Subject Code: BRE440
Level: 3
Contact Hours: 42
Student Effort Hours: 120

**Assessment Method**
- Coursework 50%
- Examination 50%

**Subject Aim:**
This subject is intended to:
- Focus on both theories and applications of value management in different phases of a development,
- Develop an appreciation for what can be accomplished using the techniques of VM and applied creativity, and
- Identify management and technical issues that can be solved or addressed using the techniques of VM and critical thinking.

**Credit Value:** 3

**Pre-requisites:** BRE347 or equivalent
**Co-requisites:** NIL
**Exclusions:** NIL

**Subject Leader/Lecturer/Dept.:**
- Q.P. Shen (BRE)
- S.W. Fong (BRE)

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### Learning Outcomes:

_Students will demonstrate their ability to:-_

1. Have an understanding of the value management methodology
2. Organize and manage value management workshops in different phases of a project life cycle
3. Conduct function analysis and life-cycle costing for a project or a part of a project
4. Exercise practical creativity skills to work with a team of stakeholders to arrive at innovative solutions for construction projects
5. Ensure value for money for projects by applying value management tools in business situation or technical situations of a construction company

### Brief Syllabus Content:

- **Notion of value:** value, function and cost.
- **Value management basics:** historical development; project selection (types, values, and timing); alternative workshop approaches (e.g. the 40-hour job plan, the Charette, the VM audit, and the contractor's change proposal).
- **Value management methodology:** VM job plan (information, analysis, creativity, evaluation, development, proposal); function analysis, group dynamics, creativity, and problem-solving skills
- **Life cycle costing for construction projects**
- **Comparison of value management and traditional cost management techniques.**
- **Case studies of the practice of value management in Hong Kong and overseas.**

### Learning and Teaching Approach (tasks and activities designed to achieve learning outcomes):

The class will be conducted through a combination of lectures, student discussions, group and individual exercises, and active student participation. Students will be called on to make classroom presentations. The class distribution will be approximately as shown below. The lectures form the core instructional material supported by directed reading, assignments, student exercises, and other course elements. Significant work is programmed to be accomplished by the students in project teams when working on a study. Students are expected to meet regularly outside of formal class meetings to pursue and develop the ability to work with teams.

<table>
<thead>
<tr>
<th>Contact Hours</th>
<th>Lectures, seminars: 42 hours</th>
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<tbody>
<tr>
<td>Independent Study</td>
<td>Self study material: 46 hours</td>
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<td>Assignments: 32 hours</td>
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<td>Total: 120 hours</td>
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</tbody>
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*Teaching activities: Lecture (LT)/Tutorial (TU)/Seminar (SM)/Drawing (DW)/Laboratory or Practical (LB)/Studio (ST)/Workshop (WS)/Project (PJ)/Field Study (FS)/Guided Study (GS)/Visit (VS)*
**Assessment strategy** (assessment of student performance resulting from learning tasks):

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coursework</td>
<td>50%</td>
</tr>
<tr>
<td>Examination</td>
<td>50%</td>
</tr>
</tbody>
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**Reading List:**

**Recommended:**


Institution of Civil Engineers (1996), *Creating Value in Engineering*, Thomas Telford.


**Supplementary:**


