

Module Guide

Project Appraisal and Cost Control

EBB-5-120

School for the Built Environment and Architecture

Level 5

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1. MODULE DETAILS

Module Title:	Project Appraisal and Cost Control
Module Level:	5
Module Reference Number:	
	20 CAT Points
Student Study Hours:	15
Contact Hours:	45
Private Study Hours:	140
Pre-requisite Learning (If applicable):	
Co-requisite Modules (If applicable):	None
Course(s):	BSc QS, BSc Quantity Surveying
	(Commercial Management)
Year and Semester	Semester 1: Year 2 FT & Year 3 PT
Module Coordinator:	Upeksha Madanayake (UM)
MC Contact Details (Tel, Email, Room	madanau2@lsbu.ac.uk
Ext.) Teaching Team & Contact	Upeksha (UM)- 7638, Itua (IO)- 7150,
, -	Raf- 7220, Bert- 7622
Details Subject Area:	Built Environment
Summary of Assessment Method:	The module is assessed by one in-course
	group assignment and one in-course individual
	controlled assessment consisting of a timed
	assignment
External Examiner appointed for module:	Damilola Ekundayo
	Programme Leader – BSc (Hons) QS F/T
	University of Salford
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2. SHORT DESCRIPTION

The module will focus on the QS techniques for appraising projects, developing cost plans, project budget and cashflow, controlling contract costs, valuation procedures and dealing with the administration of contracts and payments.

3. <u>AIMS OF THE MODULE</u>

The aims of this module are to develop a critical understanding of the range of appraisal techniques used by quantity surveyors, commercial managers or cost consultants and to understand the QS work patterns and use of these techniques at different project stages and the RIBA Plan of work. The specific objectives are as follows:

- Understand the development context need for projects, types of projects and stages in the development process and the basic concepts in project appraisal - costs and benefits matrix, capital and operational costs;
- Understand project and investment appraisal techniques including discounted cash flow and internal rates of return. Understand property investment decisions and the relationship between yield, rent and value;
- Appreciate how risk is evaluated and managed in a construction context by understanding the role of risks in cost calculations;
- Forecast cost of building projects at the pretender stage using BCIS and on-line information services for cost forecasting. Understand how to determine costs based upon limited information and subsequent adjustment as more detailed information becomes available and to appreciate the role of indices in cost calculations;
- Apply whole life costing principles and models to predict cost, compare cost of alternative design solutions and appraise different design including environmental criteria;
- Construct the project cost budget and the project cash flow and apply cost control and monitoring systems and procedures.

4. LEARNING OUTCOMES

4.1 Knowledge and Understanding

On completion of the module the student should comprehend the QS systems and methods used by for appraising and controlling the financial elements of projects.

4.2 Intellectual Skills

On completion of the module the student should be capable of assembling information and data from a variety of sources and discern and establish connections.

4.3 Practical Skills

Use & interpret cost data and methods in order to forecast probable future costs.

4.4 Transferable Skills

On completion of the module the student should be capable of:

- 1. Communicating effectively by oral, written and visual means in a form appropriate to the intended audience, with appropriate acknowledgement and referencing of sources;
- 2. Applying statistical and numerical skills to an appropriate level;
- 3. Learning effectively and independently.

5. ASSESSMENT OF THE MODULE

This module is assessed by one in course assignment and one summative timed assignment (class based test).

Each component contributes 50% towards the module assessment.

A brief for the individual in course assignment including detailed assessment criteria and marking allocations are provided in Section 12 of this Guide.

ELEMENT	TITLE	WEIGHTING	MINIMUM ELEMENT PASS	MINIMUM MODULE PASS
In-course Assignment 1	Group assignment	50	35	40
Summative Assignment 2	Controlled examination (class test)	50	35	40

The minimum mark for the module is 40%.

The deadline for submission of Assignment 1 (Group Assignment) is **week 11**. The summative assignment (class test) will be in **week 12**.

6. FEEDBACK

Feedback will normally be given to students 15 working days after the final submission of an assignment or as advised by their module leader.

General feedback, applying to all students, will also be placed on the module VLE site within 15 working days.

7. INTRODUCTION TO STUDYING THE MODULE

7.1 Overview of the Main Content

A number of project and appraisal techniques will be covered and you will be given the opportunity to develop understanding by using them. You are also expected to develop an understanding of Pre-tender cost forecasting including use of the BCIS database, whole life costing, cost control and monitoring systems, project cost budget and cashflow, the context within which they are used and a critical appreciation of their use.

7.2 Overview of Types of Classes

A mixture of formal lectures and problem based seminars/tutorial support for the assignments. Some learning outside of the classroom is directed learning.

7.3 Importance of Student Self-Managed Learning Time

Student responsibility in the learning and development process will be emphasised. Students are required to undertake directed self-study and prepare solutions/discussions to questions relative to various topic areas. Students will be encouraged to identify for themselves particular problems of difficulty and to use seminar discussions, where appropriate, for the resolution of these. Students must regularly access the Moodle site for this module. They should download the class/lecture material from the Moodle site, and do the recommended reading, before each lecture/class.

Where appropriate, students are also expected to download the relevant seminar questions and study them in advance of each seminar, in order to derive maximum benefit from seminar time. The programme of teaching, learning and assessment gives guidance on the textbook reading required for each week, the purpose of which is to encourage further reading both on and around the topic.

7.4 Employability

This module is important to all those who wish to work as quantity surveyors in the construction industry. Every construction project is a unique process and, as such it is necessary for the industry to utilise and communicate information in as accurate and comprehensible form as possible. The collation and imparting of cost information, is an essential skill for all quantity surveyors.

8. <u>THE PROGRAMME OF TEACHING,</u> <u>LEARNING AND ASSESSMENT</u>

Wk No 1	Format Lecture	Topic Introduction	Lecturer UM/IO
		The development context, basic concepts in project appraisal, principles of compounding and discounting, discounted cashflow	
2	Lecture	The speculative development process	UM/IO
3	Lecture	Whole Life Costing	UM/IO
4	Lecture	Sensitivity analysis and risk management	UM/IO
5	Lecture	Pre-tender estimates using BCIS, indices and risk	UM/IO
6	Lecture	Developing the cost plan	UM/IO
7	Lecture /	Value management	UM/IO
8	Workshop Lecture	Cost control, monitoring systems and procedures	UM/IO
9	Workshop / Tutorial	Whole Life Costing	UM/IO
10		Sustainability and project evaluation	UM/IO
11		Module review and revision	UM/IO
12	Assessment	Timed assignment	UM/IO
		CHRISTMAS VACATION	
13		Feedback and administration	UM/IO
14		Examination period	UM/IO
15		Examination period	UM/IO

9. STUDENT EVALUATION

A module evaluation questionnaire will be used to obtain feedback from students at the end of the module. The module has generally been well received and highly rated in previous years. In particular, the integration of key guest lectures to provide practical reference points has proved popular among past cohorts. Evaluation responses are also reviewed to ensure that the module continues to reflect specific feedback where appropriate.

10. LEARNING RESOURCES

10.1 Reading List

Link to Access On-Line Module Reading Lists (Moodle)

10.2 Library and Learning Resources (LLR)

Finding research materials and referencing them

Students are encouraged to make use of the academic resources to support their research. There is a list of resources including Technical Indexes, British Standards Online, Business Source Complete and ScienceDirect on the Library subject page for your subject area on MyLSBU. They can be accessed 24/7 from any location with an Internet connection.

Support for students:

- □ You are encouraged to book our workshops to learn about finding resources and how to reference them: MyLSBU > Library > Event Booking.
- If you need help quickly, visit our drop-in Research Help Desk located on Level 3 Bridge in the Perry Library (open Monday-Friday 11:00-16:00 term time).
- □ If you would like further help, please contact us at: <u>LLRbea@lsbu.ac.uk</u>.

Students IT support and the Learning Resources Centre (LRC)

Students can contact LRC for IT issues such as LSBU account, printing, and accessing wifi network: <u>LLRithelpdesk@lsbu.ac.uk</u>.

You are encouraged to book our IT workshops via MyLSBU > Library > <u>Event Booking</u>. If you need further help, please contact <u>LLRittt@lsbu.ac.uk</u>.

11. <u>NOTES</u>

Additional lecture notes and related material will be available on Moodle as the module progresses.

12. IN-COURSE ASSIGNMENT DETAILS

IN-COURSE ASSIGNMENT 1 (GROUP ASSIGNMENT)

HAND IN DATE :WEEK 11 THURSDAY 5th DECEMBER 2019SUBMISSION MODE:VLE (MOODLE)

Introduction

This assignment is designed to test your understanding of appraisal techniques used to help clients make decisions about alternative design solutions. The tasks are specified and an explanation of what is required is provided, as well as an indication of the criteria that will be used when marking your assignment.

Tasks

You are employed by a consulting company and have been asked to present a report in relation to alternative <u>window</u> specifications for a local authority in a *poor neighbourhood in London* characterised by a *high level of crime and burglary*. The purpose of this report is to allow the local authority to make an informed decision about choice of windows for their housing projects. The report should have the following sections:

1 An introduction

Need a brief explanation of the brief relating to what you were asked to do to provide the context for the report.

2 Whole life cost comparison

Compare the whole life/ life cycle costs of alternative window specifications, assuming a 60-year life cycle and using an appropriate discount rate. You should choose *three completely different* windows for your evaluation. All windows should meet minimum performance requirements. These requirements and assumptions <u>must</u> be clearly stated in your report.

3 Multi-criteria assessment

As a consultant to the local authority, explain and demonstrate numerically how you would make your selection for the most suitable window from three different types of windows using at least five distinct and relevant performance criteria. You are asked to develop a list of criteria and attempt to score each specification against the criteria to arrive at a total performance score for each design option/specification. A brief explanation of the criteria used, weighting and scoring system must also be provided.

4 Conclusion and discussion of approaches used

The final section of your report should summarise your findings, but also highlight any difficulties that you experienced in undertaking this comparison and the limitations in relation to the techniques used that you feel your employer should be aware of. This section should draw on what you have read about these approaches and your own experience in using these approaches.

5 Annex

List the sources that you have used, identify the information that has come from the sources and how you have used this data to arrive at the figures presented in the report. There is a need for a clear "audit trail" in, order to assess your report. Please <u>do not</u> <u>include</u> a stack of brochures and photocopies of every source you have consulted.

Assessment Criteria

The report is to be word-processed and should be written in report style. It will be assessed in relation to the following criteria (**marking allocation shown in brackets**):

- Introduction: brief context and background to the report; clear aim and objectives of the report (10%)
- Life cycle cost study: choice of windows; clear and appropriate statement of minimum performance; appropriateness of assumptions; appropriate and justified choice of discount rate; inclusion of relevant costs; and correct use of technique (35%)
- Multi-criteria evaluation to determine performance score: appropriate criteria and clear description of each criterion; appropriateness of weighting and scoring (20%)
- Conclusion and discussion: appropriate conclusion for the report; concise clear summary of findings; well-informed discussion or reflection on the difficulties and limitations of the techniques (10%)
- Report presentation: style and format; clarity in communication through tables and text, spellings and use of English (10%)
- Annex: evidence of the thoroughness of your research for data (but <u>not</u> the quantity of documentation that you have accumulated); appropriate use of the data; support for the figures included in your report (15%)