



# **T Level Technical Qualification in Digital Support Services**

Employer-set project (ESP)

## **Core skills**

Digital Support

Project brief

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## Project brief

Digital Support

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## Student instructions

- read the project brief carefully before starting your work
- you must work independently and make your own decisions as to how to approach the tasks within the employer-set project
- you must clearly name and date all of the work that you produce during each supervised session
- you must hand over all of your work to your tutor at the end of each supervised session
- you must not work on the assessment in between supervised sessions

## Student information

- the employer-set project will assess your knowledge, understanding and skills from across the core content of the qualification
- in order to achieve a grade for the core component, you must attempt both of the external examinations and the employer-set project
- the combined marks from these assessments will be aggregated to form the overall core component grade (A\* to E and U), if you do not attempt one of the assessments, or fail to reach the minimum standard across all assessments, you will receive a U grade
- the maximum time you will have to complete all tasks for the employer-set project is 12 hours 10 minutes
- your tutor will explain how this time is broken down per task and will confirm with you if individual tasks need to be completed across multiple sessions
- at the end of each supervised session, your tutor will collect all employer-set project assessment materials before you leave the room
- you must not take any assessment material outside of the room (for example, via a physical memory device)
- you must not upload any work produced to any platform that will allow you to access materials outside of the supervised sessions (including email)
- you can fail to achieve marks if you do not fully meet the requirements of the task, or equally if you are not able to efficiently meet the requirements of the task
- the project is assessed out of a total of 76 marks (this includes 2 marks for your use of maths in task 3 and 4 marks for your use of English throughout tasks 2, 3 and 4); the individual task marks are also shown throughout the project brief booklet at the start of each task

## Plagiarism

Plagiarism may result in the external assessment task being awarded a U grade.

For further guidance, refer to your student handbook - plagiarism guidance and maladministration and malpractice policy located at [www.qualhub.co.uk](http://www.qualhub.co.uk).

## Presentation of work

- all of your work should be completed electronically using black font, Arial size 12pt unless otherwise specified
- any work not produced electronically must be agreed with your tutor, in which case the evidence you produce should be scanned and submitted as an electronic piece of evidence
- all your work should be clearly labelled with the relevant task number and your student details and be legible (for example, front page and headers)
- electronic files should be named using the following format – Surname\_Initial\_student number\_evidence reference for example Smith\_J\_123456789\_Task1 for identification purposes; where evidence reference is shown, this should be replaced with the task number for which the work reflects and saved in a .pdf format
- all pages of your work should be numbered in the format 'Page X of Y', where X is the page number and Y is the total number of pages
- you must complete and sign the external assessment cover sheet (EACS) and include it at the front of your assessment task evidence
- you must submit your evidence to the supervisor at the end of each session

## Scenario

You are working as an IT support technician for Willow Technology.

Willow Technology is a digital marketing and design agency which currently operates from offices in Southampton and has recently opened a satellite office in York. Currently, as new members of staff join the business, computers are purchased ad hoc and joined to the network. There are a mixture of different operating systems and software in use throughout the business, and there are concerns about licensing and out-of-date software on each computer.

For staff to be able to work effectively, they need access to word processing, spreadsheet and presentation software as well as an effective email client/calendaring solution and web browsing.

Design staff require access to software that will allow image and video editing, document production and PDF editing.

With the growth in the business, there is an urgent need to provide consistency of software to allow users to share documents easily and simplify support. It is also important that any computer needs to be up to date so that software can be installed. Computers need to be compatible with internet applications for moderate internet use. All installed software needs to be kept up to date as a matter of course.

Following the office relocation and movement of equipment, one computer that has been relocated is now having connectivity issues when trying to access network resources. The computer has been brought to you for assistance and is now failing to boot at all.

## Brief

As part of your role, you are involved in both larger IT projects as well as providing immediate technical support diagnostics and assistance to technical issues experienced by end users. You are due to work on a major roll-out project but must make sure that individual issues are resolved as they are logged.

You have been asked to investigate 2 helpdesk tasks relating to computer issues within the business, identifying and remedying the faults.

Once you have resolved the individual issues, you will need to focus on the larger project and will need to research and propose an effective solution to ensure all company computers are running with a consistent operating system and software build that meets the different requirements of staff within the business. You should also plan and show how this will be rolled out to all users.

# Task 1: 2 hours 30 minutes

You must read the information on all pages provided for this task before starting your response.

(22 marks)

## Scenario

You are working with a colleague who is new to Willow Technology and you have been assigned 2 helpdesk tasks.

The first helpdesk task requires you to troubleshoot and resolve the issue with computer 1. The user of the first computer has explained that they are trying to access the internet using the Google Chrome browser but keep getting the following message:

***This site can't be reached.***

***The web page at xxxxx might be temporarily down or it may have moved permanently to a new web address.***

The second helpdesk task requires you to support your colleague by undertaking a root cause analysis and then designing a test plan to propose changes so your colleague would be able to carry out the appropriate tests and check if the fault has been resolved with computer 2.

The second computer is failing to boot at all and is only beeping when turned on. The computer is a Dell OptiPlex 5040 and when listening, you hear a sequence of 4 beeps, 3 beeps and then 1 beep.

## Instructions for students

### Computer 1

You have been provided with computer 1 and should investigate and identify the root cause of the connectivity issue.

You should document your troubleshooting steps, identifying the issue and consider:

- use of troubleshooting frameworks
- tools used during the troubleshooting process

Your troubleshooting document (6 marks) should include the following:

- user details
- test dates
- proposed tests
- expected outcomes of tests
- ability to record changes based on test outcomes
- record of diagnosis

### Computer 2

Using the information in the scenario and the internet, you should identify the root cause of the hardware failure and propose a remedy. You should design a test plan that could be followed by your colleague to test that your proposed changes have resolved the fault. You are not required to undertake the tests.

Your test plan (16 marks) should include the following:

- user details
- test dates
- proposed tests
- expected outcomes of tests
- ability to record changes based on test outcomes
- user acceptance of work completed

## **Evidence required for submission to NCFE**

- a troubleshooting document in .pdf format
- a test plan document in .pdf format

When you have completed this task, you should save in a .pdf format, and name your file:

Surname\_Initial\_student number\_evidence reference for example Smith\_J\_123456789\_Task1

## **Additional guidance**

You will have access to a word processing application or other suitable software to enable you to complete this task.

Access to the internet is permitted.

Access to any online cloud storage is not permitted.

Use of online chat or emails is not permitted.

Access to previous class notes/teaching materials is not permitted.

## Task 2: 2 hours 10 minutes

You must read the information on all pages provided for this task before starting your response

(12 marks)

### Scenario

You have resolved the individual computer issues and you have been moved you onto a larger project by your team leader. In a team meeting, your team leader informs you that currently the business uses a wide range of different operating systems, computers and software. Willow Technology would like to standardise this, where possible, whilst ensuring that staff have access to computers, software and services they require.

You have been asked to put forward recommendations on resolving the issues, therefore you need to gather information that will help you plan your recommendations.

You organise a meeting with Willow Technology's network manager to discuss requirements for the updated computer build and better understand the overall computer usage and problems. Before the meeting, you decide to prepare some questions that will help you gather the appropriate information in the meeting.

After your meeting, you must update your team leader and the facilities manager of Willow Technology with your findings by sending them each an email.

### Instructions for students

The meeting with the network manager will be a recorded, simulated interview in which your tutor will play the role of the network manager and will last no longer than 10 minutes. (6 marks)

The total time for the task is 2 hours and 10 minutes which will be broken down as follows:

You will be allocated 1 hour to prepare your questions.

You should:

- prepare a list of key questions you want to ask to gather information from the network manager prior to your meeting with them

You will be allocated 10 minutes to conduct your interview.

After your meeting with the network manager, you need to email your team leader and the company facilities manager with your findings. (6 marks). You have the remaining 1 hour to complete both emails.

Your email to your team leader (technical audience) should:

- outline any questions and responses you have used or gathered
- summary of key issues identified

Your team leader has also asked you to email the facilities manager (non-technical audience). Your email should:

- include an overview of the issues that have been identified that can be sent company-wide as part of a business update



## Evidence required for submission to NCFE

- network manager interview audio recording (saved as an appropriate audio file, for example MP3)
- email to team leader detailing questions asked, responses and summary of issues that have been identified (on email template document) in .pdf format
- email to facilities manager with an overview of the issues that have been identified that can be used in an update email to the business (on email template document) in .pdf format
- all completed work must be submitted at the end of this task

When you have completed this task, you should save in a .pdf format, and name your file:

Surname\_Initial\_student number\_evidence reference for example Smith\_J\_123456789\_Task2

## Additional guidance

This task will also assess your English skills.

You will have access to a word processing application or other suitable software to enable you to complete this task.

Use the email template provided to construct your emails; do not use your own email account.

Access to the internet is permitted.

Access to any online cloud storage is not permitted.

Use of online chat or emails is not permitted.

Access to previous class notes/teaching materials is not permitted.

## Task 3: 4 hours

You must read the information on all pages provided for this task before starting your response

(24 marks)

### Scenario

Following your meeting with the network manager, you have been provided with a full specification of requirements (control document A) for the updated software build for company computers by your team leader (technical audience).

Your team leader has asked you to assess the specification of requirements and prepare a project proposal that addresses the needs of the client.

### Instructions for students

Your project proposal (24 marks) should include:

- an introduction outlining the current issues of the computer and software upgrade
- a detailed overview of how to upgrade the company computers which includes plans for future computers that may be added to the network
- a justification of any equipment, software or cloud services decisions you make which includes plans for rolling out the software efficiently to all company computers
- estimated costs for any equipment, software or cloud services recommended; your decisions should provide value for money whilst meeting the brief (you should use the internet to research this)
- an explanation and justification of any proposed software licensing arrangements
- an explanation and justification of the rationale for your choice of operating systems/software recommendations
- an explanation of any potential cyber security issues with recommended mitigations
- ensuring that the proposed solution protects company data and supports minimising unauthorised access to the computer
- a final summary which includes long-term solutions for the business

When identifying costs, the company usually uses PC World Business and Dell as preferred suppliers. Where possible, these suppliers should be used for all equipment or software recommendations before considering other suppliers.

### Evidence required for submission to NCFE

- a detailed project proposal in .pdf format

When you have completed this task, you should save in a .pdf format, and name your file:

Surname\_Initial\_student number\_evidence reference for example Smith\_J\_123456789\_Task3

## **Additional guidance**

You will be issued with control document A for this task.

This task will also assess your English skills.

This task will also assess your mathematical skills which are worth 2 marks.

You will have access to a word processing application or other suitable software to enable you to complete this task.

Access to the internet is permitted.

Access to any online cloud storage is not permitted.

Use of online chat or emails is not permitted.

Access to previous class notes/teaching materials is not permitted.

You are permitted to have up to a maximum of 15 minutes rest break during this task. This must be supervised.

## Task 4: 3 hours 30 minutes

You must read the information on all pages provided for this task before starting your response.

(12 marks)

### Scenario

The computer and software upgrade project is nearing its completion and Willow Technology are considering implementing your proposals.

Your team leader (technical audience) wants you to prepare for a post-project review and create a sample satisfaction survey that could be used to test end-users' satisfaction and measure if your solution fulfils the desired outcomes.

### Instructions for students

You should create a sample satisfaction (6 marks) survey that:

- is professionally formatted and suitable to be distributed to non-technical customers
- includes a range of questions to check ease of use, stability of the network, ability to access files and folders and overall satisfaction with the network

Your post-project review (6 marks) should include:

- a brief overview of the key issues present in the computer and software upgrade project
- your identified solution
- any security issues you have mitigated
- a brief evaluation of your own performance, including considering areas that could be developed or improved in a future project

### Evidence required for submission to NCFE

- a sample satisfaction survey document in .pdf format
- a post-project review document in .pdf format

When you have completed this task, you should save in a .pdf format, and name your file:

Surname\_Initial\_student number\_evidence reference for example Smith\_J\_123456789\_Task4

### Additional guidance

This task will also assess your English skills.

You will have access to a word processing application or other suitable software to enable you to complete this task.

You will have access to all of your completed ESP tasks for this task apart from the interview audio recording.

Access to the internet is permitted.

Access to any online cloud storage is not permitted.

Use of online chat or emails is not permitted.

Access to previous class notes/teaching materials is not permitted.

You are permitted to have up to a maximum of 15 minutes rest break during this task. This must be supervised.

# Control document A: specification of requirements

## Controlled document to be issued at the start of task 3.

Each user has been issued with a computer that was purchased at the time of joining the business and then added to the network.

Each computer is currently using the anti-virus software that was supplied on the computer at point of purchase. There has been no policy to ensure anti-virus software has been updated and, in some incidences, the trial versions of anti-virus software have been allowed to expire.

There is no centralised administration of the computers with each user having administrative access to their own computer. Administrators currently ask users for their passwords when supporting their computer.

## Desktop computers

The desktop computers at the company include:

- 10 computers running Windows 10 Pro with Office 2013 and Adobe Photoshop installed (2.4 GHz processor, 2 GB RAM, 60 GB HDD)
- 5 computers running Windows 8 Pro with Office 2010 and GIMP installed (2.4 GHz processor, 4 GB RAM, 560 GB HDD)
- 3 computers running Windows 7 Home with Office 2007 and PaintShop Pro installed (1 GHz processor, 2 GB RAM, 50 GB HDD)
- 1 computer running OSX 10.15 Catalina with iWork installed
- 1 computer running Linux Mint with LibreOffice and GIMP installed (2.4 GHz processor, 1 GB RAM, 60 GB HDD)

## Laptop computers

The laptop computers at the company include:

- 10 computers running Windows 10 Pro with Office 2013 installed (2.4 GHz processor, 8 GB RAM, 720 GB HDD)
- 15 computers running Windows 8 Pro with Office 2010 installed (2.4 GHz processor, 4 GB RAM, 128 GB SSD)
- 3 computers running Windows 8.1 Core with Office 2010 installed (2.4 GHz processor, 2 GB RAM, 60 GB HDD)
- 2 computers running OSX 10.15 Catalina with iWork and Adobe Photoshop installed

## Current issues

The current issues in the company include:

- opening files created in iWork or LibreOffice on the Windows computers
- Windows 7 computers have not received any Windows updates for several months
- some computers have unapproved software and games installed on them
- graphics files created on different machines are sometimes unable to be opened on other computers

## Requirements

The requirements are:

- all computers should be upgraded to a standardised operating system with computers not capable of running the operating system being replaced
- software should be standardised across all computers with all users using the same productivity software and email client, with standardised centrally managed endpoint protection implemented
- users should not be able to install software on their work computers
- any training or upskilling for staff to use the new systems should be considered
- upgrading of the operating systems should be carried out with minimum interaction in an efficient manner
- additional hardware to facilitate remote installation should be specified as part of the project

## Staffing

The company currently has 52 staff working in the following roles:

- 15 design staff producing high-end graphics and video
- 3 IT staff working in technical support roles and IT manager
- design team leader
- 2 finance staff
- 10 sales staff and sales team leader
- HR manager
- operations manager
- 8 customer service agents and team leader
- 3 admin staff
- office manager
- facilities manager
- managing director
- 2 field sales agents

## Document information

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Owner: Head of Assessment Design

## Change History Record

Version	Description of change	Approval	Date of Issue
v1.0	Post approval, updated for publication.		December 2020
v1.1	Branding and formatting final updates. NCFE rebrand.		September 2021