



# THE FEDERAL UNIVERSITY OF TECHNOLOGY, AKURE

## *Department of Quantity Surveying*

### QSV 504 – Cost Control II

#### COURSE PARTICULARS

**Course Code:** QSV 504

**Course Title:** Cost Control II

**No. of Units:** 3

**Course Duration:** Two hours of lectures and one hour of tutorial per week for 15 weeks.

**Status:** Compulsory

**Course Email Address:** qsv504@futa.edu.ng

**Course Webpage:** <http://www.qsv.futa.edu.ng/courseschedule.php?coursecode=QSV%20504>

**Prerequisite:** QSV 503 (Cost Control I)

#### COURSE INSTRUCTORS

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#### COURSE DESCRIPTION

This course is an explanatory, designed primarily for students in quantity surveying discipline. However, it also meets the need of students in other environmental study fields, as a course that provides training on cost computation and prediction. The focus of the course is to impart useful skills on the students in order to enhance their cost forecasting and value analysis with respect to deployment of scarce construction resources at higher levels. Topics to be covered include cost in use studies, cash flow forecasting, investment appraisal, cost benefit analysis, modern estimating techniques, feasibility studies, cost modeling and value analysis.

#### COURSE OBJECTIVES

The objectives of this course are to:

- Enable the student understand the cost categories pertinent to cost in use studies
- Evaluate project design alternatives based on cost categories
- Develop skills to compute cash flow forecasting to ensure adequate working capital necessary for construction activities
- Determine the viability of project investment alternatives and its profitability through a long term cost benefit analysis
- Assess the practicability and worthiness of project investment alternatives through feasibility study.
- Provide student with opportunities to develop estimating skills with respect to the deployment of scarce construction resources
- Understand the logical and sequential team approach to function definition and creativity through application of job plan to the study of value

## **COURSE LEARNING OUTCOMES / COMPETENCIES**

Upon successful completion of this course, the student will be able to:

*(Knowledge based)*

- Explain cost categories involved in cost in use studies
- Prepare cash flow forecasting for construction organization
- Appraise project investment to establish priority among competing alternatives
- Understand purpose and function of cost model in estimating
- Understand the framework of job plan in value analysis

*(Skills)*

- Take design and construction decisions on the basis of cost in use analysis
- Forecast cash flow to ensure sufficient liquidity in construction activities
- Assess the viability and profitability of project investment alternatives
- Transcend from cost to value derivatives on construction projects

## **GRADING SYSTEM FOR THE COURSE**

This course will be graded as follows:

Attendance	5%
Assignments	15%
Test(s)	20%
<u>Final Examination</u>	<u>60%</u>
<b><u>TOTAL</u></b>	<b><u>100%</u></b>

## GENERAL INSTRUCTIONS

**Attendance:** It is expected that every student will be in class for lectures and also participate in all tutorial classes. Attendance records will be kept and used to determine each person's qualification to sit for the final examination. In case of illness or other unavoidable cause of absence, the student must communicate as soon as possible with the instructor, indicating the reason for the absence.

**Academic Integrity:** Violations of academic integrity, including dishonesty in assignments, examinations, or other academic performances are prohibited. You are not allowed to make copies of another person's work and submit it as your own; that is plagiarism. All cases of academic dishonesty will be reported to the University Management for appropriate sanctions in accordance with the guidelines for handling students' misconduct as spelt out in the Students' Handbook.

**Assignments and Group Work:** Students are expected to submit assignments as scheduled. Failure to submit an assignment as at when due will earn you zero for that assignment. Only under extenuating circumstances, for which a student has notified the instructor in advance, will late submission of assignments be permitted.

**Code of Conduct in Lecture Rooms and tutorials:** Students should turn off their cell phones during lectures. Students are prohibited from engaging in other activities (such as texting, watching videos, etc.) during lectures. Food and drinks are not permitted in the class.

## READING LIST

<sup>1</sup> Ashworth, A. (1994); *Cost Studies of Buildings*, Published by Longman Group, London. P. 311

<sup>1</sup>Harris, F. and McCaffer, R. (1995); *Modern Construction Management*, Published by Blackwell Science, London. P. 588

<sup>1</sup>Hutchinson, K. (1995); *Building Project Appraisal*, Published by Macmillan Press, London.

<sup>1</sup>Kelly, J., Male, S. and Graham, D. (2008); *Value Management of Construction Projects*, Published by Blackwell Science, London. P.369

<sup>1</sup>Kelly, J., Morledge, R. and Wilkinson, S. (2004); *Best Value in Construction*, Published by Blackwell Science, London. P.306

<sup>4</sup>Kelly, J. and Male, S. (2001); *Value Management in Design and Construction*, Published by E & FN Spon, London. P.101

<sup>1</sup>Kirkham, R. (2008); *Cost Planning of Buildings*, Published by Blackwell Science, London. P.388

<sup>1</sup>Mishan, E. J. (1994); *Cost Benefit Analysis*, Published by Academic Division of Unwin Hyman Limited, London. P.461

<sup>1</sup> Seeley, I. (1983); *Building Economics*, Published by Macmillan, London. P.298

**Legend**

- 1- Available in the University Library
- 2- Available in Departmental/School Libraries
- 3- Available on the Internet.
- 4- Available as Personal Collection
- 5- Available in local bookshops.

## COURSE OUTLINE

Week	Topic	Remarks
1	Introduction & justification of cost in use studies. Considerable factors for design & construction alternatives to cost in use studies.	During this first class, the expectation of the students from the course will also be documented.
2 & 3	Definition of cost in use studies. Explanation of terms contained in the definition. Current and future costs. Application of standard tables. Worked examples.	Understanding of the students on the cost categories involved in cost in use will be tested.
4 & 5	Cashflow forecasting; factors affecting cashflow forecasting; data needed for cashflow forecasting; worked example; factors affecting capital lock-up.	Practical exercise will be carried out in the class on how to compute cash flow forecasting.
6 & 7	Techniques of investment appraisal; worked examples on conventional method; worked examples on Discounting methods.	Exercises will involve on how to determine the viability of project investment alternatives.
8	<b>MID-SEMESTER TEST</b>	
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9	Cost benefit analysis; modern estimating techniques; cost modeling.	Understanding of the students on purpose and function of cost model in estimating will be tested.

10 & 11	Feasibility study; types of feasibility study; purpose of feasibility study; format & worked examples of feasibility study.	Worked examples to assess the practicability and worthiness of project investment alternatives will be carried out in the class.
12 & 13	Philosophy of value analysis; terms contained in the definition of value; explanation on process of JOB PLAN; definition and justification of value management.	The application of JOB PLAN framework to construction process will be explained in the class.
14 & 15	REVISION	This is the week preceding the final examination. At this time, evaluation will be done to assess how far the students' expectations for the course have been met.