

Subject Description Form

Subject Code	BRE442
Subject Title	Forecasting & Competition in the Built Environment
Credit Value	3
Level	4
Pre-requisite / Co-requisite/ Exclusion	BRE345
Objectives	This subject intended to help students acquire knowledge and skills to forecast and compete for work in the built environment.
Intended Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> 1. Select and employ appropriate techniques in price forecasting and strategies for improving survival and profitability. 2. Recognise the usefulness and limitations of competition and forecasting models. 3. Integrate risk management techniques with competition and forecasting models. 4. Analyse competitive performance and forecasting accuracy. 5. Draw conclusions and make recommendations on improving competitive performance and forecasting accuracy.
Subject Synopsis/ Indicative Syllabus	<p><i>Competition</i></p> <ul style="list-style-type: none"> • Auction theory: relationship between construction contract bidding, competitive fee bidding and land auctions. • Strategic management and competitive advantage: diversification; international contracting. • The competitive environment competition processes: level of competition; market conditions: survival and profitability; competitor analysis, decision to compete; pricing policy; competition strategy; risk in competing. • Monitoring competition performance: competitiveness and consistency in competing for construction contracts; market share and competitiveness. • Strategies for improving competitive advantage; subcontractor selection strategies. • Client objectives: negotiation; competitor prequalification, competition assessment, and award of contract. • Strategies for improving competitor prequalification. <p><i>Forecasting</i></p> <ul style="list-style-type: none"> • Relationship between competition, bidding and forecasting • Designers' and contractors' approaches to forecasting; resume of forecasting techniques; deterministic and nondeterministic approaches to forecasting; risk in forecasting. • Accuracy and reliability of forecasts: factors affecting accuracy of forecasts; feedback in forecasting.

Teaching/Learning Methodology	Lectures introduce the concepts and approaches in practice followed by discussion on background reading and forecasting and/or bidding tasks in the tutorials. In the tutorials, the students will be required to produce a forecast and/or bid price, justifying how they arrived at the forecast/bid price.																																												
Assessment Methods in Alignment with Intended Learning Outcomes	<table border="1" data-bbox="440 365 1466 741"> <thead> <tr> <th data-bbox="440 365 786 465" rowspan="2">Specific assessment methods/tasks</th> <th data-bbox="786 365 935 465" rowspan="2">% weighting</th> <th colspan="6" data-bbox="935 365 1466 465">Intended subject learning outcomes to be assessed</th> </tr> <tr> <th data-bbox="935 465 1019 533">a</th> <th data-bbox="1019 465 1104 533">b</th> <th data-bbox="1104 465 1189 533">c</th> <th data-bbox="1189 465 1273 533">d</th> <th data-bbox="1273 465 1358 533">e</th> <th data-bbox="1358 465 1466 533"></th> </tr> </thead> <tbody> <tr> <td data-bbox="440 533 786 600">Tutorial tasks</td> <td data-bbox="786 533 935 600">40%</td> <td data-bbox="935 533 1019 600">√</td> <td data-bbox="1019 533 1104 600"></td> <td data-bbox="1104 533 1189 600"></td> <td data-bbox="1189 533 1273 600">√</td> <td data-bbox="1273 533 1358 600">√</td> <td data-bbox="1358 533 1466 600"></td> </tr> <tr> <td data-bbox="440 600 786 667">Examination</td> <td data-bbox="786 600 935 667">60%</td> <td data-bbox="935 600 1019 667"></td> <td data-bbox="1019 600 1104 667">√</td> <td data-bbox="1104 600 1189 667">√</td> <td data-bbox="1189 600 1273 667"></td> <td data-bbox="1273 600 1358 667">√</td> <td data-bbox="1358 600 1466 667"></td> </tr> <tr> <td data-bbox="440 667 786 741">Total</td> <td data-bbox="786 667 935 741">100%</td> <td colspan="6" data-bbox="935 667 1466 741"></td> </tr> </tbody> </table>							Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed						a	b	c	d	e		Tutorial tasks	40%	√			√	√		Examination	60%		√	√		√		Total	100%						
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Student Study Effort Expected	Class contact:																																												
	▪ Lectures						26 Hrs.																																						
	▪ Tutorials						13 Hrs.																																						
	Other student study effort:																																												
	▪ Student effort hours						81 Hrs.																																						
	Total student study effort						120 Hrs.																																						
Reading List and References	<p data-bbox="440 1225 751 1256">Indicative Reading List:</p> <p data-bbox="440 1290 1230 1321">Ashworth A. (1994) <i>Cost Studies of Buildings</i>, Longman; Harlow.</p> <p data-bbox="440 1355 1473 1431">Brook M. (2004) <i>Estimating and Tendering for Construction Work</i>, Butterworth Heineman, Oxford.</p> <p data-bbox="440 1464 1230 1496">Cartlidge D. (2004) <i>Procurement of Built Assets</i>, Elsevier Oxford.</p> <p data-bbox="440 1529 1473 1606">Ferry D. and Brandon P.S. (1999) <i>Cost Planning of Buildings</i>, Blackwell Science, Oxford.</p> <p data-bbox="440 1639 1473 1715">Park W.R. & Chapin W.B. (1992) <i>Construction Bidding: Pricing for Profit</i>. John Wiley & Sons, New York.</p> <p data-bbox="440 1749 1190 1780">Seeley I. (1996) <i>Building Economics</i>, Macmillan, Basingstoke.</p> <p data-bbox="440 1814 1473 1890">Walker I. and Wilkie R. (2002) <i>Commercial Management in Construction</i>, Blackwell Oxford.</p>																																												