

Unit 1: Individual Project (Pearson-set)

Unit code R/615/1387

Unit type Core

Unit level 4

Credit value 15

Introduction

The ability to define, plan and undertake a project is a critical set of skills needed in various roles within the construction industry. Identifying appropriate information and analysing this, to formulate clear results or recommendations, is required to underpin many of the processes that inform construction projects.

The aim of this unit is to support students in using and applying the knowledge and skills they have developed through other areas of their studies to complete and present an individual project. In addition, this unit will provide students with key study skills that will support them in further study.

Students will be able to identify, define, plan, develop and execute a successful project by working through a clear process. They will develop a project brief; outlining a problem that requires a solution, as well as a project specification, the specific requirements of which the final outcome must meet. They will research the problem, undertaking a feasibility study, and consider a range of potential solutions using critical analysis and evaluation techniques to test, select and contextualise their preferred solution. Students will provide a work and time management plan, keeping a diary of all activities, reflecting on their process and their learning throughout the project.

Learning Outcomes

By the end of this unit students will be able to:

1. Formulate a project that will provide a solution to an identified problem.
2. Manage a project within agreed timescales and specification; documenting the process throughout.
3. Evaluate potential project management solutions.
4. Produce a project report and deliver a presentation of the final project outcomes.

Essential Content

LO1 **Formulate a project that will provide a solution to an identified problem**

Project identification

Research methods

Feasibility Studies

Brief and specification

LO2 **Manage a project within agreed timescales and specification, documenting the process throughout**

Resources and resource planning

Costs and cost planning

Work plan:

Gantt charts.

Project Evaluation and Review Technique (PERT) charts.

Critical Path Method (CPM).

Project tracking:

Progress tracking.

Milestones.

LO3 **Evaluate potential project management solutions**

PERT analysis

CPM analysis

LO4 **Produce a project report and deliver a presentation of the final project outcomes**

Report formats

Presentation techniques

Learning Outcomes and Assessment Criteria

Pass	Merit	Distinction
LO1 Formulate a project that will provide a solution to an identified problem		LO1 LO2 D1 Evaluate the relationship between project identification, feasibility and project planning, with consideration of the impact of project scope on time and resources.
P1 Select an appropriate construction-based project, giving reasons for your choice. P2 Identify the main components of a project specification.	M1 Explain why the project specification is of fundamental importance to a successful project outcome.	
LO2 Manage a project within agreed timescales and specification, documenting the process throughout		
P3 Identify potential resources, costs and timescales. P4 Describe a range of appropriate techniques for generating realistic potential solutions.	M2 Prepare and update a project management plan, using standard systems of time and resource tracking.	
LO3 Evaluate potential project management solutions		LO3 LO4 D2 Appraise your own performance in managing the project; draw conclusions and make recommendations that would further improve your performance in the future.
P5 Explore project management strategies to determine suitability for a given project. P6 Justify the selection of your preferred solution, making reference to your initial project specification.	M3 Compare the outcomes of your initial planned resources, timescales and costs against actual outcomes.	
LO4 Produce a project report and deliver a presentation of the final project outcomes		
P7 Produce a written report identifying each stage of the project. P8 Utilise appropriate forms of referencing and citation in the preparation of a written report. P9 Prepare a presentation of your final project outcomes, utilising industry standard software.	M4 Present your final project outcomes and recommendations to a selected audience.	

Recommended Resources

Textbooks

BALDWIN, A. (2014) *Handbook for Construction Planning and Scheduling*. London: Wiley-Blackwell.

BUSSEY, P. (2015) *CDM 2015: A Practical Guide for Architects and Designers*. London: RIBA.

CIOB (2010) *Guide to Good Practice in the Management of Time in Complex Projects*. London: Chartered Institute of Building.

GOETSCH, D. L. (2011) *Construction Safety & Health*. London: Pearson.

KELLY, J. and MALE, S. (1992) *Value Management in Design and Construction: The Economic Management of Project*. London: Taylor & Francis.

POTTS, K. and ANKRAH, N. (2014) *Construction Cost Management: Learning from Case Studies*. London: Routledge.

LAWSON, B. (2005) *How Designers Think: The Design Process Demystified*. London: Routledge.

WYATT, D. (2007) *Construction Specifications: Principles and Applications*. New York: Delmar.

Links

This unit links to the following related units:

Unit 5: Legal & Statutory Responsibilities in Construction

Unit 6: Construction Information (Drawing, Detailing, Specification)