### Subject Description Form

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>BRE442</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Title</td>
<td>Forecasting &amp; Competition in the Built Environment</td>
</tr>
<tr>
<td>Credit Value</td>
<td>3</td>
</tr>
<tr>
<td>Level</td>
<td>4</td>
</tr>
<tr>
<td>Pre-requisite / Co-requisite/ Exclusion</td>
<td>BRE345</td>
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</tbody>
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#### 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

Upon completion of the subject, students will be able to:

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

**Competition**

- 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.

**Forecasting**

- 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>
<thead>
<tr>
<th>Specific assessment methods/tasks</th>
<th>% weighting</th>
<th>Intended subject learning outcomes to be assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutorial tasks</td>
<td>40%</td>
<td>✓</td>
</tr>
<tr>
<td>Examination</td>
<td>60%</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>✓ ✓ ✓</td>
</tr>
</tbody>
</table>

**Student Study Effort Expected**

- **Class contact:**
  - Lectures: 21 Hrs.
  - Tutorials: 21 Hrs.

- **Other student study effort:**
  - Student effort hours: 120 Hrs.

Total student study effort: 162 Hrs.

**Reading List and References**

**Indicative Reading List:**