for their immediate employability and lifelong learning. The Programme underpins surveying studies with the disciplines of economics, law, management and technology. Graduates will enter the professions of building surveying, quantity surveying, planning & development, property and facility management or general practice surveying as graduate trainees but with full potentials to readily become full-fledged professional surveyors and finally take leading and strategic roles in the profession and business of land, property and construction and make contributions to the community through their chosen professional services.

#### **Programme Outcomes**

Programme outcomes refer to the intellectual abilities, knowledge, skills and attributes that an all-round preferred graduate from surveying programme should possess.

To ensure fulfillment of the goal of developing all-round students with professional competence, it is required that outcome statements encompass the following two categories of learning outcomes:

#### **Professional/Academic Knowledge and Competencies**

Upon successful completion of the programme, the students are expected to attain the following abilities:-

- (i) to comprehend and identify issue and problems concerning land, property and construction at project level.
- (ii) to comprehend and identify issue and problems concerning land, property and construction at corporate level.
- (iii) to comprehend and identify issue and problems concerning land, property and construction at industry level.
- (iv) to comprehend and identify issues and problems concerning land, property and construction at macro social-economic and political level.
- (v) to advise clients through rendering surveying services.
- (vi) to identify, formulate and solve problems related to the surveying profession and real estate industry.
- (vii) to analyse and interpret data of the industry
- (viii) to formulate and implement strategies, policies and solutions for sustainable development and construction.

#### **Attributes for All-roundedness**

As all undergraduate programmes are under the BRE Degree scheme, the attributes for all-roundedness listed are the same under the scheme.

Upon successful completion of the programme, the students are expected to possess the following attributes for all-roundedness:-

- (i) to possess skills to identify, analyse and solve problems.
- (ii) to have an understanding of professional, social and ethical responsibilities.
- (iii) to communicate effectively.
- (iv) to reflect on knowledge gap for life time learning.
- (v) to contribute as team member and to lead effectively.
- (vi) to identify contemporary issues.

## 3. GENERAL ENTRANCE REQUIREMENTS

## **Normal Applicants**

The basic entrance requirement is a Higher Diploma or Associate Degree in Construction related discipline or equivalent from a recognized institution.

#### Selection

Selection of applicants for admission is based on academic qualifications and other relevant qualifications. Short-listed applicants may be required to attend an interview. The purpose of the interview is to assess the applicants':

- Command of spoken English;
- Depth and breadth of general knowledge, and
- Motivation for entering the programme.

The final selection of students will be based on a balance of academic attainment, motivation, and the interview report, if any.

In all cases, the final decision as to the suitability of any applicant will be the sole discretion of the Head of Department.

#### 4. PROGRAMME CURRICULUM

## 4.1 BSc (Hons) in Building Engineering & Management

#### Subject Descriptions

'Level' codes reflect the intellectual demand on the students. The levels of the subjects are coded according to a common coding system of the Hong Kong Polytechnic University.

<u>Level</u>		Explanation
2	=	Standard comparable to Year 2 of a 4-year degree Major
3	=	Standard comparable to Year 3 of a 4-year degree Major
4	=	Standard comparable to the final year of a 4-year degree Major

The University adopts a university-wide standard for subject level weighting for calculating the award GPA, and to use the weighting of 2 for Level 2 subjects; and a weighting of 3 for Level 3 and 4 subjects.

The Programme Curriculum and Examination Schedule for each academic level are detailed in Programme Curriculum Table from Stage 3 to Stage 4.

Subjects are referred by subject codes. The alphabets refer to the responsible departments whilst the three-digit reference numbers, the first digit (i.e. 2, 3 or 4) indicates the level of the subjects.

The typical progression patterns of BSc (Hons) in Building Engineering & Management illustrate the semesters in which these subjects are recommended to be taken, if the programme of the Major is to be completed in the minimum time.

#### NOTE

\*Programme Curriculum displays the Discipline-specific Requirements (DSR) for the Major in Building Engineering & Management only.

Details of the General University Requirements (GUR) can be found from their respective websites provided by the University.

## PROGRAMME CURRICULUM OF THE PROGRAMMES

# Programme Curriculum of Major\* in Building Engineering & Management - Stage 3 of the 4-Year programme

\*Programme Curriculum shows the 62-credit Discipline-Specific Requirements (DSR) for the Major in Building Engineering & Management only. Details of the 9-credit General University Requirements (GUR) can be found from their respective websites provided by the University.

Stage 3	Stage 3		Curriculum								
		Timetabled Contact Hours per Week			No. of Teaching Weeks	Total Hours	Teaching Dept.	Subject Weighting for Final Assessment Grade (FAG)			
Subject Code	Subject Title	Lecture	Tutorial/ Seminar	Lab. (Pract.)/ Project Work/ Guided Study	(Pract.)/ ect Work/		Subject Weighting	Credit Value	CW/ CA	Exam.	
CBS3231P	Chinese Communication for Construction and Land Use		3		13	39	CBS	3.0	3	100%	-
ELC3421	English for Construction and Environmental Professionals		3		13	39	ELC	3.0	3	100%	-
BRE204	Structure I	2	1	-	13	39	BRE	2.0	3	30%	70%
BRE302	Structure II	2	1	-	13	39	BRE	3.0	3	50%	50%
BRE326	Maintenance Technology & Management	2	1	-	13	39	BRE	3.0	3	30%	70%
BRE345	Measurement, Documentation & Estimating	2	1	-	13	39	BRE	3.0	3	50%	50%
BRE350	Project Management & Procurement	2	1	-	13	39	BRE	3.0	3	50%	50%
BRE361	Construction Technology & Materials II	2	1	-	13	39	BRE	3.0	3	30%	70%
BRE364	Construction Contract Law & Administration						BRE	3.0	3	30%	70%
BRE365	International Study*	-	-	0.8			BRE	3.0	1	100%	-
BRE366	Analytical Skills & Methods	2 (for 8 weeks)	1 (for 8 weeks)	-	8	24	BRE	3.0	2	100%	-
BRE466	Capstone Project#	-	-	1.0 (for 10 weeks)	10	184 (PW/GS)	BRE	3.0	6	100%	-
AMA290	Engineering Mathematics	2	1	-	13	39	AMA	2.0	3	40%	60%
BRE299 or IC202	Work-Integrated Education (WIE)						BRE/ Employers / IC	2.0	2 training credits	100%	-

#### NOTE:

- 1. Students must meet the Language and Communication Requirements (LCR), otherwise the students are required to take additional LCR subjects.
- 2. Students must complete and pass the 6 credits CAR subjects to meet the requirements for 9 credits GUR, and all the subjects listed in Level 2, Level 3, and Level 4 in Stages 3 and 4 prior to their graduation.
- 3. Students must complete the Work-Integrated Education (WIE) with satisfactory results before they can graduate.
- BRE466 is a **6-credit** core subject spanning across from Semester 2 of Stage 3 to Semester 1 of Stage 4.
- \* International Study Tour is to take place in the Summer Semester. Students need to commence preparation, organization and liaison work of their study tour from Semester 1 of Stage 3.

T/S = Tutorial/Seminar

Lab. (Pract.) = Laboratory (Practicals)

PW = Project Work

CW = Coursework

GS = Guided Study

CA = Continuous Assessment

# Programme Curriculum of Major\* in Building Engineering & Management for Stage 4

Stage 4			Curriculum								
		Timetabled Contact Hours per Week			No. of Teaching Weeks	Total Hours	Teaching Dept.	Subject Weig Final Assessn (FAG)			
Subject Code	Subject Title	Lecture	Tutorial/ Seminar	Lab. (Pract.)/ Project Work/ Guided Study				Subject Weighting	Credit Value	CW/CA	Exam.
BRE4393	Temporary Work Design	2	1	-	13	39	BRE	3.0	3	100%	-
BRE426	Geotechnical & Foundation Engineering	2	1	-	13	39	BRE	3.0	3	30%	70%
BRE4281	Construction Engineering Management	2	1	-	13	39	BRE	3.0	3	50%	50%
BRE450	Building Maintenance for Sustainability	2	1 (for 9 weeks)	-	13	39	BRE	3.0	3	100%	-
BRE453	Building Services II	2	1	-	13	39	BRE	3.0	3	30%	70%
BRE461	Environmental Impact & Assessment	2	1	-	13	39	BRE	3.0	3	40%	60%
BRE462	Advanced Construction Technology	2	1	-	13	39	BRE	3.0	3	100%	-

**NOTE:** Student must complete and pass all subjects listed in Level 4 prior to their graduation.

T/S = Tutorial/Seminar

Lab. (Pract.) = Laboratory (Practicals)

PW = Project Work

CW = Coursework

GS = Guided Study

CA = Continuous Assessment

## **PROGRESSON PATTERN**

## BSc (Hons) in Building Engineering and Management

Total credits for the curriculum framework for the senior year intake is 69 credits (plus 2 training credits), including 9 credits for General University Requirements, and 60 credits for Discipline-Specific Requirements. Unless otherwise specified, subjects are compulsory and carry 3 credits.

Subject Code Subject Title

Semester 1

## Stage 3 (Year 1) [September 2017]

CBS3231P	Chinese Communications for Construction and Land Use
ELC 3421	English for Construction and Environment
BRE204	Structure I
BRE350	Project Management and Procurement
BRE361	Construction Technology& Materials II
BRE365	International Study (1 Credit) **
BRE366	Analytical Skills & Methods (2 credits)
GUR	CAR Subject 1 *
Semester 2	
Semester 2 AMA290	Engineering Mathematics
	Engineering Mathematics Structure II
AMA290	
AMA290 BRE302	Structure II
AMA290 BRE302 BRE326	Structure II  Maintenance Technology & Management
AMA290 BRE302 BRE326 BRE345	Structure II  Maintenance Technology & Management  Measurement , Documentation & Estimating

#### **Summer Semester**

GUR

BRE299	Work-Integrated Education (2 training credits)
BRE365	International Study (1 Credit), con'd **
BRE466	Capstone Project (6 credits in 3 semesters from Year 1:S2 to Year 2:S1)

#### Stage 4 (Year 2) [September 2018]

CAR Subject 2 \*

#### Semester 1

BRE365	International Study (1 Credit), con'd **
BRE4393	Temporary Work Design
BRE450	Building Maintenance for Sustainability
BRE453	Building Services II
BRE461	Environmental Impact & Assessment
BRE466	Capstone Project (6 credits in 3 semesters from Year 1:S2 to Year 2:S1)

#### Semester 2

BRE4393	Temporary Work Design (con'd)
BRE426	Geotechnical & Foundation Engineering
BRE462	Advanced Construction Technology
BRE4281	Construction Engineering Management
	Service Learning

#### Notes:

- 1. \* Senior year intake students need to take 2 CAR subjects which must be different from the CAR subjects taken during their study of Higher Diploma or Associate Degree. In the meantime, the students must meet the language requirements (English reading, writing; Chinese reading, Writing), and China-related study through CAR subjects, if not yet during their previous study. The student can take CAR subjects in any semester before graduation.
- 2. \*\* Planning for study tour or comparative international study shall be commenced from year 1, semester 1. The study tour or field study shall be completed during the Semester 1 of year 2.
- 3. \*\*\* The Department reserves the rights to review/revise the subjects offered and time of offer.

#### **BSc (Hons) in Property Management**

#### Subject Descriptions

'Level' codes reflect the intellectual demand on the students. The levels of the subjects are coded according to a common coding system of the Hong Kong Polytechnic University.

<u>Level</u>		Explanation
1	=	Standard comparable to Year 1 of a 4-year degree Major
2	=	Standard comparable to Year 2 of a 4-year degree Major
3	=	Standard comparable to Year 3 of a 4-year degree Major
4	=	Standard comparable to the final year of a 4-year degree Major
5-6	=	Standard at postgraduate level

The University adopts a university-wide standard for subject level weighting for calculating the award GPA, and to use the weighting of 2 for Level 1 and 2 subjects; and a weighting of 3 for Level 3 and 4 subjects.

The Programme Curriculum and Assessment Methods for each academic level are detailed in Programme Curriculum Table from Stage 1 to Stage 4.

Subjects are referred by subject codes. The alphabets refer to the responsible departments whilst the three-digit reference numbers, the first digit (i.e. 1, 2, 3 or 4) indicates the level of the subjects.

The typical progression patterns of BSc (Hons) in Property Management illustrate the semesters in which these subjects are recommended to be taken, if the programme of the Major is to be completed in the minimum time.

'Electives' are those subjects which are optional. These give students some choices in composing their study programme.

#### **NOTE**

\*Programme Curriculum displays the Discipline-specific Requirements (DSR) for the Major in Property Management only.

Details of the General University Requirements (GUR) can be referred to their respective websites provided by the University.

## Programme Curriculum of Major\* in Property Management - Stage 3 of the 4-Year Programme

\*Programme Curriculum shows the 63-credit Discipline-Specific Requirements (DSR) for the Major in Property Management only. Details of the 9-credit General University Requirements (GUR) can be found from their respective websites provided by the University.

Stage 3		Curriculum									Assessment Methods	
		Timetabled Contact Hours per Week			No. of Teaching Weeks	Total Hours	Teaching Dept.	Subject Wei Final Assess (FAG)				
Subject Code	Subject Title	Lecture	Tutorial/ Seminar	Lab. (Pract.)/ Project Work/ Guided Study				Subject Weighting	Credit Value	CW/CA	Exam.	
CBS3231P	Chinese Communication for Construction and Land Use		3		13	39	CBS	3.0	3	100%	-	
ELC3421	English for Construction and Environmental Professionals		3		13	39	ELC	3.0	3	100%	-	
BRE315	Property Valuation	2	1	-	13	39	BRE	3.0	3	50%	50%	
BRE326	Maintenance Technology & Management	2	1	-	13	39	BRE	3.0	3	30%	70%	
BRE337	Property Law	2	1	-	13	39	BRE	3.0	3	30%	70%	
BRE341	Property Management I	2	1	-	13	39	BRE	3.0	3	30%	70%	
BRE350	Project Management & Procurement	2	1	-	13	39	BRE	3.0	3	50%	50%	
BRE362	Urban Economics & Property Investment	2	1	-	13	39	BRE	3.0	3	50%	50%	
BRE365	International Study**	-	-	0.8	13	39	BRE	3.0	1	100%	-	
BRE366	Analytical Skills & Methods	2 (for 8 weeks)	1 (for 8 weeks)	-	8	24	BRE	3.0	2	100%	-	
BRE397	Property Management Accounting	2	1	-	13	39	BRE	3.0	3	50%	50%	
BRE432	Property Management II	2	1	-	13	39	BRE	3.0	3	30%	70%	
BRE466	Capstone Project#	-	-	1.0 (for 10 weeks)	35	184 (PW/GS)	BRE	3.0	6	100%	-	

NOTE: Students must complete and pass the 9credit GUR subjects and all the subjects listed in Level 3 and Level 4 in Stage 3 prior to their graduation.

T/S = Tutorial/Seminar Lab. (Pract.) = Laboratory (Practicals) PW = Project Work CW = Coursework GS = Guided Study

CA = Continuous Assessment

BRE466 is a **6-credit** core subject spanning across from Semester 2 of Stage 3 to Semester 1 of Stage 4.

<sup>\*\*</sup> International Study Tour is to take place in the Summer Semester. Students need to commence preparation, organization and liaison work of their study tour from Semester 1 of Stage 3.

## Programme Curriculum of Major\* in Property Management for Stage 4

Stage 4		Curriculum								Assessment Methods	
		Timetabled Contact Hours per Week			No. of Total Hours Weeks	Total Hours		Subject Weighting for Final Assessment Grade (FAG)			
Subject Code	Subject Title	Lecture	Tutorial/ Seminar	Lab. (Pract.)/ Project Work/ Guided Study				Subject Weighting	Credit Value	CW/CA	Exam.
BRE427	Applied Property Investment	2	1	-	13	39	BRE	3.0	3	30%	70%
BRE4291	Real Estate Marketing	2	1	-	13	39	BRE	3.0	3	50%	50%
BRE431	Housing Studies	2	1	-	13	39	BRE	3.0	3	50%	50%
BRE437	Facility Management	2	1	-	13	39	BRE	3.0	3	50%	50%
BRE463	Business Valuation & Accounts	2	1	-	13	39	BRE	3.0	3	50%	50%
BRE465	Asset Management	2	1	-	13	39	BRE	3.0	3	50%	50%
BRE470(E)	Information Technology and Building Information Modelling for Construction	2	1	-	13	39	BRE	3.0	3	50%	50%
Elective# Elective#	subject 1 subject 2				13	39 39	BRE BRE	3.0 3.0	3		
Elective#	subject 2				13	39	BRE	3.0	3		

**NOTE:** Student must complete and pass all subjects listed in Level 4 and two out of the four electives of their choice prior to their graduation.

<sup>#</sup> All BRE Level 3 and Level 4 subjects of a particular Major or discipline are offered as electives to students of another Major or discipline within the Department, subject to the fulfillment of any pre-requisite or co-requisite requirements and time-table constraints

BRE470(E) Information Technology and Building Information Modelling for Construction

PMT students can also opt the following subjects offered by the Department of APSS, in addition to or in lieu of BRE electives:

APSS265 Self Understanding and Communication Skills

APSS4531 Current Management Practices and Issues in Human Service Organizations

APSS4522 Health Policy

T/S = Tutorial/Seminar

Lab. (Pract.) = Laboratory (Practicals)

PW = Project Work

CW = Coursework

GS = Guided Study

CA = Continuous Assessment

E = Elective

Students who have either HD or Associate Degree qualifications are deemed to satisfy the University's requirement on LCR subjects.

# BSc (Hons) in Surveying

# Curriculum structure and components

University Core	CAR subjects chosen from the following 4 clusters:	
Curriculum (GUR)	Human nature, relations and development	
[9 credits]	Community, organization and globalization	Service-Learning
	History, culture and world views	[3 credits]
	Science, technology and environment	
	[6 credits, min 3 credits of which should be in subjects designated as "China-related"; plus "R" and "W" requirements in English and Chinese]	
	Students are also expected to meet the equivalent standard of the Language and Communication Requirements (LCR).	

Major Study (DSR)						
BSc (Hons) in Surveying (SUR)		•	pecific Subjects for [24 credits]			
[63 credits]	[Including 2 emb	[Subjects co edded language requ	mmon to all surveyi airements in English		ninese (3 credits)]	
	Discipline-Specific Electives for Surveying [33 credits]					
	Surveying students are required to opt ONE Discipline from the 5 surveying disciplines:  Building Surveying (BS), General Practice Surveying (GP),  Planning & Development (PD), Property and Facility Management (PFM) and  Quantity Surveying (QS).					
	BS Discipline- Specific Elective Specific Elective Subjects					
			Capstone Project [6 credits]	;		
			tegrated Education [2 training credits]	,		

Total credit requirement for graduation: 72 credits (plus 2 training credits)

## NOTE:

Students not meeting the equivalent standard of the Undergraduate Degree LCR will be required to take additional LCR subjects. These students will have to take in an assessment test to ascertain the LCR subjects required.

# Programme Curriculum of Major\* in Surveying - Stage 3 of the 4-Year Programme

\*Programme Curriculum shows the 63-credit Discipline-Specific Requirements (DSR) for the Major in Surveying only. Details of the 9-credit General University Requirements (GUR) can be found from their respective websites provided by the University.

## Discipline-Specific Requirements (DSR) for SUV

Subject	Subject Title	Teaching	Subject Weighting for		Subject Weighting for Assessment		t Methods
Code		Dept.	Final Assessr	nent Grade			
		•	(FAC	G)			
			Subject	Credit	CW/CA	Exam	
			Weighting	Value			

Stage 2 DSR Subjects of the 4-year full-time programme with embedded language requirements in English and in Chinese						
ELC3421	English for Construction and Environmental	ELC	3.0	3	100%	-
	Professionals					
CBS3231P	Chinese Communication for Construction and Land Use	CLC	3.0	3	100%	-

Stage 3 DSF	Subjects of the 4-year full-time programme					
BRE326	Maintenance Technology & Management	BRE	3.0	3	30%	70%
BRE336	Development Control Law	BRE	3.0	3	50%	50%
BRE350	Project Management & Procurement	BRE	3.0	3	50%	50%
BRE365	International Study <sup>2</sup>	BRE	3.0	1	100%	-
BRE366	Analytical Skills & Methods	BRE	3.0	2	100%	-
BRE369	Integrated Professional Workshop II	BRE	3.0	3	100%	-
BRE466	Capstone Project <sup>3</sup>	BRE	3.0	6	100%	-
BS/QS Disci	pline-Specific Elective subjects <sup>1</sup>					
BRE204	Structure I	BRE	2.0	3		
BRE345	Measurement , Documentation & Estimating	BRE	3.0	3	40%	60%
BRE361	Construction Technology & Materials II	BRE	3.0	3	30%	70%
BRE363	Construction Economics	BRE	3.0	3	40%	60%
BRE364	Construction Contract Law & Administration BRE 3.0 3 30%		70%			
GP/PD/PFM	Discipline-Specific Elective subjects <sup>1</sup>					
BRE315	Property Valuation	BRE	3.0	3	50%	50%
BRE337	Property Law	BRE	3.0	3	30%	70%
BRE341	Property Management I	BRE	3.0	3	30%	70%
BRE362	Urban Economics & Property Investment	BRE	3.0	3	50%	50%
BRE397	Property Management Accounting	BRE	3.0	3	50 %	50 %
	Work-Integrated Education (2 training credits)				Pass	/ Fail

Stage 4 DSR	Subjects of the 4-year full-time programme					
BRE469	Integrated Professional Workshop III	BRE	3.0	3	100%	-
BS and QS D	BS and QS Discipline-Specific Elective Subjects <sup>1</sup>					
BRE415	Dispute Resolution	BRE	3.0	3	100%	-
BRE453	Building Services II	BRE	3.0	3	30%	70%
BRE461	Environmental Impact & Assessment	BRE	3.0	3	40%	60%
BS Discipline	-Specific Elective Subjects <sup>1</sup>			•	•	•
BRE435	Design, Adaptation & Conversion	BRE	3.0	3	50%	50%
BRE437	Facility Management	BRE	3.0	3	50%	50%
BRE450	Building Maintenance for Sustainability	BRE	3.0	3	100%	-
QS Discipline	e-Specific Elective Subjects <sup>1</sup>			•	•	•
BRE439	Engineering Contract Procedure	BRE	3.0	3	50%	50%
BRE440	Cost & Value Management	BRE	3.0	3	50%	50%
BRE442	Forecasting & competition in the Built Environment	BRE	3.0	3	40%	60%
GP, PD and P	FM Discipline-Specific Elective Subjects <sup>1</sup>					
BRE418	Real Estate Development	BRE	3.0	3	50%	50%
BRE427	Applied Property Investment	BRE	3.0	3	30%	70%
BRE4291	Real Estate Marketing	BRE	3.0	3	50%	50%
BRE463	Business Valuation and Accounts	BRE	3.0	3	50%	50%
BRE465	Asset Management	BRE	3.0	3	50%	50%
GP and PFM	Discipline-Specific Elective Subjects <sup>1</sup>					
BRE436	Applied Property Valuation	BRE	3.0	3	50%	50%
PD Discipline	e-Specific Elective Subjects <sup>1</sup>	•	•	•	•	
BRE464	Urban Planning	BRE	3.0	3	100%	-

#### NOTE:

Students must complete and pass all the Discipline-Specific Subjects and all Discipline-Specific Elective Subjects of their chosen surveying discipline for graduation.

- 1. Surveying students are required to opt ONE Discipline from the 5 surveying disciplines: BS, GP, PD, PFM and QS.
- 2. International study tour is to take place in the Summer Semester of stage 3. Students need to commence their study tour preparation, organization and liaison work from Semester 1 of stage 3.
- BRE466 Capstone Project is a 6-credit core subject spanning across three semesters: Semester 2 and Summer Semester of year 3 and Semester 1 of year 4.

CW = Coursework CA = Continuous Assessment E = Elective

#### General University Requirements (GUR)

Area and Credit Requirement	Curriculum Requirement
Cluster-Area Requirements (CAR) [6 credits; min. 3 credits should be in subject designated as "China-related"]	<ul> <li>Students should not take more than 3 credits (1 subject) from the same cluster area.</li> <li>Students need to fulfill the English and Chinese reading and writing requirements and 3 credits of China Studies requirement (CSR)</li> <li>Students may apply for a waiver if they have fulfilled the English and Chinese reading and writing requirements and/or CSR requirement in their previous studies.</li> </ul>
Service Learning [3 credits]	
Language and Communication Requirements (LCR)	Having met the equivalent standard of the Undergraduate Degree Language and Communication Requirement (LCR) (Note 1)

Note 1: Students not meeting the equivalent standard of the Undergraduate Degree LCR will be required to take additional LCR subjects. These students will have to take in an assessment test to ascertain the LCR subjects required.

#### PROGRESSON PATTERN

#### BSc (Hons) in Surveying

Total credits for the curriculum framework for the senior year intake is 72 credits (plus 2 training credits), including 9 credits for General University Requirements, and 63 credits for Discipline-Specific Requirements. Unless otherwise specified, subjects are compulsory and carry 3 credits.

Subject Code Subject Title
Stage 3 (Year 1) [September 2017]

#### Semester 1

BRE350 Project Management & Procurement
BRE365 International Study (1 Credit)\*\*\*
BRE366 Analytical Skills & Methods (2 credits)
ELC 3421 English for Construction and Environment

GUR CAR Subject 1

\*\*BS/QS Discipline-specific Elective subjects

BRE204 Structure I

BRE361 Construction Technology & Materials II

BRE363 Construction Economics

\*\*GP/PD/PFM Discipline-specific Elective subjects

BRE315 Property Valuation
BRE341 Property Management I

BRE397 Property Management Accounting

#### Semester 2

BRE326 Maintenance Technology & Management

BRE336 Development Control Law

BRE365 International Study (1 Credit), con'd \*\*\*
BRE369 Integrated Professional Workshop II

BRE466 Capstone Project (6 credits in 3 semesters from Year 1:S2 to Year 2:S1)

CBS3231P Chinese Communication for Construction and Land Use

GUR CAR Subject 2

\*\*BS/QS Discipline-specific Elective subjects

BRE345 Measurement, Documentation & Estimating
BRE364 Construction Contract Law & Administration

\*\*GP/PD/PFM Discipline-specific Elective subjects

BRE337 Property Law

BRE362 Urban Economics & Property Investment

#### **Summer Semester**

BRE369 Work-Integrated Education ( 2 training credits)
BRE365 International Study (1 Credit), con'd \*\*\*

BRE466 Capstone Project (6 credits in 3 semesters from Year 1:S2 to Year 2:S1)

#### Stage 4 (Year 2) [September 2018]

#### Semester 1

BRE365 International Study (1 Credit), con'd \*\*\*

BRE466 Capstone Project (6 credits in 3 semesters from Year 1:S2 to Year 2:S1)

\*\*BS and QS Discipline-Specific Elective Subject

BRE415 Dispute Resolution
BRE453 Building Services II

BRE461 Environmental Impact & Assessment

\*\*BS Discipline-Specific Elective Subject

BRE450 Building Maintenance for Sustainability

\*\*QS Discipline-Specific Elective Subjects

BRE440 Cost & Value Management

\*\*GP, PD and PFM Discipline-Specific Elective Subjects

BRE427 Applied Property Investment

BRE4291 Real Estate Marketing

BRE463 Business Valuation and Accounts

BRE465 Asset Management

#### Semester 2

BRE469 Integrated Professional Workshop III

Service Learning

Healthy Lifestyle (non-credit bearing)

\*\*BS Discipline-Specific Elective Subjects

BRE435 Design, Adaptation & Conversion

BRE437 Facility Management
\*\*QS Discipline-Specific Elective Subjects

BRE439 Engineering Contract Procedure

BRE442 Forecasting & competition in the Built Environment

\*\*GP, PD and PFM Discipline-Specific Elective Subjects

BRE418 Real Estate Development

\*\*GP and PFM Discipline-Specific Elective Subjects

BRE436 Applied Property Valuation

\*\*PD Discipline-Specific Elective Subjects

BRE464 Urban Planning

#### Notes:

- 4. \*\* Surveying students are required to opt ONE Discipline from the 5 surveying disciplines offered by the Department.
- 5. \*\*\* Planning for study tour or comparative international study shall be commenced from year 1, semester 1. The study tour or field study shall be completed during the Semester 1 of year 2.
- 6. The Department reserves the rights to review/revise the subjects offered and time of offer.

#### 5. ASSESSMENT

Assessment plays an important role in enhancing students' learning. Assessment is the process of finding out and putting a value on a student's achievements in studying a programme. It is a means to measure the learning outcomes/goals of a subject/programme. With the movement from a norm-referenced to a criterion-referenced model of measurement in this University, students are assessed and measured of their performance against an explicit set of standards. Therefore, the prime objective of assessment is to enable students to demonstrate their abilities in attaining the intended learning outcomes and fulfilling the intended learning outcomes and requirements of a subject/programme. Assessment is also served as feedback both to students of their performance and learning in progress and attainment of the subject/programme and to the teaching faculty of their teaching.

Different assessment methods including formative and summative assessments are adopted as deemed appropriate to the subjects depending on the natures of the subject disciplines and the alignment of the intend learning outcomes of the courses. The assessment methods are contained therein in the subject specifications which are distributed to all students in the beginning of the academic year. It is also reinforced by the subject lecturers by informing the students at the learning commencement on the assessment modes, standards and criteria.

With the move to criterion-referenced assessment, rubrics are developed to assess student performance with a scoring scale along a task-specific continuousness of criteria for some subjects. Students' work is evaluated against scoring standards/criteria, and the assessment can be done entirely through coursework such as integrated projects, design projects, professional studies and dissertation. Innovative, originality, research techniques, group effort, individual contribution or work, communication and presentation skills (oral and written), independence in working and co-operation with teams can be thus assessed according to the specified criteria and intended learning outcomes of the subjects.

In most other subjects, the student performance in each subject is assessed through a combination of coursework and examination. Weightings are allocated to coursework and examination of a subject, e.g. 30% and 70%, 40% and 60% or 50% and 50% respectively. Coursework includes assignments, case studies, seminar/tutorial presentation, role playing, field work, tests and other forms of learning activities. Grades will be assigned to reflect both individual contribution and group effort in the case it is not an individual piece of work. Examination is an end of unit/subject assessment. Grades are usually awarded to the written examinations. Marking schemes are provided to ensure assessment and grading on student performance are based on criteria and standards. The quality of examination papers and marking schemes is scrutinized by the external examiners and departmental academic advisor.

Other than projects and dissertation, where appropriate, some subjects can employ 100% continuous assessment. Usually students are assessed in their performance attainment of technical skills over an extended period of time, for example, measurement, estimating & documentation, and engineering surveying.

In the case of group projects, both aggregating grades and assigning grades are given to group effort and individual contribution in a group. This is to ensure that there will be no 'non performer'. Moreover, peer interactive learning in project proposal/solutions, and different components of the project, presentations, reports and communication are included in the grading for the group effort.

## **Assessment Method**

Students' performance in a subject is assessed by either of the following methods:-

- (a) <u>Coursework only</u>: To pass a subject by this method, a student must attain a minimum Grade 'D' in coursework (tests, assignments, projects, laboratory work, field exercises, presentations and other forms of classroom participation).
- (b) <u>Examination and Coursework</u> (the weighting of each component is stated in the Subject Portfolio): To pass a subject by this method a student must attain a minimum Grade 'D' in coursework and a minimum Grade 'D' in the examination.
- (c) <u>Continuous Assessment</u>: Both **Project** and **Capstone Project** are of this type of assessment where students are assessed through a period of time with stages of work and progress together with the final products of works. The 'Guidance Notes for the Capstone projects' detailed the assessment and process.

Assessment methods and parameters are determined by the Subject Leader who will inform the students of the details at the beginning of each semester.

<u>Grading</u> (in accordance with B1-6 General Assessment Regulations of AS Handbook on Academic Regulations and Procedures)

At the end of each semester students will be informed of the grade achieved for each subject normally.

Assessment grades shall be awarded on a criterion-reference basis. A student's overall performance in a subject shall be graded as follows:-

Subject grade	Short description	Elaboration on subject grading description
A+	Exceptionally	The student's work is exceptionally outstanding. It
	Outstanding	exceeds the intended subject learning outcomes in all
		regards.
A	Outstanding	The student's work is outstanding. It exceeds the
		intended subject learning outcomes in nearly all regards.
B+	Very Good	The student's work is very good. It exceeds the
		intended subject learning outcomes in most regards.
В	Good	The student's work is good. It exceeds the intended
		subject learning outcomes in some regards.
C+	Wholly	The student's work is wholly satisfactory. It fully meets
	Satisfactory	the intended subject learning outcomes.
C	Satisfactory	The student's work is satisfactory. It largely meets the
		intended subject learning outcomes.
D+	Barely	The student's work is barely satisfactory. It marginally
	Satisfactory	meets the intended subject learning outcomes.
D	Barely Adequate	The student's work is barely adequate. It meets the
		intended subject learning outcomes only in some
		regards.
F	Inadequate	The student's work is inadequate. It fails to meet many
		of the intended subject learning outcomes.

'F' is a subject failure grade, whilst all others ('D' to 'A+') are subject passing grades. No credit will be earned if a subject is failed.

At the end of each semester/term, a Grade Point Average (GPA) will be computed based on the grade point of the subject overall grade as follows:-

$$GPA = \frac{\sum \text{Subject Grade Point x Subject Credit Value}}{\sum \text{Subject Credit Value}}$$

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

In addition, 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 without any grade assigned
- (v) Subjects from which a student has been allowed to withdraw (i.e. those with the grade 'W')

Subject which has been given an "S" subject code, i.e. absent from examination, will be included in the GPA calculation and will be counted as "zero" grade point. GPA is thus the unweighted cumulative average calculated for a subject for all relevant subjects taken from the start of the programme to a particular reference point of time. GPA is an indicator of overall performance and is capped at 4.0.

The Weighted GPA will be used as a guide to help determine award classifications, and the level weighting to different subjects of all disciplines and programmes will need to be specified in the Definitive Programme Document.

Weighted GPA will be computed as follows:-

$$Weighted GPA = \frac{\displaystyle\sum_{n} Subject \ Grade \ Point \ x \ Subject \ Credit \ Value \ x \ W_{l}}{\displaystyle\sum_{n} Subject \ Credit \ Value \ x \ W_{l}}$$

Where  $W_1$  = weighting to be assigned according to the level of the subject

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

For calculating the weighted GPA (and award GPA) to determine the Honours classification of students who satisfy the graduation requirements of Bachelor's degree awards, a University-wide standard weighting<sup>1</sup> will be applied to all subjects of the same level, with a weighting of <u>2</u> for Level 1 and 2 subjects, a weighting of <u>3</u> for Level 3 and 4 subjects. Same as for GPA, Weighted GPA is capped at 4.0.

Any subjects passed after the graduation requirement has been met will <u>not</u> be taken into account of in the grade point calculation for award classification.

#### **Progression/Academic Probation**

The Board of Examiners shall, at the end of each semester (except for Summer Term unless there are students who are eligible to graduate after completion of Summer Term subjects), determine whether each student is

Requests for deviation from this University-wide standard require specific approval by the Academic Regulations Committee.

- (i) eligible for progression towards an award; or
- (ii) eligible for an award; or
- (iii) required to be deregistered from the programme.

When a student has a Grade Point Average (GPA) lower than 2.0, he will be put on academic probation in the following semester. Once when a student is able to pull his GPA up to 2.0 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 examination result notification but not in transcript of studies.

## **Deregistration**

A student will have 'progressing' status unless he falls within the following categories, either of which may be regarded as grounds for deregistration from the programme:-

- (i) the student has exceeded the maximum period of registration for that programme as specified in the definitive programme document; or
- (ii) the student's GPA is lower than 2.0 for two consecutive semesters <u>and</u> his Semester GPA in the second semester is also lower than 2.0; or
- (iii) the student's GPA is lower than 2.0 for three consecutive semesters.

Notwithstanding the above, a student may be deregistered from the programme enrolled before the time specified in (ii) or (iii) above if his academic performance is poor to the extent that the Board of Examiners deems that his chance of attaining a GPA of 2.0 at the end of the programme is slim or impossible.

## **Retaking Subjects**

In addition to retaking a subject due to failure, student may retake any subject for the purpose of improving his/her grades. These students will be accorded a lower priority for taking the concerned subjects and can only do so if places are available. Students concerned are required to submit the request by email to their programme offering department for processing before the end of the add/drop period. The programme offering department will inform the students concerned whether they have successfully enrolled on a retake subject after the add/drop period.

When a student retakes a subject, only the final subject grade after the retake will be included in the calculation of the Grade Point Average (GPA) and the Grade Point Average for award classification. Although the original grade will not be included in the calculation of GPAs, it will be shown on the transcript of studies. Students should refer to the definitive programme document to ascertain the requirements, in particular for subjects offered in consecutive semesters, for retaking failed subjects or seek advice from the Department concerned.

(Remark: Subject to change according to University's regulation).

## **Appeals**

Appeals against the decision of the Scheme Board of Examiners must be made within 7 working days after the public announcement of the examination results. A student should make the appeal to the Head of the BRE Department. The Department will inform the student of the appeal result and, if the appeal is successful, the Department will inform the Faculty. (Details are referred to B7 Student Appeals of AS Handbook on Academic Regulations and Procedures)

#### 6. PROGRESSION AND AWARD

## **Progression**

A student will have 'progressing' status unless he falls within the following categories, either of which may be regarded as grounds for deregistration from the programme:

- (i) the student has exceeded the maximum period of registration for that programme as specified in the definitive programme document; or
- (ii) the student's GPA is lower than 2.0 for two consecutive semesters <u>and</u> his Semester GPA in the second semester is also lower than 2.0; or
- (iii) the student's GPA is lower than 2.0 for three consecutive semesters.

## **Graduation Requirements**

A student will be eligible for award if all the following conditions are satisfied:-

- (i) Accumulation of the requisite number of credits for the particular award, as defined in the definitive programme document; and
- (ii) Satisfying the residential requirement for at least one third of the credits required for the award to be completed under the current enrolment at PolyU; and
- (iii) Satisfying all requirements as defined in the definitive programme document and as specified by the University; and
- (iv) Having a Grade Point Average (GPA) of 2.0 or above at the end of the programme.

A student is required to graduate as soon as all the conditions for award are satisfied.

## **Guidelines for Award Classification**

The following are guidelines for the Boards of Examiners when determining award classifications. The BoE will exercise its judgement as to the award for each student and may use other relevant information.

Hons Degree	Guidelines
1 <sup>st</sup>	The student's performance/attainment is outstanding, and identifies him/her as exceptionally able in the field covered by the programme in question.
2:i	The student has reached a standard of performance/attainment which is more than satisfactory but less than outstanding.
2:ii	The student has reached a standard of performance/attainment judged to be satisfactory, and clearly higher than the "essential minimum" required for graduation.
3 <sup>rd</sup>	The student has attained the "essential minimum" required for graduation at a standard ranging from just adequate to just satisfactory.

A Pass-without-Honours degree award will be recommended only under exceptional circumstances, when the student has demonstrated a level of final attainment which is below the 'essential minimum' required for graduation with Honours from the programme in question, but when he has nonetheless covered the prescribed work of the programme in an adequate fashion, while failing to show sufficient evidence of the intellectual calibre expected of Honours degree graduates.