Subject Description Form

Subject Code	BRE439
Subject Title	Engineering Contract Procedure
Credit Value	3
Level	4
Pre-requisite / Co-requisite / Exclusion	Nil
Objectives	Develop an understanding of the technological, practical, procedural, contractual and economic characteristics of engineering work including building services in building projects and civil engineering work.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: a. Possess the knowledge of the technological practices of engineering work. b. Understand the practices of procurement and contractual arrangements of engineering work. c. Produce and evaluate the measurement and documentation of engineering work. d. Appraise and apply the principle and practices of contractual procedures and administration in engineering work. e. Communicate effectively with contractual negotiation skills.
Subject Synopsis/ Indicative Syllabus	1. Technological and cost appraisal of building services work and civil engineering work. 2. Procurement systems and contractual arrangements for building services and civil engineering projects. 3. Documentation, measurement and valuation of building services and civil engineering work. 4. Contract administration and procedure in building services and civil engineering projects. 5. Application of Government standard forms and new engineering contracts.
Teaching/Learning Methodology	Contract documentation and administration will form the main thrust of the course, to be underpinned on a comprehensive engineering work technologies and practices. Interactive lectures on the various technologies, practice and economic aspects will be conducted with a view of providing the background knowledge necessary for developing competence in documentation, procurement and administration in the field of engineering work. Interactive lecture and case studies will be utilized. Professional practitioners will be invited to facilitate problem based learning on different contract strategies in different projects. Tutorial sections will be provided to conduct case studies and systematic discussions.

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	
1. Coursework	50%	√	√	√	√	√	
2. Examination	50%	√	√	√	√	√	
Total	100%						

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

Examination and coursework will constitute the 50% and 50% of the overall mark for the subject respectively. The coursework mark will be based on the assignments by producing documentation, seminar presentations and discussions. At least two assignments with equal contribution will be set.

The assessment by examination will be based on a 2 hour examination. The coursework will be evaluated on; (i) a basic understanding of engineering work practices, economics of engineering work development, and its impact on the economy; (ii) a working knowledge of the contract documentation and administration of typical engineering work; (iii) a critical appraisal of alternative contract strategies, procedures and administration in engineering work.

Student Study Effort Expected

Class contact:	
▪ Lectures	26 Hrs.
▪ Tutorials / Seminars	13 Hrs.
Other student study effort:	
▪ Self learning and recommended reading	120 Hrs.
Total student study effort	159 Hrs.

Reading List and References

Recommended:

Construction Industry Council (CIC): Frequently Asked Questions on NEC3 Collaborative Contracts (Version 1 – September 2015).
http://www.cic.hk/eng/main/aboutcic/publications/reference_materials/index.html

Wong K.D. (2008) *Target Cost Contracting in Hong Kong* – Chapter 12 of the book by PACE Publishing Ltd, namely "*Contractual and Regulatory Innovations in Building and Real Estate*" edited by Edwin Chan and Edward Yiu, Page 69 to 74, June 2008.

Wong K.D. (1998) "*Real Estate Development in Hong Kong"* Chapter 12 *Procurement & Tendering* and Chapter 13 *Contractual Arrangement and Construction Management*, a book by PACE Publishing Limited 1998 ISBN 962-7723-09-6.

HKIA/HKIS Standard Form of Building Contract 2005 Edition.

	HKSAR Government General Conditions of Contract for Civil Engineering Works 1999 Editions. HKSAR Government General Conditions of Contract for Electrical and Mechanical Engineering Works 1999 Editions. HKSAR Government General Conditions of Contract for Design and Build Contracts 1999 Editions. HKSMM4 (2005) *Hong Kong Standard Method of Measurement for Building Services*. Macmillan (1997) Measurement of Building Services PolyU Call Number TH6021.M87 1997. Prentice Hall (1998) Construction Contract Administration PolyU Call Number KF902. L5 1998. Prentice Hall (2011) Engineering and Construction Law and Contracts PolyU Call Number K891. B8 Y38 2011. **Supplementary:** Government of Hong Kong, (1992) *SMM for Civil Engineering Works*, Hong Kong Government Printer. ICE *Civil Engineering Standard Method of Measurement 4* Third Edition, Thomas Telford, London 2012. ICE *Civil Engineering Standard Method of Measurement 4* Examples 2014. New Engineering Contract http://www.neccontract.com Wong and Tse (1998) "*A Study of Quantity Surveying Practices in the Building Services Sector of Hong Kong*" Asia Pacific Building and Construction Management Journal, Page 9 - Page 15 Volume Four December 1998 ISSN 1024-9540. Wong K.D. (2006) **"***The application of a computerized financial control system for the decision support of target cost contracts***"**, ITcon Vol. 11, Special Issue Decision Support Systems for Infrastructure Management, Page 257-268, http://www.itcon.org/2006/19 Wong A K D (2006).