# Improving Productivity Using IT (ICDL Advanced) (ITQ)



# **Document Change History**

Any changes made to the syllabus shall be clearly documented with a change history log. This shall include the latest version number, date of the amendment and changes made. The purpose is to identify quickly what changes have been made.

**Version Number** Changes Made

**Version 1.0** Document Creation



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## Introduction

As digital technologies and the use of IT continues to play a greater role in the daily operations of a business, there is a growing need to maximise productivity from the systems and the tools available. Individuals with the skills to support and implement IT solutions that deliver a greater level of efficiency and productivity are in high demand, and therefore having a practical understanding of how to make best use the IT software available is extremely advantageous.

This qualification will enable candidates to further develop their practical knowledge and skills of using IT systems and software at an advanced level in order to find ways to deliver improvements to productivity.



# Qualification Suitability and Overview

In order to undertake this qualification, candidates should be able to use the following software (or suitable equivalents) at an advanced level; Microsoft Word, Microsoft Excel, Microsoft Powerpoint, Microsoft Access\*. This includes the ability to use functions such as bookmarks in documents, creating macros, creating lists and alerts, using lookups and writing database queries. Candidates will need a good standard of written English.

\*Note that assessments for this qualification have been developed to support office versions 2019 and higher only.

This qualification is suitable for;

- a. individuals in a working environment wishing to;
  - further develop their practical use of software and problem-solving skills as part of their own professional development and individual progression.
  - better support the function that they and their team provides.
  - support others to be more productive through the use of software.
- b. job seekers looking to develop more advanced IT skills in order to attain a desired position.
- c. **students** wishing to develop their practical IT skills in preparation for the working environment.

Candidates can study for this certificate by attending a course provided by a BCS accredited training or education provider, or through self-study.

Total Qualification Time	<b>Guided Learning Hours</b>	Assessment Time
41 hours	40 hours	1 hour
'	'	

### **Tutor Criteria**

It is recommended that to effectively deliver this certification, tutors should possess one or more of the following:

- 1 year teaching or training experience
- A level 3 Certification in IT or equivalent qualification
- A minimum 2 years' experience using software at an advanced level within a working environment

# **Learning Outcomes**

Upon completion of the certificate candidates will be able to demonstrate a practical understanding of how to:

- Plan, select and use appropriate IT systems and software for different purposes
- Evaluate the selection and use of IT tools to make sure that activities are successful.
- Devise solutions to improve the use of IT tools and systems for self and others



# **Syllabus**

 Plan, select and use appropriate IT systems and software for different purposes

#### Candidates will be able to:

1.1 Explain the purpose for using IT

#### **Indicative content**

- a. Different IT technologies and their uses
- b. Technology as an enabler to complete specific tasks
- c. Benefits of IT

#### Guidance

Candidates should be encouraged to consider the use of different types of IT applications, how they can be used to streamline business processes and deliver many benefits e.g., a reduction of manual processes, automation, improved accuracy. They should already have a practical understanding of the use of different office software.

1.2 Analyse the methods, skills and resources required to complete the task successfully

#### Indicative content

- a. Understanding the requirements of the task
- b. Method (approach, procedure)
- c. Skills (individual or team)
- d. Resource identification (software)

#### **Guidance**

When identifying the requirements of a task it is useful for candidates to consider; who and what the information is for, when it must be finished, what information needs to be included, where it will be used (on screen, sent to others, printed) and what methods can be employed complete the task (are their common or standard approaches already or does this require a new approach?). Candidates should know which resources are available and the skills required to complete the required task.

1.3 Analyse any factors that may affect the task

#### Indicative content

- a. Access to information
- b. Steps that need to be taken in advance
- c. Availability of time
- d. Budget and resources
- e. Audience need

#### Guidance

Candidates should be encouraged to consider the factors/ dependencies that can influence how a task can be completed and what they should consider as part of the planning process. It is useful to consider the dependency of other tasks that need to be completed first and how this may influence when and how other tasks can be completed.

1.4 Critically compare alternative methods to produce the intended outcome

#### **Indicative content**

- a. Problem solving
  - What are you trying to achieve?
  - What are the different ways you could achieve it?
  - What is the best way to achieve it?

#### **Guidance**

Candidates should be encouraged to consider examples of tasks that may be required and evaluate/compare the options available in order to solve the problem so they can identify potential opportunities to complete tasks in the most efficient manner.

1.5 Develop plans for using IT for different tasks and purposes, including contingencies

#### **Indicative content**

- a. Sources of information
- b. Formats/file types
- c. Required content, structure and layout
- d. Resources and skills required
- e. Potential problems/barriers
- f. Measures of success

#### **Guidance**

Candidates should be encouraged to consider how to they would plan for implementing the use of IT for the tasks they undertake, and where contingencies may need to be factored in, particularly in terms of the resources they plan to use and the skills required to use them. They should also be able to plan how they will measure the use of IT to identify how successful it has been and whether its using is fulfilling the requirements of the task.

**1.6** Select and use appropriate IT systems and software applications to produce effective outcomes

#### **Indicative content**

- a. Word processing
- b. Spreadsheets
- c. Presentation software
- d. Database software

#### **Guidance**

Candidates should have a practical understanding of the uses of the software listed above. They should be encouraged to further explore their use and functionality, to explore how they can be used to a greater level to improve the undertaking of specific tasks.

1.7 Explain why different software applications could be chosen to suit different tasks, purposes and outcomes

#### Indicative content

- a. Features and functionality
- b. Convenience/ease of use
- c. Accessibility and availability
- d. Time/cost saving
- e. Quality and accuracy
- f. Ability to complete complex tasks more easily

#### **Guidance**

It is important for candidates to understand why specific software may be more appropriate to use in certain situations based on the factors listed. It is useful for candidates to consider the concept of ROI (Return On Investment) when making a case for investing in new software where it has been identified as having the ability to deliver specific benefits/improvements to productivity.

1.8 Explain any legal or local guidelines or constraints which apply to the task or activity

#### Indicative content

- a. Data protection act
- b. Copyright
- c. Software licenses
- d. Security
- e. Operational procedures/ standard practice
- f. Organisational house-style or brand guidelines

#### **Guidance**

Candidates should have a basic understanding of the laws that govern the management and use of data and information (security, storage, access, use etc.) as well as the use of copyrighted content including but not limited to text, images, logos and video and avoiding plagiarism. They should also be aware of organisational procedures and style guides that will often need to be adhered to when producing content and documents. When planning to use specific software, it is also important for candidates to understand the availability of software licenses and their terms of use.

# **Syllabus**

## 2. Evaluate the selection and use of IT tools to make sure that activities are successful

#### Candidates will be able to:

2.1 Critically compare the strengths and weaknesses of own and other people's final work

#### Indicative content

- a. File naming/folder structure
- b. Layout
- c. Formatting (font, colours)
- d. Use of images/graphics
- e. Accuracy (spelling, grammar)
- f. Accessibility
- g. Suitability for intended audience

#### **Guidance**

In order to evaluate the use of software and to identify where its use can be improved, candidates should be able to identify good practice/examples. The list shown here are typical features and qualities that should be observed as a minimum when evaluating own or other people's work, although other features and qualities may be evaluated depending on the nature and requirements of the task.

2.2 Review ongoing use of IT tools and techniques and change the approach as needed

#### **Indicative content**

- a. Taking an iterative approach
- b. Review against measures of success
- c. Identification of new/ alternative approaches

#### **Guidance**

Candidates should understand the importance of taking an iterative approach towards developing the use of IT in order to continually improve its use, as well as their own skills. This can involve a simple review of their own and/or others work, or against the measures of success identified in the planning stage. They should consider how to adapt or modify their approach when finding a particular solution does not work as intended when put into practice.

2.3 Evaluate and test solutions to make sure they match requirements and are fit for purpose

#### **Indicative content**

- a. Trials and mock-ups
- b. Benchmarking
- c. User testing
- d. Review against user requirements/objectives of the task

#### Guidance

Candidates should know how test a solution in order to evaluate its effectiveness and suitability for the task. This may include trialling software or creating mock-ups of potential solutions (e.g. a new type of document or spreadsheet). It may also include the use of benchmarking where a solution is rated against a list of requirements or criteria in terms of what it can and can't do – and how well it can do it. This may also include user testing where a practical review of the solution may be undertaken by a group of individuals to assess the suitability and the performance of a particular solution.

2.4 Be prepared to give feedback on other people's selection and use of IT tools

#### Indicative content

- a. Giving constructive feedback and guidance
- b. Identifying and correcting mistakes

#### Guidance

Candidates should consider the basic principles of how to give constructive feedback and guidance to others on the use of IT tools and software, to build confidence and develop good working relationships with others.

**2.5** Explain different ways to make further improvements to work

#### Indicative content

- a. Sharing best practice
- b. Team reviews/meetings/ collaboration
- c. Recommending solutions
- d. Signposting to useful resources
- e. Learning/self-study

#### **Guidance**

Candidates should be encouraged to consider the value of sharing best practice to identify more efficient and effective ways of doing things, and how they can improve their own and others use of IT through the sharing of useful resources (e.g. videos, guides, blogs, books). They should consider the opportunities available to them in terms of learning and self-study and how they can continue to further develop and improve their work.

# **Syllabus**

#### 3. Devise solutions to improve the use of IT tools and systems for self and others

#### Candidates will be able to:

3.1 Evaluate the productivity and efficiency of IT systems and procedures used by self and others

#### Indicative content

- a. Overall standard and accuracy of work
- b. Time spent/saved
- c. Reduction of unnecessary manual processes
- d. Adoption of systems and procedures
- e. The right tools being used for the right task
- f. Stakeholder feedback

#### **Guidance**

Candidates should explore methods for evaluating and reviewing productivity and efficiency of the IT systems and processes used. This should be a regular occurrence through which areas for continuous improvement can be identified. They should consider the factors listed here as part of a review - although their review does not need to be limited to this list.

Candidates may wish to consider the use of SWOT analysis or other methods to identify what is working well and where specific improvements could be made to identify new opportunities or where new approaches could be used. Knowing how to gather and evaluate stakeholder feedback can be advantageous towards identifying whether the outputs of a task have fulfilled the requirements of the intended audience, and where further improvements could be made.

3.2 Research and advise on ways to improve productivity and efficiency

#### **Indicative content**

- a. File naming conventions
- b. Files and folder structures
- c. File/data back ups
- d. Methods for error checking
- e. Automation
- f. Protecting documents/ limiting access

#### Guidance

Candidates should be encouraged to explore the approaches listed here in relation to their own processes and use of IT and specific software in order to identify where their own and others' use of IT could improve in each of these approaches.

3.3 Develop solutions that make a demonstrable improvement to the use of IT tools and systems

#### **Indicative content**

- a. Templates
- b. Cross references
- c. Fields
- d. Formulas
- e. Pivot tables
- f. Macros
- g. Queries
- h. Bookmarks
- i. Mail merge
- j. Lookups
- k. Custom slide shows
- I. Password protection

#### **Guidance**

Candidates should consider how they can enhance productivity through the development of items such as shared templates, custom interfaces, macros, style guides etc.

Candidates should be familiar with each of the software functions listed here and be able to confidently use them within their own work. They should be prepared to be tested on their ability to use some of these functions within the final assessment. They should know which software allows them to perform each of these functions.

3.4 Test solutions to make sure that they work as intended

#### **Indicative content**

- a. Running a Macro
- b. Locking and unlocking cells
- c. Testing alerts

#### Guidance

When developing a solution using of a particular IT tool (e.g. creating a macro) candidates should know how test the solution to make sure it actually works prior to implementing it or sharing with others for general use.

3.5 Recommend improvements to IT systems and procedures that increase productivity

#### **Indicative content**

- a. Scheduling tasks
- b. Prioritisation
- c. Training
- d. Standard practice
- e. Collaboration and communication
- f. Health and safety
  - Working conditions (e.g. light, flow of air)
  - Taking regular breaks
  - Equipment (furniture, screen size/position, supports)
  - Supporting the wellbeing of others

#### **Guidance**

Candidates should be encouraged to explore other methods that can be used to improve to overall use of IT systems. This will enable them to review their own working practices and consider ways in which to make improvements that can help to increase productivity and the wellbeing of themselves and others.

Although not included within the assessment, candidates may wish to explore the use of other types of IT tools that can support team collaboration, communication tools, and task scheduling (e.g. teams/groups, video calls, project boards) through the use of cloud technology and apps.

## **Examination Format**

This certificate is assessed through completion of an invigilated online exam which candidates will only be able to access at the date and time they are registered to attend.

Type Performance/skills based (in-application) and Knowledge based (multiple-choice

questions) online assessment

**Duration** 60 minutes

**Supervised** Yes

**Open Book** No (no materials can be taken into the examination room)

Passmark 75%

**Delivery** Digital or paper based.

Adjustments and/or additional time can be requested in line with the <u>BCS reasonable adjustments policy</u> for candidates with a disability, or other special considerations including English as a second language.



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