Subject Description Form

Subject Code	BRE363
Subject Title	Construction Economics
Credit Value	3
Level	3
Pre-requisite	BRE263
Objectives	1. Enable students to understand the factors affecting construction cost 2. Enable students to contribute to the economic efficiency of construction throughout a project life cycle in conjunction with its stakeholders
Intended Learning Outcomes	a. Analyse the factors affecting construction cost at an industry and project level. b. Compile and use cost data effectively for forecasting and controlling purpose c. Compare cost of alternative designs d. Evaluate life cycle cost of construction e. Communicate principles and cost data effectively. f. Identify contemporary issues related to construction economics
Subject Synopsis/ Indicative Syllabus	Demand and supply for construction Factors affecting construction cost at industry and project level Productivity and its measurement Types of client and the client's brief Real estate developers and their costs The roles of construction and property professionals Compilation and use of cost data Building cost and tender price indices Design economics Cost planning and cost analysis An introduction to cost modeling Life cycle costing Cost control measures

Teaching/Learning Methodology

The principles and concepts are delivered through lectures (each at 2 hrs per week), with application and discussion being covered in seminars and tutorials (each at 1 hrs per week in small groups), for a total period of 13 weeks.

The syllabus on construction economics will take students through the macro and micro factors affecting construction cost, both from the client and contractor's perspectives. Seminar topics (some of which are case-based) and reports demand students' individual research and data analysis, as well as presentation.

Apart from face-to-face lectures and discussion, students can download teaching materials from an electronic teaching platform.

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	f
1.Seminars/reports	40 %	√	√	√	√	√	√
2. Examination	60 %	√	√	√	√	√	
Total	100 %						

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

Learning outcomes	Oral Seminar Presentation	Written Seminar Report	Examination
1. to possess skills to identify, analyze and		√	√
2. to have an understanding of professional, social and ethical	√	√	
3. to communicate effectively	√	√	√
4. to contribute as team member and to lead effectively	√	√	
5. to identify contemporary issues	√	√	
6. Analyse the factors affecting construction cost at an industry and project level.	√	√	√
7. Compile and use cost data effectively for forecasting and controlling purpose	√	√	√
8. Compare cost of alternative designs	√	√	√
9. Evaluate life cycle cost of construction	√	√	√

	The assessment criteria adopted in tutorial/seminars ("plus" grade for enhanced performance possible for each grade except F) 1. Seminar (oral presentation) – individual assessment (20%) • Oral presentation skills: A for excellent, B for good, C for clear, D for reading from script, F for mumbling • Familiarity with the topic: A for excellent, B for good, C for adequate, D for poor, F for no knowledge • Quality of visuals: A for excellent, B for good, C for adequate, D for barely sufficient, F for poor • Answer during discussion: A for excellent, B for good, C for adequate, D for barely sufficient, F for poor 2. Seminar (Group report) – overall (group) assessment (20%) • Written communication skills: A for excellent, B for good, C for clear, D for barely sufficient, F for poor • Data/information collection: A for excellent, B for good, C for adequate, D for barely sufficient, F for poor • Data interpretation & analysis: A for excellent, B for good, C for adequate, D for barely sufficient, F for poor • Identification of problem/issue: A for excellent, B for good, C for adequate, D for barely sufficient, F for poor • Conclusion: A for excellent, B for convincing, C for adequate, D for barely sufficient, F for poor	
Student Study Effort Required	Class contact:	
	▪ Lectures	26Hrs.
	▪ Seminars/Tutorials	13Hrs.
	Other student study effort:	
	▪ Independent study	120Hrs.
	Total student study effort	159Hrs.
Reading List and References	Briscoe, G., (1988) *The Economics of the Construction Industry*, London: Mitchell Ferry, D. & Brandon, P.S., (2007) *Cost planning of Buildings*, 7th Edition, Oxford, Blackwell Publications Harvey, J. (1992) *The Economics of Real Property*, London: MacMillan Raftery, J., (1991) *Principles of Building Economics*, London: BSP Professional Books Ashworth A., (2010*) Cost Studies of Buildings*, Harlow, England: Pearson **Supplementary:** Smith, J. (1998) *Building Cost Planning for the Design Team*, Deakin University Press Seeley, I. (1996) *Building Economics*, MacMillan Pilcher, R. (1994) *Project Cost Control in Construction*, Blackwell Scientific Publication Chris, M. (2009) Finance and control for construction, Taylor & Francis *Hong Kong Statistics* (current issues), Hong Kong SAR Government Websites of major QS practices Journal articles (e.g., *Construction Management and Economics*: update issues)	