

Subject Description Form

Subject Code	BRE442
Subject Title	Forecasting & Competition in the Built Environment
Credit Value	3
Level	4
Pre-requisite / Co-requisite/ Exclusion	Nil
Objectives	This subject is 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. Recognize the usefulness and limitations of competition and forecasting models. 3. Integrate risk management techniques with competition and forecasting models. 4. Analyze competitive performance and forecasting accuracy. 5. Draw conclusions and make recommendations on improving competitive performance and forecasting accuracy.
Subject Synopsis/ Indicative Syllabus	<p><i>Forecasting</i></p> <ul style="list-style-type: none"> • Microeconomic foundation and the efficient market hypothesis • Time series analyses and process of forecasting • Forecasting methods: theory, practice, and comparison • Price estimation • Risk management in pre and post contract stages <p><i>Competition</i></p> <ul style="list-style-type: none"> • Introduction on the competitive built environment • Competitor analysis and competitiveness measurement • Bidding models: theory, practice, and comparison • Tender assessment • Strategies for improving competitive advantage

Teaching/Learning Methodology	Lectures introduce the concepts and approaches in practice followed by discussion on background reading and forecasting and competition analyses in the tutorials based on case studies.																																																						
Assessment Methods in Alignment with Intended Learning Outcomes	<table border="1" data-bbox="440 365 1474 741"> <thead> <tr> <th data-bbox="440 365 785 465" rowspan="2">Specific assessment methods/tasks</th> <th data-bbox="791 365 932 465" rowspan="2">% weighting</th> <th colspan="6" data-bbox="938 365 1474 465">Intended subject learning outcomes to be assessed</th> </tr> <tr> <th data-bbox="938 474 1018 533">a</th> <th data-bbox="1024 474 1104 533">b</th> <th data-bbox="1110 474 1190 533">c</th> <th data-bbox="1197 474 1276 533">d</th> <th data-bbox="1283 474 1362 533">e</th> <th data-bbox="1369 474 1474 533"></th> </tr> </thead> <tbody> <tr> <td data-bbox="440 542 785 600">Tutorial tasks</td> <td data-bbox="791 542 932 600">40%</td> <td data-bbox="938 542 1018 600">√</td> <td data-bbox="1024 542 1104 600"></td> <td data-bbox="1110 542 1190 600"></td> <td data-bbox="1197 542 1276 600">√</td> <td data-bbox="1283 542 1362 600">√</td> <td data-bbox="1369 542 1474 600"></td> </tr> <tr> <td data-bbox="440 609 785 667">Examination</td> <td data-bbox="791 609 932 667">60%</td> <td data-bbox="938 609 1018 667"></td> <td data-bbox="1024 609 1104 667">√</td> <td data-bbox="1110 609 1190 667">√</td> <td data-bbox="1197 609 1276 667"></td> <td data-bbox="1283 609 1362 667">√</td> <td data-bbox="1369 609 1474 667"></td> </tr> <tr> <td data-bbox="440 676 785 741">Total</td> <td data-bbox="791 676 932 741">100%</td> <td colspan="6" data-bbox="938 676 1474 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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Reading List and References	<p data-bbox="440 1220 1474 1256">Indicative Reading List:</p> <p data-bbox="440 1323 1474 1391">Adrian J. Smith (1995). <i>Estimating, tendering and bidding for construction</i>. Macmillan.</p> <p data-bbox="440 1424 1474 1458">Ashworth A. (1994) <i>Cost Studies of Buildings</i>, Longman; Harlow.</p> <p data-bbox="440 1491 1474 1525">Beeston, D.T. (1983). <i>Statistical methods for building price data</i>, E&FN Spon</p> <p data-bbox="440 1559 1474 1626">Brook M. (2004) <i>Estimating and Tendering for Construction Work</i>, Butterworth Heineman, Oxford.</p> <p data-bbox="440 1659 1474 1693">Cartlidge D. (2004) <i>Procurement of Built Assets</i>, Elsevier Oxford.</p> <p data-bbox="440 1727 1474 1794">Chapman, C., & Ward, S. (1996). <i>Project risk management: processes, techniques and insights</i>. John Wiley.</p> <p data-bbox="440 1827 1474 1895">Clements, M. P., & Hendry, D. F. (Eds.). (2002). <i>A companion to economic forecasting</i>. Oxford: Blackwell.</p> <p data-bbox="440 1928 1474 1995">Ferry D. and Brandon P.S. (1999) <i>Cost Planning of Buildings</i>, Blackwell Science, Oxford.</p> <p data-bbox="440 2029 1474 2096">Friedman, L. (1956). A competitive-bidding strategy. <i>Operations research</i>, 4(1), 104-112.</p>																																																						

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