

Form 2B

City University of Hong Kong

Information on a Course

offered by Department of Architecture and Civil Engineering
with effect from Semester A in 2014/2015

Part I

Course Title:	Value Management for Construction
Course Code:	CA6120
Course Duration:	1 Semester (Some courses offered in Summer Term may start a few weeks earlier than the normal University schedule. Please check the teaching schedules with CLs before registering for the courses.)
Credit Units:	3
Level:	P6
Medium of Instruction:	English
Prerequisites:	Nil
Precursor:	Nil
Equivalent Courses:	BC6120 Value Management for Construction
Exclusive Courses:	Nil

Part II

Course Aims:

The course aims to apply systematic decision techniques in an inter-disciplinary professional context for solving the construction problems.

Course Intended Learning Outcomes (CILOs):

Upon successful completion of this course, students should be able to:

No.	CILOs	Weighting (if applicable)
1.	Solve construction problems by systematic job plan;	---
2.	Analyze functions of construction projects or components;	---
3.	Allocate cost and worth to functions identified;	---
4.	Stimulate wild ideas by creative techniques in developing alternatives;	---
5.	Develop proposals for each evaluated alternatives; and	---
6.	Present VM proposal appropriately.	---

Teaching and Learning Activities (TLAs):

(Indicative of likely activities and tasks designed to facilitate students' achievement of the CILOs. Final details will be provided to students in their first week of attendance in this course)

Semester Hours: 3 hours per week

Lecture/Tutorial/Laboratory Mix: Lecture (1); Tutorial (2); Laboratory (0)

CILO No.	TLAs	Total Hours (if applicable)
CILO 1	<ul style="list-style-type: none">Introduction and Job plan: Form team work in the class ; Search information out of class period	9
CILO 2	<ul style="list-style-type: none">FAST: Establish a FAST diagram for their particular project	6
CILO 3	<ul style="list-style-type: none">Function cost: Calculate function cost for particular items	6
CILO 4	<ul style="list-style-type: none">Creativity: Stimulate ideals as many as possible for their identified functions (refer to CILO 2)	6
CILO 5	<ul style="list-style-type: none">Evaluation and Development: Select the best ideas based on a systematic approach	9
CILO 6	<ul style="list-style-type: none">Presentation: present their proposals in the class (refer to CILO2-5)	3

Assessment Tasks/Activities:

(Indicative of likely activities and tasks designed to assess how well the students achieve the CILOs. Final details will be provided to students in their first week of attendance in this course)

Coursework: 50%

Examination: 50% (Examination duration = 3 hours)

* For coursework assessment, a real project is conducted throughout the semester

To pass a course, a student must obtain minimum marks of 30% in both coursework and examination components, and an overall mark of at least 40%.

CILO No.	Type of assessment tasks/activities	Weighting (if applicable)	Remarks
CILO 1	<ul style="list-style-type: none">Assignment (a real project) and Examination (a scenario): working process ; job plan	---	<ul style="list-style-type: none">Nil
CILO 2	<ul style="list-style-type: none">Assignment (a real project) and Examination (a scenario): FAST diagram	---	<ul style="list-style-type: none">Nil
CILO 3	<ul style="list-style-type: none">Assignment (a real project) and Examination (a scenario): function cost	---	<ul style="list-style-type: none">Nil
CILO 4	<ul style="list-style-type: none">Assignment (a real project) and Examination (a scenario): ideas and creativity techniques	---	<ul style="list-style-type: none">Nil

CILO 5	<ul style="list-style-type: none"> Assignment (a real project) and Examination (a scenario): final VM report and evaluation techniques 	---	<ul style="list-style-type: none"> Nil
CILO 6	<ul style="list-style-type: none"> Assignment (a real project) and Examination (a scenario): teamwork and presentation 	---	<ul style="list-style-type: none"> Nil

Grading of Student Achievement:

Grading Pattern:

Standard

Refer to Grading of Courses in the Academic Regulations for Taught Postgraduate Degrees.

Part III

Keyword Syllabus:

VE history, Job Plan, Functional analysis: customer/task FAST diagram, technical FAST diagram, Cost analysis: pareto's law, cost model, life-cycle cost model, Creative technique: two cardinal ground rules, brainstorming technique, Gordon technique, Evaluation: trade-off analysis, paired comparisons, evaluation matrix

Recommended Reading:

- **Texts:**
 1. Bytheway C.W. (2007) FAST, creativity and Innovation. U.S.A.: J.Ross Publishing.
 2. Dell'Isola, A. (1997) Value Engineering: Practical Applications. Kingston, Mass.: R.S. Means Company.
 3. Kelly, J. (2003) Value Management of Construction Projects, Oxford: Blackwell Science
 4. Kelly, J. and Male, S. (1993) Value Management in Design and Construction. U.K.: E & FN Spon
 5. Park, D.E. (1985) Value Engineering Theory, Lawrence D. Miles Foundation, U.S.A.: Washington DC
 6. Woodhead R., McCuish J (2002) Achieving Results - How to Create Value.London: Thomas Telford Publishing.
 7. Zimmerman, L.W. and Hart, G.D (1992) Value engineering: a practical approach for owners, designers, and contractors. New York: Van Nostrand Reinhold
 8. Value Management: its Place in the Construction Industry [videorecording], London: Einstein Network
 9. SAVE International Conference Proceedings, USA: SAVE
 10. HKIVM International Conference Proceedings, HK: HKIVM
 11. The Value Manager. H.K.: Hong Kong Institute of Value Management
 12. Value World, Irving, Tex, U.S.A. : Society of American Value Engineers
 - **Online Resources:**
 1. Lawrence Delos Miles Value Foundation , <http://www.valuefoundation.org/>
 2. SAVE International "The Value Society" , <http://www.value-eng.org/>
 3. The Institute of Value Management , <http://www.ivm.org.uk/>
 4. Value Engineering Analysis and Management Academic Community, <http://www.brookes.ac.uk/other/veamac/>
 5. Hong Kong Institute of Value Management , <http://www.hkivm.com.hk/>
 6. Behaviour Construction Management , <http://bcm.cityu.edu.hk/>
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