

Cambridge **TECHNICALS LEVEL 3**

IT

Cambridge
TECHNICALS
2016

Unit 8

Project management

F/507/5008

Guided learning hours: 60

Version 2 - revised July 2016

*changes indicated by black vertical line

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UNIT 8: Project management

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Guided learning hours: 60

Essential resources required for this unit: none

This unit is internally assessed and externally moderated by OCR.

UNIT AIM

This unit will provide you with the opportunity to understand and use various project planning skills and techniques, thereby enabling you to become more effective in the workplace.

The key to any project being a success is the planning that takes place. Project management skills are essential transferrable skills that can be used for all IT related projects whether it's traditional methodologies or more recently adapted agile approaches within the IT development environment. These skills can be adapted and used even on the smallest 'tasks' during the planning and implementation stages.

Regardless of your job role, you will often be called upon to participate in projects for a variety of reasons; consequently this unit is optional within all four of the specialist pathways. This unit will assist you in developing your skills, knowledge and understanding of different project methodologies and the key factors that can influence the success or failure of a project.

Knowledge gained in the study of this unit will also help prepare you for relevant industry qualifications such as CompTIA Project+.

Note: Learners must work on an IT project that would reflect the type of project carried out within the IT industry. For those learners following the Diploma qualifications their chosen project will ideally reflect their chosen specialist pathway.

TEACHING CONTENT

The teaching content in every unit states what has to be taught to ensure that learners are able to access the highest grades.

Anything which follows an i.e. details what must be taught as part of that area of content. Anything which follows an e.g. is illustrative, it should be noted that where e.g. is used, learners must know and be able to apply relevant examples in their work, although these do not need to be the same ones specified in the unit content.

For internally assessed units you need to ensure that any assignments you create, or any modifications you make to an assignment, do not expect the learner to do more than they have been taught, but must enable them to access the full range of grades as described in the grading criteria.

Learning outcomes	Teaching content
The Learner will:	Learners must be taught:
1. Understand the project life cycle	1.1 Project methodologies (e.g. Prince2, waterfall, DMAIC methodology, critical path method (CPM), agile development, individual methodologies as required by the client) 1.2 Project life cycle, i.e.: <ul style="list-style-type: none"> • initiation phase • planning phase • execution phase • evaluation phase 1.3 Project issues, i.e.: <ul style="list-style-type: none"> • communication (e.g. between team members, project manager, stakeholders, clients) • external factors (e.g. finance, team members, etc.) • conflicts (e.g. between project team members and/or client) • lack of management/leadership • poor planning • legislation/regulation 1.4 Documentation, i.e.: <ul style="list-style-type: none"> • main documentation <ul style="list-style-type: none"> ○ project brief/project mandate (overview of project/scope/objectives) ○ project initiation document (PID)/project definitions document (project outline/scope/objectives) ○ contract (agreement from project sponsor/budget holder to start project) ○ business case (project justification, cost versus benefits) ○ client acceptance form (to obtain agreement from project sponsor/budget holder that project is complete) ○ work breakdown structure ○ project progress report (status updates while project is in progress) ○ project closure report (indication of outcomes) ○ lessons learned report (also survey)

Learning outcomes	Teaching content
The Learner will:	Learners must be taught:
	<ul style="list-style-type: none"> • main control registers and plans: <ul style="list-style-type: none"> ○ project planner (visual aid to show the project timelines and activities to be completed) ○ risk register (to record details of project risks, monitoring and management of project risks) ○ issues register (to record details of project issues, monitoring and management of project issues) ○ lessons learned register (to capture details of things when they go wrong to inform report at end of project)
2. Be able to initiate and plan projects	<p>2.1 Initiation phase, i.e.:</p> <ul style="list-style-type: none"> • stakeholders, clients, target audience • scope definition • purpose • objectives • resources (e.g. fast tracking, crashing, delaying, optimising) • Tools (e.g. Gantt charts, Network diagram (ADM, PDM, CPM,CCM)) • deliverables • timescales • structure • business case <ul style="list-style-type: none"> ○ several possible solutions ○ costs/benefits of each • feasibility study (evaluation and analysis of a proposed project) • terms of reference <ul style="list-style-type: none"> ○ accurate description of: <ul style="list-style-type: none"> ▪ what the project aims to achieve ▪ criteria and flexibilities involved ▪ project parameters, scope, range, outputs, sources, participants, budgets and timescales • phase review <p>2.2 Planning phase, i.e.:</p> <ul style="list-style-type: none"> • project plan consisting of: <ul style="list-style-type: none"> ○ resource plan (e.g. identification of staff, equipment and materials needed) ○ financial plan (e.g. quantify the financial expenditure required) ○ quality plan (e.g. quality targets and quality control methods) ○ risk plan (identify risks and plan actions need to minimise risks) ○ acceptance plan (e.g. specify criteria for accepting deliverables) ○ phase review

Learning outcomes	Teaching content
The Learner will:	Learners must be taught:
	<ul style="list-style-type: none"> ▪ is the project under schedule and within budget? ▪ have the deliverables been produced and approved? ▪ have the risks been controlled and mitigated? ▪ have issues been resolved? ▪ is the project on track? ▪ should the project continue to the execution phase?
<p>3. Be able to execute projects</p>	<p>3.1 Execution phase, i.e.:</p> <ul style="list-style-type: none"> • time (e.g. tracking and recording time spent on tasks as per project plan) • cost (e.g. identifying and recording costs against budget plan) • quality (e.g. review quality of deliverables and management process) • change (e.g. reviewing and implementing requests for changes to project) • risk (e.g. assessing level of project risks and taking action to minimise the risks) • issue (e.g. identifying and resolving project issues) • communication (e.g. communication with stakeholders, end users, clients, project team members) • acceptance (e.g. identifying completion of deliverables and gaining client's acceptance) • phase review <ul style="list-style-type: none"> ○ is the project under schedule and within budget? ○ have the deliverables been produced and approved? ○ have the risks been controlled and mitigated? ○ have issues been resolved? ○ is the project on track? ○ should the project continue? • project closure report (final document produced to enable formal closure of the project) <ul style="list-style-type: none"> ○ project summary ○ reason for project closure (has the project reached its planned end date or is it being closed prematurely for some reason?) ○ assessment of project performance (how well did the project perform against the business case?) <ul style="list-style-type: none"> ▪ achievement of the project objectives, outputs and activities (where was the project successful or not successful?) ▪ performance against planned time, resources and costs (explanation of variance from original planned milestones, costs or allocated resources) ▪ performance against planned savings and benefits (explanation of any variance from original planned benefits)

Learning outcomes	Teaching content
The Learner will:	Learners must be taught:
	<ul style="list-style-type: none"> ○ lessons learned ○ celebrating success (what were the biggest successes for the project?) ○ next steps (description of any outstanding actions and handover arrangements) <ul style="list-style-type: none"> ▪ outstanding activities ▪ remaining risks and issues ▪ on-going dependencies ▪ costs of on-going support ▪ stakeholder communications ▪ handover of assets and contracts
4. Be able to carry out project evaluations	<p>4.1 Evaluation phase, i.e.:</p> <p>Obtain feedback from:</p> <ul style="list-style-type: none"> ● clients ● stakeholders ● users ● team ○ has the project: <ul style="list-style-type: none"> ▪ delivered business benefits identified in the business case? ▪ achieved the objectives in the terms of reference? ▪ deviated from the original scope? ▪ met the quality targets identified in the quality plan? ▪ proceeded according to the delivery schedule? ▪ deviated from the budget as defined in the financial plan? ▪ deviated from forecast resource levels as per the resource plan? ▪ conformed to the management process as per the execution phase? ○ the effect the selected tools and methods have had on the outcome of the project ○ identify major achievements and the positive effect on the client's business ○ identify any project failures and the effects on the client's business ○ identify lessons learned ○ identify potential improvements for similar future projects

GRADING CRITERIA

LO	Pass	Merit	Distinction
	The assessment criteria are the Pass requirements for this unit.	To achieve a Merit the evidence must show that, in addition to the pass criteria, the candidate is able to:	To achieve a Distinction the evidence must show that, in addition to the pass and merit criteria, the candidate is able to:
1. Understand the project life cycle	P1: Explain the different phases within an identified project life cycle		D1: Evaluate the importance of each phase of the identified project life cycle
	P2: Describe different project methodologies	M1: Compare the features and benefits of different project methodologies	
2. Be able to initiate and plan projects	P3*: Complete the documentation for the initiation phase for an identified project <i>(*Synoptic assessment from Unit 1 Fundamentals of IT, Unit 2 Global information and Unit 3 Cyber security)</i>		D2: Create a Business Case to support an identified project
	P4: Develop a project plan for the identified project	M2: Carry out and document a phase review of the project plan	
3. Be able to execute projects	P5: Follow the project plan and conduct a phase review of the identified project		D3: Prepare a project closure report based on the execution phase review of the identified project
4. Be able to carry out project evaluations	P6: Evaluate feedback from client and team in relation to the project	M3: Recommend potential improvements for future projects based on the outcome of the project evaluation	

SYNOPTIC ASSESSMENT

When learners are taking an assessment task, or series of tasks, for this unit they will have opportunities to draw on relevant, appropriate knowledge, understanding and skills that they will have developed through other units. We've identified those opportunities in the grading criteria (shown with an asterisk). Learners should be encouraged to consider for themselves which skills/knowledge/understanding are most relevant to apply where we have placed an asterisk.

ASSESSMENT GUIDANCE

LO1 Understand the project life cycle

P1: Learners must explain the different phases within an identified project life cycle. Their descriptions must provide an account of each phase including their position within the project life cycle, and the supporting documentation that is used. Evidence can be in the form of a written report, presentation with detailed speaker notes, a video of presenting the information to an audience, or a detailed information guide on the project life cycle.

D1: Learners are required to evaluate the importance of each phase of the identified project life cycle. The evaluation must show that learners have determined the significance of each phase of the project life cycle as well as the documentation involved. The evidence can be presented in the form of a written report, presentation with detailed speaker notes or comprehensive information guide. The evidence produced for P1 can be used as a useful starting point for the evaluation.

P2: Learners must describe project methodologies. The summary should be concise and include the main points of their chosen project methodologies written/spoken in their own words. The evidence can be in a written or verbal format eg written report, presentation, audio or video recording of a presentation, etc.

M1: Learners are required to compare the features and benefits of different project methodologies. It is suggested that learners use their evidence from P2 as a starting point for their comparison. The comparison should show that learners have examined the similarities and differences between the different project methodologies and must not just be a list of the features and benefits of each in isolation. The evidence can be in the form of a written report, a presentation with detailed speaker notes or comprehensive information guide.

Learners could present evidence for the entire learning outcome as a tutor guide for learners wanting to study project management.

LO2 Be able to initiate and plan projects

This learning outcome is about learners carrying out the initiation phase and project planning phase for an identified project. It is important that the scenario and/or project that learners are provided with allows them to meet the assessment criteria in a manner that reflects working practices.

P3: Learners must carry out the initiation phase for an identified project taking into consideration the bullet list in the teaching content under initiation phase. They should then prepare a PID which must include, as a minimum, the stakeholders, clients and target audience (end user), scope definition, purpose, objectives, deliverables, timescales and structure. The evidence will be the completed PID.

D2: Learners are required to create a business case for an identified project. It can be linked to the project for which they carried out the initiation phase. The business case must give clear justification as to why the project should be carried out i.e. the reasons and why. They could present the evidence as a report or as a presentation with detailed speaker notes or a presentation of them delivering their business case to an audience.

P4: Learners must develop a project plan for an identified project. The project plan can be a follow on from the evidence presented for P3 and D2. The project plan must include the items in the bullet list in the teaching content. Although learners may not be “working with budgets”, they should still take into consideration that ‘time is money’ and therefore cost in potential value of time of those involved in the project as well as the cost of other physical resources that may be used.

M2: Learners must carry out a phase review of the project plan. The phase review must show that learners have reviewed every section of the project plan to ensure that the project can progress to the execution phase. They will need to show what they have reviewed and the results of their review. This will then be concluded by including the justification for the continuation of the project. This may also include where learners have identified that changes have to be made, etc. The evidence will be the documented review of the planning phase of the project.

LO3 Be able to execute projects

This learning outcome is about learners carrying out the execution phase of a specified project. It is important that the scenario and/or project with which learners are provided, allows them to meet the assessment criteria in a manner that reflects working practices. Learners could follow through with the project that they have used for LO2 Be able to initiate and plan projects.

P5: Learners are required to provide evidence of following a project plan for an identified project and carry out a phase review. They should be reviewing each phase of the project plan to check whether the project has achieved its planned objectives and if not, what are the reasons and how should these be addressed. The evidence will be the documented phase review. The evidence for this assessment criterion should include, as a minimum, the following: considerations of time, quality, change, risk, issue, communications and acceptance. The evidence will be the documented records of the different aspects of the execution phase.

D3: Learners are required to prepare a project closure report based on the execution phase review carried out for M3. The project closure report must include the actions identified in the phase review which must be carried out prior to the project being closed. The bullet points within the teaching content should be included in the project closure report.

LO4 Be able to carry out project evaluations

P6: Learners are required to evaluate the feedback from the client and team of the identified project. They should evaluate the project that they have carried out for LO3. The evaluation must include the bullet points in the teaching content from the section “Has the project” to “Identify lessons learned”. The evidence will be the documented evaluation. This could be in the form of a report or a presentation with detailed speaker notes or a video of learners presenting the results of their evaluation.

M3: Learners are required to recommend potential improvements for future projects based on the outcome of their project evaluation. They should be considering what issues have occurred and what could be done differently to alleviate/prevent the occurrence of these issues in future projects. Learners should be able to state why these recommendations would improve the delivery of future similar projects.

Some providers for the industry qualifications offer quizzes, tests and assessments. Reference to these websites may support knowledge and learning.

www.comptia.org

Feedback to learners: you can discuss work-in-progress towards summative assessment with learners to make sure it's being done in a planned and timely manner. It also provides an opportunity for you to check the authenticity of the work. You must intervene if you feel there's a health and safety risk.

Learners should use their own words when producing evidence of their knowledge and understanding. When learners use their own words it reduces the possibility of learners' work being identified as plagiarised. If a learner does use someone else's words and ideas in their work, they must acknowledge it, and this is done through referencing. Just quoting and referencing someone else's work will not show that the learner knows or understands it. It has to be clear in the work how the learner is using the material they have referenced **to inform their** thoughts, ideas or conclusions.

For more information about internal assessment, including feedback, authentication and plagiarism, see the centre handbook. Information about how to reference is in the OCR *Guide to Referencing* available on our website: <http://www.ocr.org.uk/i-want-to/skills-guides/>.

EMPLOYABILITY SKILLS

Employability skills	Learning outcome
Communication	P3, P4, P6, M2, M3, D2, D3
Problem solving	P3, P4, P6, M2, M3, D2, D3
Time management	P3, P4, P6, M2, M3, D2, D3
Critical thinking	P3, P4, P6, M2, M3, D2, D3
Team working	P3, P4, P6, M2, M3, D2, D3
Negotiation	P3, P4, P6, M2, M3, D2, D3
Decision making	P3, P4, P6, M2, M3, D2, D3

MEANINGFUL EMPLOYER INVOLVEMENT - a requirement for the Diploma (Tech Level) qualifications

The 'Diploma' qualifications have been designed to be recognised as Tech Levels in performance tables in England. It is a requirement of these qualifications for centres to secure for every learner employer involvement through delivery and/or assessment of these qualifications.

The minimum amount of employer involvement must relate to at least one or more of the elements of the mandatory units.

Eligible activities and suggestions/ideas that may help you in securing meaningful employer involvement for this unit are given in the table below.

Please refer to the *Qualification Handbook* for further information including a list of activities that are not considered to meet this requirement.

Meaningful employer involvement	Suggestion/ideas for centres when delivering this unit
1. Learners undertake structured work-experience or work-placements that develop skills and knowledge relevant to the qualification.	Learners may be able to participate in projects while on work placement. The centre would need the support of the work placement for learners to practice working through the various phases and to complete appropriate documentation (even if only for their own personal use).
2. Learners undertake project(s), exercises(s) and/or assessments/examination(s) set with input from industry practitioner(s).	Learners could be given IT projects that have been developed with the aid of local employers. The employers could be asked to identify potential IT project scenarios similar to what they would work on in their particular environment.

To find out more

ocr.org.uk/it

or call our Customer Contact Centre on **02476 851509**

Alternatively, you can email us on **vocational.qualifications@ocr.org.uk**



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