

## Subject Description Form

<b>Subject Code</b>	BRE350
<b>Subject Title</b>	Project Management and Procurement
<b>Credit Value</b>	3
<b>Level</b>	3
<b>Pre-requisite</b>	None
<b>Objective</b>	1. Extend students' understanding of management principles and develop the knowledge of project management and procurement in the construction industry.
<b>Intended Learning Outcomes</b>	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> <li>1. Apply knowledge of time, cost, quality, safety and environmental management to construction projects.</li> <li>2. Negotiate and resolve conflicts between management and employees.</li> <li>3. Communicate with others in a clear and articulated manner.</li> <li>4. Identify and propose solutions to project management and procurement problems.</li> <li>5. Identify the different forms of procurement and assess their impacts on the success of a project.</li> <li>6. Describe the principles underlying the choice of appropriate procurement systems.</li> <li>7. Apply and compare alternative procurement systems to all types of construction works.</li> </ol>
<b>Subject Synopsis / Indicative Syllabus</b>	<p><b><i>Quality, Safety and Environmental Management</i></b> Quality assurance system, safety management system and environmental management.</p> <p><b><i>Human Resources Management</i></b> Recruitment, selection and engagement of personnel in construction organizations, and industrial relations.</p> <p><b><i>Planning and Programming Techniques</i></b> Planning and programming techniques including bar chart, critical path analysis and line of balance.</p> <p><b><i>Construction Procurement</i></b></p> <ul style="list-style-type: none"> <li>● The nature of building process, models of the process.</li> <li>● Categorization of procurement systems.</li> <li>● Alternative procurement systems such as traditional sequential, traditional accelerated, competitive design and build, enhanced design and build, novated design and build, management contracting and construction management, guaranteed maximum price and target cost contracting, and public private partnership.</li> <li>● Choice of appropriate procurement methods, allocation of risks and liabilities of the major parties to the arrangement.</li> <li>● Relational contracting and its impact on procurement.</li> <li>● Subcontracting management in construction.</li> </ul>
<b>Teaching / Learning Methodology</b>	Lectures will be used to introduce systems and techniques whilst the small group work will be used for the application of management skills through quizzes and project presentation.

<b>Assessment Methods in Alignment with Intended Learning Outcomes</b>	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)						
			1	2	3	4	5	6	7
	1.Quizzes	10%	√	√	√		√		
	2.Project Report & Presentation	30%	√	√	√	√	√	√	√
	3.Examinations: Midterm (30%) and Final (30%)	60%	√	√	√		√	√	√
Total	100 %								
<p><u>The assessment criterion adopted in tutorial/seminars</u>  ("plus" grade for enhanced performance possible for each grade except F)</p> <p>1. Project Report &amp; Presentation – overall (group) assessment (15%)</p> <ul style="list-style-type: none"> <li>• Oral communication skills: A for excellent, B for good, C for clear, D for barely sufficient, F for poor</li> <li>• Data/information collection: A for excellent, B for good, C for adequate, D for barely sufficient, F for poor</li> <li>• Data interpretation &amp; analysis: A for excellent, B for good, C for adequate, D for barely sufficient, F for poor</li> <li>• Identification of problem/issue: A for excellent, B for good, C for adequate, D for barely sufficient, F for poor</li> <li>• Conclusion: A for excellent, B for convincing, C for adequate, D for barely sufficient, F for poor</li> </ul>									
<b>Student Study Effort Expected</b>	Class contact:								
	▪ Lectures		26 Hrs.						
	▪ Project Seminars/Tutorials		13 Hrs.						
	Other student study effort:								
	▪ Independent study		96 Hrs.						
Total student study effort		135 Hrs.							
<b>Reading List and References</b>	<b>Recommended Reading List:</b>								
	<p><u>Project Management</u></p> <p>Chan, A.P.C., Wong, K.W., Li, Y., &amp; Guo, Y.P. (2015) The development of anti-heat stress clothing for construction workers in hot and humid weather, <i>Ergonomics</i>, ISSN: 0014-0319, September, 59(4), pp. 479-495.</p> <p>Chan, A.P.C., Yang, Y., Wong, F.K.W., Chan, D.W.M., and Lam, E.W.M. (2015). Wearing comfort of construction work uniforms. <i>Construction Innovation: Information, Process, Management</i>, Volume 15, Issue 4, September, pp. 473-492.</p> <p>Chan, P.C., Wong, K.W., Wong, D., Lam, W.M., and Yi, W., (2012) Determining an Optimal Recovery Time after Exercising to Exhaustion in a Controlled Climatic Environment: Application to Construction Works, <i>Building and Environment</i>, Volume 56, pp. 28 - 37.</p> <p>Chan, P.C., Wong, K.W., Chan, W.M., , Cheung, E., Choy, E., Chung, S.K., Kwok, W.K., Lam, W.M., Lee, W.C., Liu, C.H., Lo, C.H., Siu, K.W., Wong, C.W., &amp; Yam, C.H., (2009) Developing a Prototype for the Rapid Demountable Platform (RDP) – Stage II of CII-HK Research on “Construction Safety Involving Working at Height for Residential Building Repair and Maintenance”, Research Summary Report, Construction Industry Institute – Hong Kong, ISBN No. 1978-988-99558-7-8, April, 43pp.</p> <p>Chan, A.P.C., Wong, F.K.W., Chan, D.W.M., Chan, E.H.W., Cheung, E., Kwok, A.W.K., Lam, E.W.M., Yam, M.C.H. and Yiu, E.C.Y. (2007). <i>Construction Safety Involving Working at Height for Residential Building Repair and Maintenance</i>, Summary Report,</p>								

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- Harris F. and McCaffer R. (2001) *Modern Construction Management*, 5<sup>th</sup> Edition, Blackwell Science: Oxford
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- Poon, S.W., Tang, S.L., & Wong, K.W. (2008) Management and Economics of Construction Safety in Hong Kong, Hong Kong University Press, June, ISBN No. 978-962-209-906-7, 169pp
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- Chan A.P.C. and Chan D.W.M., Editors (2004). *Proceedings of the CII-HK Conference 2004 on Construction Partnering: Our Partnering Journey - Where Are We Now, and Where Are We Heading?*, Construction Industry Institute – Hong Kong, 9 December 2004, Hong Kong, China, ISBN 988-98153-2-X, 206 pages.
- Chan A.P.C., Chan D.W.M., Fan L.C.N., Lam P.T.I. and Yeung, J.F.Y. (2004). *A Comparative Study of Project Partnering Practices in Hong Kong*, Summary Report, Construction Industry Institute – Hong Kong, Research Report No. 1, ISBN 988-98153-1-1, 40 pages.
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