

**City University of Hong Kong**  
**Course Syllabus**

**offered by Division of Building Science and Technology**  
**with effect from Semester A 2018/19**

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**Part I Course Overview**

**Course Title:** Procurement Practice

**Course Code:** BST22755

**Course Duration:** 1 semester

**Credit Units:** 3 credits

**Level:** A2

Arts and Humanities

**Proposed Area:**  
*(for GE courses only)*

Study of Societies, Social and Business Organisations

Science and Technology

**Medium of Instruction:** English

**Medium of Assessment:** English

**Prerequisites:**  
*(Course Code and Title)* Nil

**Precursors:**  
*(Course Code and Title)* Nil

**Equivalent Courses:**  
*(Course Code and Title)* Nil

**Exclusive Courses:**  
*(Course Code and Title)* Nil

## Part II Course Details

### 1. Abstract

(A 150-word description about the course)

This course aims to:

- enable students to evaluate the procurement options in construction; and
- provide students with practical knowledge and skills in tendering and estimating.

### 2. Course Intended Learning Outcomes (CILOs)

(CILOs state what the student is expected to be able to do at the end of the course according to a given standard of performance.)

No.	CILOs <sup>#</sup>	Weighting* (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
			A1	A2	A3
1.	Develop the basic principles of estimating for tendering purposes.	15%	✓	✓	
2.	Build up all-in cost for labour, plant and materials and unit rates for major building trades for tendering purposes.	35%	✓	✓	✓
3.	Explain the tendering methods and procedures including the use of bidding theory, analysis of tender performance and selection of tenders.	25%	✓	✓	✓
4.	Select and evaluate a procurement method to suit specific project requirements	25%	✓	✓	✓
		100%			

\* If weighting is assigned to CILOs, they should add up to 100%.

# Please specify the alignment of CILOs to the Gateway Education Programme Intended Learning outcomes (PILOs) in Section A of Annex.

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to self-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

**3. Teaching and Learning Activities (TLAs)**  
(TLAs designed to facilitate students' achievement of the CILOs.)

TLA	Brief Description	CILO No.				Hours/week (if applicable)
		1	2	3	4	
1	Lecture (Average class size: Around 100 students)	✓		✓	✓	2 hrs/week
2	Workshop		✓			1 hr/week

\* This will not contribute to contact hours

1. A **Lecture** is a large-class activity involving the whole class. It mainly consists of presentations by lecturers/instructors to present information on particular topic areas. The lecture is supplemented with textbooks, lecture notes, standard forms of contracts and other relevant readings.
2. A **Workshop** is a class activity to provide students with opportunities for closer interaction. Three to four problem cases will be given in tutorial sessions to teams (around 5 students) and/or individuals to engage students in the solving of cost estimating problems.

**4. Assessment Tasks/Activities (ATs)**  
(ATs are designed to assess how well the students achieve the CILOs.)

Assessment Tasks/Activities	CILO No.				Weighting*	Remarks
	1	2	3	4		
Continuous Assessment: <u>40%</u>						
Test	✓	✓			10%	
Individual Assignment	✓	✓			15%	
Case Study Report			✓	✓	15%	
Examination: <u>60%</u> (duration: 2.5 hours , if applicable)						
					100%	

\* The weightings should add up to 100%.

1. **Individual assignment** is in the form of essay type questions or calculations.
2. **Test/quiz** is in the form of MCs, short questions or calculations.
3. **Case study report** is a group assignment. Students are required to select a construction project and study in detail and provide submissions of a written report.
4. **Examination** is in the form of calculation and essay type questions.

Note: A student must obtain a minimum mark of 35 in both coursework and examination components and an overall mark of 40 to pass the course.

## 5. Assessment Rubrics

(Grading of student achievements is based on student performance in assessment tasks/activities with the following rubrics.)

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
1. Test	1.1 ability to understand the basic theory of procurement practice	High	Significant	Moderate	Basic	Not even reaching marginal levels
2. Individual Assignment	2.1 ability to accomplish build-up cost estimations on selected building element.	High	Significant	Moderate	Basic	Not even reaching marginal levels
3. Case Study Report	2.1 capacity for self-direct learning to understand the key characteristics of different procurement methods 2.2 ability to explain in details on different procurement methods and tendering procedures	High	Significant	Moderate	Basic	Not even reaching marginal levels
4. Examination	3.1 evaluate the achievement of both CILOs on both the technical contents and the capacity to integrate the technical content and related issues on procurement practice in the construction industry.	High	Significant	Moderate	Basic	Not even reaching marginal levels

### Part III Other Information (more details can be provided separately in the teaching plan)

#### 1. Keyword Syllabus

**Procurement Systems:** The principles of procurement; procurement systems for design and construction works including traditional approach and non-traditional approach, the factors affecting the choice.

**Tendering:** Tendering systems, pre-qualification process and tendering documentation; tendering practices and procedures; tender analysis and report; estimating process for submission of tender; bidding strategy and analysis of tender performance.

**Principles of estimating:** Direct cost and indirect cost; profit and overheads; all-in cost for labour, plant and materials; statutory factors, plant depreciation.

**Technical estimating:** Estimating for preliminaries; calculation of unit rates for major building trades including hand and mechanical excavation, concrete, formwork, reinforcement, brick or block wall, plaster and paint, joinery and pipework.

#### 2. Reading List

##### 2.1 Compulsory Readings

*(Compulsory readings can include books, book chapters, or journal/magazine articles. There are also collections of e-books, e-journals available from the CityU Library.)*

1.	Buchan, R.D., Fleming, F.W. & Grant, F.E.K. (2003) Estimating for Builders and Quantity Surveyors, Oxford: Butterworth-Heinemann.
2.	Brook, M. (2004) Estimating and Tendering for Construction Work, Amsterdam; Boston: Elsevier Butterworth-Heinemann.
3.	William, J. ed. (1996) Geddes, Spence Book on Estimating for Building and Civil Engineering Works, Heinemann: Butterworth.
4.	E-book: Masterman, J, W.E. (2002) An Introduction to Building Procurement Systems, Second Edition, London: Spon Press, HD39.5 .M36 2002eb World Wide Web.
5.	Hackett, M., Robinson, I. & Statham, G. ed. (2007) The Aqua Group Guide to Procurement, Tendering & Contract Administration, Oxford; Malden, MA: Blackwell Pub./Davis Langdon.
6.	Franks, J. (1998) Building Procurement Systems. London: The Chartered Institute of Building.

##### 2.2 Additional Readings

*(Additional references for students to learn to expand their knowledge about the subject.)*

1.	Government web page for construction cost published in the Statistics and Census Department: <a href="http://www.censtatd.gov.hk/home/index.jsp">http://www.censtatd.gov.hk/home/index.jsp</a> Rider Levett Bucknall – Cost Data: <a href="http://www.asia.rlb.com/hongkong/">http://www.asia.rlb.com/hongkong/</a> Davis Langdon & Seah – Cost Data: <a href="http://www.dlshk.com/index.html">http://www.dlshk.com/index.html</a>
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