

Subject Description Form

Subject code	BRE350
Subject title	Project management and procurement
Credit value	3
Level	3
Pre-requisite	None
Objectives	<p>This subject is intended to:</p> <p><u>Project management</u></p> <ul style="list-style-type: none"> • Enable students to appreciate the roles and duties of managing professionals and skilled workers to execute standardised site activities when delivering construction projects. • Enable students to equip the project management knowledge for supervising site staff, managing project time, managing project cost, managing project quality, and managing project safety. • Enable students to use advanced computing software for planning and controlling construction projects. <p><u>Project procurement</u></p> <ul style="list-style-type: none"> • Enable students to appreciate project procurement in context of available form of contracts (e.g., standard form of building contract, general condition of contract, and new engineering contract). • Enable student to understand traditional project delivery options of design-bid-build, design-built, design-build-operate, and design-build-finance-operate, along with alternate options such as new-engineering-contract and public-private-partnership. • Enable students to appreciate procurement process and bidding strategies at pre-contract stage, tendering stage, tender evaluation stage, contract award stage, and explain the tendering methods and procedures, including the use of bidding theory, analysis of tender performance, and selection of tenders.
Intended learning outcomes	<p>Upon completion of the subject, students will be able to:</p> <p><u>Project management</u></p> <p>(a) Understand construction industry, including the roles and duties of construction professionals, organisational structures of construction corporation, standardised classifications of site workers, and standardised site activities.</p> <p>(b) Apply project management knowledge with computing tools to plan and control construction projects by managing project staff, project time, project cost, project quality, and project safety.</p> <p><u>Project procurement</u></p> <p>(c) Understand key terminologies of project procurement in context of contractual and tendering responsibilities.</p>

	(d) Articulate knowledge on construction procurement practice, including tendering systems, tendering strategies, tendering process, tender evaluation, and tendering report.																																																						
Subject synopsis / indicative syllabus	<p><u>Project management</u></p> <ul style="list-style-type: none"> • Introduction of construction industry. • Site supervision system. • Project time management system. • Project cost management system. • Safety management system. • Quality management system. <p><u>Project procurement</u></p> <ul style="list-style-type: none"> • Principles of procurement practices. • Spirit of contracts in procurement. • Tendering procedure and practice (employers' perspectives). • Tendering documents. • Tendering strategies (tenderers' perspectives). 																																																						
Teaching / learning methodology	<ul style="list-style-type: none"> • Theories and rationales will be delivered in lecture periods. • Classwork will be given in lecture and tutorial classes. • Practical knowledges and experiences will be shared and delivered in classes. • E-learning materials and e-discussion forums will be provided. • Software trainings will be delivered in the flipped classes. • Guest lecture will be arranged to share the most updated project management and procurement practice in Hong Kong construction industry. 																																																						
Assessment methods in alignment with intended learning outcomes	<table border="1" data-bbox="467 1255 1481 1780"> <thead> <tr> <th rowspan="2">Specific assessment methods/tasks</th> <th rowspan="2">% weighting</th> <th colspan="6">Intended subject learning outcomes to be assessed</th> </tr> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>1. Coursework 1</td> <td>25%</td> <td>√</td> <td>√</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2. Coursework 2</td> <td>25%</td> <td></td> <td></td> <td>√</td> <td>√</td> <td></td> <td></td> </tr> <tr> <td>3. Examination</td> <td>40%</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td></td> <td></td> </tr> <tr> <td>4. Effort</td> <td>10%</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td></td> <td></td> </tr> <tr> <td>Total</td> <td>100%</td> <td colspan="6"></td> </tr> </tbody> </table>	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed						a	b	c	d			1. Coursework 1	25%	√	√					2. Coursework 2	25%			√	√			3. Examination	40%	√	√	√	√			4. Effort	10%	√	√	√	√			Total	100%						
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	<p>Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:</p> <ul style="list-style-type: none"> • Coursework 1: Students are given individual or group assignments relevant to project management. Upon completion of Coursework 1, students will be able to achieve learning outcomes (a) and (b). • Coursework 2: Students are given individual or group assignments relevant to project procurement. Upon completion of Coursework 2, students will be able to achieve learning outcomes (c) and (d). • Examination is used to assess students' understanding of concepts and practices learned in the lectures and tutorials. Students will be able to achieve learning outcomes (a), (b), (c), and (d). • Through students' effort in solving the problem exercises given in lectures and tutorials, the students will be able to achieve learning outcomes (a), (b), (c), and (d). 	
Student study effort expected	Class contact:	
	<ul style="list-style-type: none"> • Lectures 	26 Hrs.
	<ul style="list-style-type: none"> • Tutorials 	13 Hrs.
	Other student study effort:	
	<ul style="list-style-type: none"> • Independent study 	96 Hrs.
Reading list and references	<u>Project management</u>	
	<ul style="list-style-type: none"> • Buildings Department. (2009). <i>Code of practice for site supervision</i>. Hong Kong. • Buildings Department. (2009). <i>Technical memorandum for supervision plans</i>. Hong Kong. • Buildings Department. (2019). <i>Code of practice for site supervision 2009 amendments</i>. Circular letter, Hong Kong. • Hong Kong Housing Authority. (2017). <i>PASS (Performance assessment scoring system) manual</i>. Hong Kong. • Poon, S.W., Tang, S.L., and Wong, F.K.W. (2008). <i>Management and economics of construction safety in Hong Kong</i>. Hong Kong University Press, Hong Kong. • Project Management Institute. (2017). <i>A guide to the project management body of knowledge</i>. Newtown Square, Project Management Institute, Newtown Square, Pennsylvania, United States. • Tang, S.L., Ahmed, S.M., Aoieong, R.T., and Poon, S.W. (2008). <i>Construction quality management</i>. Hong Kong University Press, Hong Kong. • Tang, S.L., Poon, S.W., Ahmed, S.M., and Wong, K.W. (2008). <i>Modern construction project management</i>. Hong Kong University Press, Hong Kong. 	

Construction procurement

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- Morledge, R. (2013). *Developing a construction procurement strategy and selecting an appropriate route*, 1st Edition, Royal Institution of Chartered Surveyors, United Kingdom.
- Greenhalgh, B., Squires, G., and Mahamadu, A.M. (2022). *Construction procurement: complex property development*. Routledge, United Kingdom.
- Hong Kong Institute of Architects, the Hong Kong Institute of Construction Managers, and the Hong Kong Institute of Surveyors. (2005). *Agreement and schedule of conditions of building contract for use in the Hong Kong Special Administrative Region, Standard form of building contract private edition, With quantities*. Hong Kong.
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- Naoum, S.G., and Egbu, C. (2016). Modern selection criteria for procurement methods in construction: A state-of-the-art literature review and a survey. *International journal of managing projects in business*, 9(2), 309–336.
- Oo, B.L., and Tang, O.S. (2023). Information feedback in construction contract bidding: Perceptions of Hong Kong contractors. *International journal of construction management*, 23(6), 1044–1052.