



Project Management

Unit Type: Mandatory

Level: 4

Credits: 15

GLH: 75

Assessment Method: Examination

In the current business environment, a key business skill covering multiple disciplines and business sectors is the ability to manage projects from inception to a successful delivery. This is a different challenge to being involved with regular 'business as usual' work as very often projects will be considered 'mission critical' as the outcomes will impact directly the overall performance of the business organisation. Taking into account this priority, this unit expands the basic theory of project management into a practical, operational context and integrates all the fundamental tools and techniques required to manage business projects successfully.

You will be exposed to a set of modern project management techniques: network planning, critical path analysis, costing/budgeting, and resource management. Subsequent activities include progress monitoring, trouble-shooting, and controls.

On successful completion of this unit, you will be able to apply the tools and techniques to a variety of business projects in your place of employment. A careful application will increase the chance of the project being successful in terms of the deliverables being fit for purpose, meeting agreed delivery deadlines, and staying within the budget cost agreed at the outset. Being able to contribute in this way should have a successful impact on the performance of the organisation.



What you'll learn

The table below shows the learning outcomes of this unit (what you will be able to do or what you will know), along with the assessment criteria (what you will be able to do to demonstrate achievement of the learning outcome).

Learning Outcomes <i>The learner will:</i>	Assessment Criteria <i>The learner can:</i>
1. Discuss the concept of the project life cycle in a variety of business organisations and contexts (Weighting 25%)	1.1 Explain the sequential stages of the project management life cycle and the activities which are carried out at each stage 1.2 Apply the basic concept of a project business case based on a set of basic cost and revenue inputs, including the application of some simple metrics such as Return on Capital, Payback and net present value (NPV) 1.3 Discuss the concept of a work breakdown structure (WBS) 1.4 Discuss the risks that may emerge on a major project
2. Develop a project plan based on a set of input data (Weighting 25%)	2.1 Construct a network diagram from a set of tasks 2.2 Develop a simple Gantt chart from a set of tasks 2.3 Apply critical path analysis to determine the planned duration of a project 2.4 Calculate the start and finish dates of a project and its tasks
3. Calculate a resource-based budget for a project based on a set of inputs (Weighting 25%)	3.1 Explain the variety of resources needed by a project 3.2 Explain what is meant by top-down and bottom-up project budgets 3.3 Calculate the cost of time-related and fixed price resources 3.4 Total all resource costs to arrive at a bottom-up project budget
4. Explain how a project could be monitored and controlled during the execution phase (Weighting 25%)	4.1 Explain the concepts of a baseline plan and an approved budget 4.2 Calculate the difference between planned and actual progress 4.3 Explain a range of tactics that could be used to recover lost time 4.4 Discuss how project management software can be used to plan and monitor a project



Capabilities

Alongside academic learning and development, ABE's qualifications have been designed to develop your practical skills and capabilities. These capabilities are highlighted as certain values, knowledge, skills, and behaviours that will help you in your professional development.

Below is an overview of the behaviours, skills, and attitudes that you will develop through this unit:

Element of learning	Key capabilities developed
Element 1 - The project life cycle	Knowledge of the core concept and application of the project life cycle Ability to identify potential risks <i>Project management, planning, application of simple metrics</i>
Element 2 - Project planning	Development of practical planning skills for a project <i>Network diagrams, Gantt charts, critical path analysis, planning</i>
Element 3 - Project budgets	Development of practical budgeting skills for a project <i>Identifying resources, setting budgets, calculating cost</i>
Element 4 - Project tracking	Development of tracking and control skills for a project. <i>Using plans and budgets, monitoring progress, tactics for recovering lost time, options for use of project management software</i>

Localisation

It is very important when studying for your ABE qualification that you consider your local business environment and try to apply what you are learning to relevant scenarios in your local business context. Doing this will help you to put your learning into practice and use it in your professional day-to-day activities.

A significant advantage of studying project management is that the core principles, tools and techniques generally transcend all international boundaries and the basic concepts covered on this module are unaffected by the local business environment.



Indicative Content

1. Discuss the concept of the project life cycle in a variety of business organisations and contexts (Weighting 25%)

1.1 Explain the sequential stages of the project management life cycle and the activities which are carried out at each stage

- The concept, application and importance of the project life cycle (PLC)
- Typical project lifecycle phases – initiation, planning, execution, closure and evaluation
- The activities which generally take place at each stage of the project life cycle

1.2 Apply the basic concept of a project business case based on a set of basic cost and revenue inputs, including the application of some simple metrics such as Return on Capital, Payback and NPV

- What precisely is meant by a project 'business case'
- Developing a simple table of positive and negative cash flows over the lifetime of a project, based on a set of basic cost and revenue inputs
- The application of appraisal metrics such as Return on Capital, Payback and Net Present Value (NPV)
- Deciding whether a project may be financially viable

1.3 Discuss the concept of a work breakdown structure (WBS)

- The basic concept of a work breakdown structure (WBS) with simple examples to analyse
- Understanding how project complexity can be managed by breaking down the scope of work into a simple hierarchy of work
- Using the WBS to estimate overall costs

1.4 Discuss the risks that may emerge on a major project

- A consideration of the typical risks encountered on a significant business project
- The basic risk management process: identification, analysis, prioritisation, response, monitoring/review
- Recommending appropriate responses to various risks

2. Develop a project plan based on a set of input data (Weighting 25%)

2.1 Construct a network diagram from a set of tasks

- Create a network diagram based on a set of inputs (e.g. a table of tasks with estimated durations and predecessors)

2.2 Develop a simple Gantt chart from a set of tasks

- Create a Gantt chart based on a set of inputs (e.g. a table of tasks with estimated durations and predecessors)

2.3 Apply critical path analysis to determine the planned duration of a project

- Isolate the critical path on a network diagram
- Find the planned duration of the project

2.4 Calculate the start and finish dates of a project and its tasks

- Calculate start and finish dates for the project and individual tasks
- Calculate and interpret float on individual tasks
- Assess options for saving time



3. Calculate a resource-based budget for a project based on a set of inputs (Weighting 25%)

3.1 Explain the variety of resources needed by a project

- The key types of resources required by a project: finance, human resources, equipment, facilities, and materials

3.2 Explain what is meant by top-down and bottom-up project budgets

- The differences and similarities between top-down and bottom-up approaches to project budgeting

3.3 Calculate the cost of time-related and fixed price resources

- Quantify time-related and fixed price resources
- Determine the budget cost of each project task

3.4 Total all resource costs to arrive at a bottom-up project budget

- Calculate the total budget for a project
- Identification of options for reducing costs

4. Explain how a project could be monitored and controlled during the execution phase (Weighting 25%)

4.1 Explain the concepts of a baseline plan and an approved budget

- Concept of a baseline plan
- Concept of an approved budget

4.2 Calculate the difference between planned and actual progress

- Interpretation of a Gantt chart to determine the planned progress of any task at any point
- Comparison of planned and actual progress for each task
- Comparison of actual spending with the budget for each task and the entire project

4.3 Explain a range of tactics that could be used to recover lost time

- Options for interventions where required to recover lost progress

4.4 Discuss how project management software can be used to plan and monitor a project

- Ways in which project management software can be used to plan and monitor a project