Business & Computing Examinations (BCE)
LONDON (UK)

Project Management Programme Analysis

The development of BCE programmes include extensive market research from the following sources:

- Data from BCE Centre Annual Reports.
- Enquiries received from different stakeholders.
- Email survey from statutory consultees and stakeholder bodies.
- Questionnaire survey from BCE learners.
- Input received during Approved Centres and Corporate companies training seminar.
- BCE discussions and feedback from potential employers.

BCE learners are 18+, classified as follows:

- Holders of General Certificate of Secondary Education (GCSE) intending to obtain a programme for employment or further education.
- Those already in employment furthering their knowledge for promotion or to venture into new fields.
- Corporate Companies approaching BCE directly or Approved Centres for in-house training.
- Those looking for career change.
- Mature adults with no formal programmes.

Guided Learning Hours is the entire notional learning hours representing estimate of total amount of time reasonably required for learners to achieve necessary level of attainment for the award of a programme.

Activities that contribute to guided learning hours include:

- Guided Learning
- Independent and unsupervised research/learning
- Unsupervised compilation of a portfolio of work experience
- Unsupervised e-learning
- Unsupervised e-assessment
- Unsupervised coursework
- Watching a pre-recorded podcast or webinar
- Unsupervised work-based learning

Activities that contribute to Guided Learning include:

- Classroom-based learning supervised by a Tutor
- Work-based learning supervised by a Tutor
- Live webinar or telephone tutorial with a Tutor in real time
- E-learning supervised by a Tutor in real time
- Forms of assessment

Level 5 Diploma in Project Management (145 Credits)

Project management is an approach of planning, organising, and managing resources to bring about the flourishing achievement of specific project goals and objectives.

Why does the programme exists – The programme provides a framework to guide the progress of projects, which is crucial in today's environment. Accurate, timely, and relevant information is essential to the decision-making process of an organisation, quality management plays a key role in assuring the organisation meets the customer requirements.

How does it fits into the larger programme – Every organisation needs to focus on quality, planning, executing and coordinating a variety of projects. Project Management is an essential element of operations in today's advancing, team-based business industries.

For who it was designed – The programme is designed for those in management or learners interested in pursuing fundamental skills in using methodology and processes to reach goals and complete tasks.

How it will benefit learners – Project Management careers are generally pursued at the management level. Every industry that requires planning, execution, control or supervision of team members, and closing of the project is overseen by an assigned project manager.

Units:
- Project Management Skills
- Project Management Information Systems
- Business Analysis
- Project Quality Management
- Project Risk Management

Project Management Skills - project management is a set of agreed upon knowledge (rules) that allow one to manage and communicate all the details, schedules, people, budgets, performance etc. that goes in to creating 'new' stuff. Project management is an approach of planning, organizing, and managing resources to bring about the flourishing achievement of specific project goals and objectives. Project management is a carefully planned and organised effort to accomplish a specific (and usually) one-time effort, for example, constructing a building or implementing a new computer system. Project management includes developing a project plan, which include defining project goals and objectives, specifying tasks or how goals will be achieved, what resources are needed, and associating budgets and timelines for completion. It also includes implementing the project plan, along with careful controls to stay on the "critical path", that is, to ensure the plan is being managed according to plan. Project management usually follows major phases (with various titles for these phases), including feasibility study, project planning, implementation, evaluation and support/maintenance.

Project Management Information Systems - provides a framework to help guide the progress of IT projects. In life, something is born, grows, matures and eventually dies – this is known as System Life Cycle, and the same applies to computer projects. We all know that accurate, timely, and relevant information is essential to the decision-making process of a project and that relying on an inadequate information system puts a project at risk. We all know that information is a valuable resource for project managers. Despite the fact that we all know these things, project managers often fail to deliver the types of information needed to ensure project success. Implementing a project management information system is one way to address critical project information needs.

Business Analysis – Business Analysis is a term which refers to the process of firstly identifying the needs of the business and then developing and implementing the solutions to meet them. Business analysis techniques are applied to develop an appropriate plan and then put it in to action. Business Analysts are an important asset to every business, they apply their skills to take the big picture and break it into smaller parts, making it easier to ensure that company resources are being utilised in the most efficient manner. Business analysis always focuses upon goals, but in a bi-directional fashion. Business analysis can be implemented to both set goals, and to achieve them. These goals will cover strategic business practices encompassing IT, business processes, corporate policies, structure and trading strategies across the entire enterprise.

Project Quality Management - is all about the synergy of continuous improvement of the project and the principal of project delivery. Using a Quality Management approach plays a key role in assuring the project meets the customer requirements. The three processes associated with Project Quality Management are:
Quality Planning – identifies the standards which are relevant to the project and how to assure the standards are achieved. This is a key process of the planning process group. **Quality Assurance** is the execution of the quality activities during project execution. **Quality Control** is monitoring deliverables to evaluate whether they comply with the project's quality standards and to identify how to permanently remove causes of unsatisfactory performance. This process occurs as a part of the monitoring and controlling process group.

Project Risk Management - risk is something that may happen and if it does, will have a positive or negative impact on the project. A few points here. "That may happen" implies a probability of less than 100%. If it has a probability of 100% - in other words it will happen - it is an issue. An issue is managed differently to a risk. A risk must also have a probability something above 0%. It must be a chance to happen or it is not a risk. The second thing to consider from the definition is "will have a positive or negative impact". Almost everything in today's business world involves a risk of some kind: customer habits change, new competitors appear, and factors outside the organisation control could delay a project. But formal risk analysis and risk management can help to assess these risks and decide what actions to take to minimize disruptions. They will also help to decide whether the strategies used to control risk are cost-effective.

Unit	Pre-requisite	Core-requisite	Guided Learning Hours	Number of Credits
Project Management Skills	Knowledge of computing and management.	A pass or better at Diploma Level 5.	260	26
Project Management Information Systems	Knowledge of computing and management.	A pass or better at Diploma Level 5.	240	24
Business Analysis	Knowledge of computing and management.	A pass or better at Diploma Level 5.	220	22
Project Quality Management	Knowledge of computing and management.	A pass or better at Diploma Level 5.	280	28
Project Risk Management	Knowledge of computing and management.	A pass or better at Diploma Level 5.	240	24
Coursework (Project) for all units			210	21

Rules of combination:	All units are mandatory
Age Group:	19+
Programme Type:	Vendor/Industry

Project Management Learning Hours Information Sheet

	Unit Titles	Credits	Notional Learning Hours					
			Guided / Contact Learning	Independent Learning	Research Activities / Group Work	Assessment (self/class)	Coursework	Total
01	Project management life cycle methodology	2.0	8	6	2	2	2	20
02	Strategic project management	2.0	8	6	2	2	2	20
03	Communication management	2.0	8	6	2	2	2	20
04	Project scope management	2.0	8	6	2	2	2	20
05	Project time and cost management	2.0	8	6	2	2	2	20
06	Developing a project plan	2.0	8	6	2	2	2	20
07	Resource scheduling	2.0	8	6	2	2	2	20
08	Reducing project duration	2.0	8	6	2	2	2	20
09	Effective project management	2.0	8	6	2	2	2	20
10	Project partnering	2.0	8	6	2	2	2	20
11	Monitoring time performance	2.0	8	6	2	2	2	20
12	Project audit and closure	2.0	8	6	2	2	2	20
13	Managing international projects	2.0	8	6	2	2	2	20
		26.0	104					260

Project Management Information Systems Learning Hours Information Sheet

	Unit Titles	Credits	Notional Learning Hours					
			Guided / Contact Learning	Independent Learning	Research Activities / Group Work	Assessment (self/class)	Coursework	Total
01	Challenges of IT projects	2.0	8	6	2	2	2	20
02	Initiating a project	2.0	8	6	2	2	2	20
03	Project development plan	2.0	8	6	2	2	2	20
04	Project organisation	2.0	8	6	2	2	2	20
05	Project scope management	2.0	8	6	2	2	2	20
06	Work Breakdown Structure concept	2.0	8	6	2	2	2	20
07	Project schedule and budgeting tools	2.0	8	6	2	2	2	20
08	Project communication plan	2.0	8	6	2	2	2	20
09	Change management	2.0	8	6	2	2	2	20
10	Project procurement	2.0	8	6	2	2	2	20
11	Project leadership skills	2.0	8	6	2	2	2	20
12	Project implementation and evaluation	2.0	8	6	2	2	2	20
		24.0	96					240

Business Analysis Learning Hours Information Sheet

	Unit Titles	Credits	Notional Learning Hours					
			Guided / Contact Learning	Independent Learning	Research Activities / Group Work	Assessment (self/class)	Coursework	Total
01	Business Analysis Techniques	2.0	8	6	2	2	2	20
02	Business financial statements and analysis tools	2.0	8	6	2	2	2	20
03	Business financing techniques	2.0	8	6	2	2	2	20
04	Problem-solving and decision-making techniques	2.0	8	6	2	2	2	20
05	Research methods and techniques	2.0	8	6	2	2	2	20
06	Descriptive statistics	2.0	8	6	2	2	2	20
07	Quantitative and qualitative graphs	2.0	8	6	2	2	2	20
08	Intellectual Property (IP)	2.0	8	6	2	2	2	20
09	Business analysis strategy	2.0	8	6	2	2	2	20
10	Effective business impact analysis	2.0	8	6	2	2	2	20
11	Elements of a Financial analysis	2.0	8	6	2	2	2	20
		22.0	**88**					**220**

Project Quality Management Learning Hours Information Sheet

	Unit Titles	Credits	Notional Learning Hours					
			Guided / Contact Learning	Independent Learning	Research Activities / Group Work	Assessment (self/class)	Coursework	Total
01	Introduction to quality management	2.0	8	6	2	2	2	20
02	Quality management tools	2.0	8	6	2	2	2	20
03	Quality management process	2.0	8	6	2	2	2	20
04	Quality and customer satisfaction	2.0	8	6	2	2	2	20
05	Quality management standards and specification	2.0	8	6	2	2	2	20
06	Quality control and assurance	2.0	8	6	2	2	2	20
07	Quality leadership	2.0	8	6	2	2	2	20
08	Designing for quality	2.0	8	6	2	2	2	20
09	Auditing quality	2.0	8	6	2	2	2	20
10	Quality and statistics	2.0	8	6	2	2	2	20
11	Total quality management	2.0	8	6	2	2	2	20
12	International quality standards	2.0	8	6	2	2	2	20
13	The six sigma methodology	2.0	8	6	2	2	2	20
14	Capability maturity model	2.0	8	6	2	2	2	20
		28.0	**112**					**280**

Project Risk Management Learning Hours Information Sheet

	Unit Titles	Credits	Notional Learning Hours					
			Guided / Contact Learning	Independent Learning	Research Activities / Group Work	Assessment (self/class)	Coursework	Total
01	Risk Management process	2.0	8	6	2	2	2	20
02	Risk identification and assessment	2.0	8	6	2	2	2	20
03	Management planning tools and techniques	2.0	8	6	2	2	2	20
04	Risk assessment methodology	2.0	8	6	2	2	2	20
05	Risk identification tools and techniques	2.0	8	6	2	2	2	20
06	Risk action plan	2.0	8	6	2	2	2	20
07	Quantitative risk analysis inputs	2.0	8	6	2	2	2	20
08	Monitoring and review	2.0	8	6	2	2	2	20
09	Technical performance measurement	2.0	8	6	2	2	2	20
10	Risk management framework	2.0	8	6	2	2	2	20
11	Assessing hazards and technical risks	2.0	8	6	2	2	2	20
12	Risk management checklist	2.0	8	6	2	2	2	20
		24.0	**96**					**240**

There are two approaches to project management; adaptive and predictive. In predictive system, there is clear understanding between product and expected outcome; e.g. building a bridge. However, in adaptive, there is no clarity between product and expected outcome; e.g. IT development.

Why does the programme exists – The programme provides to enhance knowledge gained in level 5 by introducing different units covering both adaptive and predictive approaches. This broadens leaner knowledge horizons in project management aspects

How does it fits into the larger programme – In projects, change is inevitable, hence adapting quickly to new and changing demands is imperative to project management and delivery. At the same time, projects vary in organisational types, hence this course covers project management in both development/humanitarian and profit organisations

For who it was designed – The programme is designed for those interested in pursuing project management knowledge and approaches. It can be applied to any industry, giving learners a wide variety of employers to choose from.

How it will benefit learners – Project Management careers are generally pursued at the management level. Every industry that requires planning, execution, control or supervision of team members, and closing of the project is overseen by an assigned project manager. Most of all, project management applies to all industries.

Units:
- Advanced Project Management Skills
- Project Management Planning & Process Implementation
- Microsoft Project
- Agile Project Management
- Project Monitoring & Evaluation
- Project Management Tools & Techniques
- Project Management for Development Organisations (NGOs)

Advanced Project Management Skills - Project management is made up of many different integrated elements. The project environment comprises of business as usual, standards, processes and methods among others. External factors also play a role. A good project manager is the adhesive that holds a project together and ensures quality and objectives are met on time and on budget. Unsuccessful projects can quickly derail organisational initiatives and prevent business growth. Projects are complex, hence, having a project manager to lead the initiative and keep everyone on the same page, is critical to project success. However, people are complex and they bring their complexity in projects. Coupled with the involvement of a number of stakeholders, this require projects to have proper systems in place before focusing on tools and processes.

Project Management Planning & Process Implementation – In many projects, we do a lot of things and don't really know why. Things are done because they are acceptable even though they do not serve any purpose. Having a purpose is to understand why something is done and what the output will be. This unit is about integrating project management activities. One of the core activity is collecting requirements (what stakeholders expect from us). These requirements will be translated into scope (building elements of a product) and quality (the way those building elements work together). In project management, there is no linear relationship between resources and output achieved; leading to the saying "*a Project Manager is a person who thinks that nine women can deliver a baby in one month*".

Microsoft Project – This is a software program that looks like Excel, which is designed to help in managing and controlling projects. The main part of the Project screen (work area) consists of tasks (activities that make up a project) and resources (people, equipment, facilities, costs and materials). The time taken to complete a task is called duration. The sequencing of tasks/activities is based on dependencies; finish-to-start – predecessor must finish before starting successor, start-to-start – two activities start at the same time, finish-to-finish – two activities finish at the same time, start-to-finish – cannot finish predecessor unless successor is started. In some cases, duration of tasks is affected by number of resources; i.e. three painters can take only one day instead of three days. This is known as resource driven task.

Agile Project Management – Agile is the opposite of predictive (where we try to predict everything upfront). Agile is a development approach used mainly in IT because it is not possible to predict upfront, hence we create something and show it to the customer. We use the feedback to create a more understanding and develop the next version, show it to the customer and receive more feedback. The cycle continues until we realise all expectations. This approach is called adaptive (we let the environment help us adapt and find our way through the project). Unlike predictive where we only have a working product at the end of the project, in adaptive, there are multiple versions of the project because we create build incrementally.

Project Monitoring & Evaluation - Monitoring and evaluation (M&E) is a project management technique that includes the gathering and analysis of information, and the reporting of processes and outputs. An M&E system ensures that the programme implementation is carried out as planned and is achieving the aims and objectives to an acceptable quality, in the planned time period. The system provides sustainable assurance that management issues are being addressed and that supporting organisations such as local community groups are in place and functioning. It ensures better means for learning from past experience, improving service delivery, planning and resource allocation and demonstrating results as part of accountability to key stakeholders. *Why do we evaluate?* To assess effectiveness as well as efficiency of program delivery in response to particular needs of various groups which benefit from it. There are several methods which we can use for conducting evaluation and collection of evaluation data; interview, questionnaires, observations, records/documents and surveys.

Project Management Tools & Techniques - A project is made up of phases/stages that make up the lifecycle. Each phase requires different tools to help us meet project deadlines. The reasons we need project management tools are 1) easy planning (tools assist in creating steps and sequences, saving time) 2), efficient task management (numerous tasks can be easily be assigned and monitored for performance), 3) precise project tracking. In project identification stage, options are explored and idea development can speed up by using tools like objective/problem trees and risk register. During project set-up, project charter and RACI diagram can help decision-making. For detailed planning, tools like logical framework, work breakdown structure, network diagrams and budget can be helpful. During project implementation, Gantt chart and issue logs can help ease the process. Change control diagram ensure project monitoring, evaluation and control, help to keep the project on track.

Project Management for Development Organisations (NGOs) - Managing development organisations projects is anything but simple due to the number of stakeholders involved. Challenges range from delays, inadequate resources, high expectations, poor analysis, unrealistic budgets and excessive bureaucracy. Development, environmental, and humanitarian organisations help to change the world every day, working with beneficiary communities through agriculture, healthcare, microfinance, conservation, affordable housing, shelter, education, infrastructure, human rights, disaster preparedness and response to emergencies. The goal of humanitarian projects is to save life, alleviate suffering and maintain human dignity during and in the aftermath of man-made crises and natural disasters, as well as to prevent and strengthen preparedness for the occurrence of such situations. Development projects lead to improved health and living standards; hence fulfilment and worthwhile cause.

Unit	Pre-requisite	Core-requisite	Guided Learning Hours	Number of Credits
Advanced Project Management Skills	Project Management knowledge and management experience.	A pass or better at Diploma Level 5.	300	30
Project Management Planning & Process Implementation	Project Management knowledge and management experience.	A pass or better at Diploma Level 5.	300	30
Microsoft Project	Project Management knowledge and management experience.	A pass or better at Diploma Level 5.	300	30
Agile Project Management	Project Management knowledge and management experience.	A pass or better at Diploma Level 5.	300	30
Project Monitoring & Evaluation	Project Management knowledge and management experience.	A pass or better at Diploma Level 5.	240	24

Project Management Tools & Techniques	Project Management knowledge and management experience.	A pass or better at Diploma Level 5.	300	30
Project Management for Development Organisations(NGOs)	Project Management knowledge and management experience.	A pass or better at Diploma Level 5.	260	26
Coursework (Project) for all units			260	26

Rules of combination:	All units are mandatory
Age Group:	19+
Programme Type:	Vendor/Industry

Advanced Project Management Skills Learning Hours Information Sheet

	Unit Titles	Credits	Notional Learning Hours					
			Guided / Contact Learning	Independent Learning	Research Activities / Group Work	Assessment (self/class)	Coursework	Total
01	Project management environment and responsibilities	3.0	10	8	4	4	4	30
02	Project tailoring and tolerances/escalation/exception	3.0	10	8	4	4	4	30
03	Creating business case	3.0	10	8	4	4	4	30
04	Directing a project	3.0	10	8	4	4	4	30
05	Project plan and product description	3.0	10	8	4	4	4	30
06	Managing project quality	3.0	10	8	4	4	4	30
07	Project documents	3.0	10	8	4	4	4	30
08	Managing project risks	3.0	10	8	4	4	4	30
09	Change control management	3.0	10	8	4	4	4	30
10	Evaluating project benefits	3.0	10	8	4	4	4	30
		30.0	100					300

Project Management Planning & Process Implementation Learning Hours Information Sheet

	Unit Titles	Credits	Notional Learning Hours					
			Guided / Contact Learning	Independent Learning	Research Activities / Group Work	Assessment (self/class)	Coursework	Total
01	Project characteristics	3.0	10	8	4	4	4	30
02	Project, programme and portfolio	3.0	10	8	4	4	4	30
03	Project integration management process	3.0	10	8	4	4	4	30
04	Project process groups	3.0	10	8	4	4	4	30
05	High level vs detailed planning	3.0	10	8	4	4	4	30
06	Work breakdown structure and critical path	3.0	10	8	4	4	4	30
07	Cost of conformance and non-conformance	3.0	10	8	4	4	4	30
08	Risk identification process	3.0	10	8	4	4	4	30
09	Communication models, dimensions and methods	3.0	10	8	4	4	4	30
10	Project initiation and project closure activities	3.0	10	8	4	4	4	30
		30.0	100					300

Microsoft Project Learning Hours Information Sheet

	Unit Titles	Credits	Notional Learning Hours					
			Guided / Contact Learning	Independent Learning	Research Activities / Group Work	Assessment (self/class)	Coursework	Total
01	Starting a Project	3.0	10	8	4	4	4	30
02	Tasks and resources	3.0	10	8	4	4	4	30
03	Task dependences	3.0	10	8	4	4	4	30
04	Configuring task and resource calendars	3.0	10	8	4	4	4	30
05	Summary tasks and milestones	3.0	10	8	4	4	4	30
06	Slack, lag and lead times	3.0	10	8	4	4	4	30
07	Creating resources and assigning calendars to resources	3.0	10	8	4	4	4	30
08	Scheduling triangle	3.0	10	8	4	4	4	30
09	Effort and work driven scheduling	3.0	10	8	4	4	4	30
10	Resource assignment calculations	3.0	10	8	4	4	4	30
		30.0	100					300

Agile Project Management Learning Hours Information Sheet

	Unit Titles	Credits	Notional Learning Hours					
			Guided / Contact Learning	Independent Learning	Research Activities / Group Work	Assessment (self/class)	Coursework	Total
01	Adpative vs predictive	3.0	10	8	4	4	4	30
02	MoSCoW prioritisation	3.0	10	8	4	4	4	30
03	DSDM process phases	3.0	10	8	4	4	4	30
04	Creating high-level and detailed plans	3.0	10	8	4	4	4	30
05	Timeboxing concept	3.0	10	8	4	4	4	30
06	DSDM organisational structure	3.0	10	8	4	4	4	30
07	Incremental delivery vs iterative development	3.0	10	8	4	4	4	30
08	Quality, scope and acceptance criteria	3.0	10	8	4	4	4	30
09	Evolutionary Development activities	3.0	10	8	4	4	4	30
10	Post-project phase	3.0	10	8	4	4	4	30
		30.0	100					300

Project Monitoring & Evaluation Learning Hours Information Sheet

	Unit Titles	Credits	Notional Learning Hours					
			Guided / Contact Learning	Independent Learning	Research Activities / Group Work	Assessment (self/class)	Coursework	Total
01	Using MEL/MEAL	3.0	10	8	4	4	4	30
02	MEAL challenges	3.0	10	8	4	4	4	30
03	Theory of Change	3.0	10	8	4	4	4	30
04	Log frames and indicators	3.0	10	8	4	4	4	30
05	PMP tools	3.0	10	8	4	4	4	30
06	Designing quantitative and qualitative data	3.0	10	8	4	4	4	30
07	Using traffic lights and scalar tools	3.0	10	8	4	4	4	30
08	Learning in the context of MEAL	3.0	10	8	4	4	4	30
		24.0	**80**					**240**

Project Management Tools & Techniques Learning Hours Information Sheet

	Unit Titles	Credits	Notional Learning Hours					
			Guided / Contact Learning	Independent Learning	Research Activities / Group Work	Assessment (self/class)	Coursework	Total
01	Project life cycle	3.0	10	8	4	4	4	30
02	Project resources and activities	3.0	10	8	4	4	4	30
03	Problem/objective tree	3.0	10	8	4	4	4	30
04	Designing a logframe	3.0	10	8	4	4	4	30
05	components of a Work Breakdown Structure (WBS)	3.0	10	8	4	4	4	30
06	Designing a network diagram	3.0	10	8	4	4	4	30
07	Designing a RACI matrix	3.0	10	8	4	4	4	30
08	Project environment analysis tools and techniques	3.0	10	8	4	4	4	30
09	After Action Review	3.0	10	8	4	4	4	30
10	Project Closure Checklist	3.0	10	8	4	4	4	30
		30.0	**100**					**300**

Project Management for Development Organisations (NGOs) Learning Hours Information Sheet

	Unit Titles	Credits	Notional Learning Hours					
			Guided / Contact Learning	Independent Learning	Research Activities / Group Work	Assessment (self/class)	Coursework	Total
01	Differences between commercial organisations and NGOs	3.0	10	8	4	4	4	30
02	Project management challenges	3.0	10	8	4	4	4	30
03	Objectives and tools in data analysis	3.0	10	8	4	4	4	30
04	Project charter, roles and responsibilities	3.0	10	8	4	4	4	30
05	Rolling wave planning	3.0	10	8	4	4	4	30
06	Tools and techniques used in project planning	3.0	10	8	4	4	4	30
07	Monitoring and evaluation activities	3.0	10	8	4	4	4	30
08	Project transition strategies	3.0	10	8	4	4	4	30
09	Project lessons learned activities	3.0	10	8	4	4	4	30
		27.0	**90**					**270**