

To be opened on receipt

**A2 GCE APPLIED INFORMATION AND COMMUNICATION
TECHNOLOGY**

G048/IT Working to a brief

INSTRUCTIONS FOR TEACHERS

For assessment submission

JUNE 2019



INSTRUCTIONS FOR TEACHERS

- This brief should be issued to candidates at the start of the course.
- There are no time limitations on candidates completing the tasks but you must set an internal deadline for candidates to complete and submit their work. This deadline must allow time for marking the work and submission of marks to OCR by 15 May 2019.
- **All work must be the candidates' own work.**
 - Candidates must be made aware of the Notice to Candidates on page 2 of the G048 Instructions for candidates. A copy of this notice is reproduced overleaf for reference.
 - You must be able to verify that a candidate's work submitted for assessment is their own work. Sufficient work must be carried out under direct supervision to allow authentication of coursework marks with confidence.

INFORMATION FOR TEACHERS

- **Work completed to this brief can only be submitted in the June 2019 series.**
- The total number of marks available for the paper is **50**.
- There are no restrictions on computing facilities, hardware or software that may be used.
- The work must be marked, using the Assessment Evidence Grid on pages 180–182 of the specification.
- This document consists of **8** pages. Any blank pages are indicated.

NOTICE TO CANDIDATES

The work you submit for assessment must be your own.

If you copy from someone else or allow another candidate to copy from you, or if you cheat in any other way, you may be **disqualified** from at least the subject concerned.

Any materials (eg books, information from the internet that you have used to help complete this work) must be clearly acknowledged in the work itself.

- You must always keep your coursework secure and confidential while you are preparing it. **If it is stored on a computer network, keep your password secure. When printing work, collect all copies from the printer and destroy those you don't need.**
- When you hand in your coursework for assessment, you will be required to sign that you have understood and followed the coursework and portfolio regulations.

ALWAYS REMEMBER:

YOUR WORK MUST BE YOUR OWN

INSTRUCTIONS FOR TEACHERS – 2019

Each of the following briefs has been written so that it may be completed alongside the Advanced GCE optional unit to which it relates, should centres wish to do so. There is no requirement that centres adopt this practice. Where they do so, it is the centre's responsibility to ensure that the requirements of the related Advanced GCE unit are covered.

Candidates must research and develop **one** of these briefs.

Whichever brief is chosen, candidates will need to report on current working practices. This may be based on actual working practices or an existing solution to a similar problem. If, as a teacher, you are playing the role of the client for the candidates then you will need to identify the working practices within the organisation.

For assessment of this unit, each candidate must produce evidence which **must** include:

- a preparatory report into current working practice
- a project plan in response to the set brief
- a diary or log of work completed
- support materials for use with the project
- an evaluation of their performance in relation to planning the project
- an evaluation of their performance in implementing the project
- an evaluation of their ICT solution to the given brief.

A project management plan will help candidates to organise their time efficiently. As a guide, the minimum requirements for the project management plan would include:

- key dates, deadlines and timescales
- how work may be managed in small sections or tasks
- organisation of information and resources
- time for reviews and modifications
- time for evaluation.

Full planning is vital to the success of the project. Full planning will also allow the candidates to evaluate their work more effectively. There must be clear evidence of planning **before** the project is started.

As well as planning their work in full, candidates must complete a diary or log while they are working on the project. This diary or log should include:

- a full list of all tasks undertaken as part of the delivery of the project
- an assessment of their contribution to the success of the task
- the skills used in meeting the requirements of the task
- an assessment of how their skills were extended to meet the requirements of the task – the discussion of their skills will need to include their use of working with others as well as ICT skills.

Candidates will need to produce supporting materials for the project. These may take any form and it is for the candidate to decide what support materials the project needs.

Once each candidate has completed the project, they will need to report on how well the project ran, what its strengths and weaknesses were and how well they worked with others. Their report should also suggest improvements to the project. Each candidate should collect feedback from users and the client in order to allow them to make informed comments about their project and the role that they played.

At the end of the unit, each candidate must hand in:

- their report on current working practices
- their project plan
- their diary or log
- support materials
- their evaluation reports.

Briefs

Each brief may be carried out by candidates working on their own or as part of a team. Where candidates are working on their own, the focus of 'working with others' becomes the clients or end users of the product. Where candidates are working as a team member, the focus may also include other members of the team.

Candidates **must** develop a solution to **one** of the following briefs.

Brief 1

Air traffic controllers control the movement of aircraft around the world, allocating routes that allow a number of aircraft to be in the same section of airspace, whilst also remaining a safe distance apart. You have been asked to create a model that will be used as part of the training of air traffic control staff.

The model must focus on one section of airspace. The section of airspace is 50 miles in diameter and 8 miles high, measured from the ground (sea level). The section must include an airport.

Your model must allow the following details to be added for each aircraft:

- its unique identification number
- its starting location and height above sea level within the section
- its intended end location within the section (either leaving the section or landing at the airport)
- its speed.

The trainee must be able to add new aircraft to the system and identify suitable routes through the section of airspace. These routes will be based on the intended route of the new aircraft and aircraft currently in the section. The details of new aircraft could be handed to the trainee by an assessor on paper.

As an added feature, your model must include a function which allows aircraft to be entered onto the system in advance and appear randomly once an assessor has hit an on-screen button. This function is intended to measure how well trainees can react to situations beyond their control.

Your model must take account of other aircraft currently in the section. For modelling purposes, you should have a maximum of seven aircraft in the section at any one time.

Your completed product must model the movement of aircraft across the section of airspace, and identify when an aircraft is on course to come within five miles of another horizontally or within one mile of another vertically.

This task may be completed in conjunction with Unit G049: Numerical modelling using spreadsheets.

Brief 2

The Trew Valley Railway is a small railway network of five stations run by a team of steam train enthusiasts. The members of the team have noticed that their service is increasingly being used by commuters and want to encourage more commuters to use their service.

You have been asked to create a prototype of an interactive multimedia product that allows customers to:

- check on station facilities
- find the location of each station on a map
- check on the current location of trains on the network.

In the final version of the multimedia product, information about the location of each train will be gathered from a GPS enabled device placed on each train. However, for the prototype, you can use data included in your multimedia product to synthesise the movement of trains around the network.

This task may be completed in conjunction with Unit G050: Interactive multimedia products.

Brief 3

SportLocal is an organisation that promotes sport in your local area, both as a competitive sport and as a spectator event. You have been asked to create a booklet of at least 10 A4 pages or the equivalent about sport in your local area. Your booklet should include:

- information about each featured sport
- information about the teams or events that you are publicising, including contact details
- images and photographs.

This task may be completed in conjunction with Unit G051: Publishing.

Brief 4

You work for a design studio. The studio has been asked to design a Graphical User Interface (GUI) for a SmartPhone. The GUI will be used as part of the celebration of the 100 year anniversary of the Treaty of Versailles, which ended World War I.

You have been asked to develop a sample of work that can be sent to the client for approval. Your work should focus on the benefits of peace, understanding and collaboration.

The GUI must include versions of standard icons.

This task may be completed in conjunction with Unit G052: Artwork and imaging.

Brief 5

Pump and Go is a chain of five city centre gyms located in different cities in the UK.

You have been asked to create a website that can be used by prospective new members, to apply for membership, and by current members, to download information about classes and other events that are happening.

The website is to include the following facilities:

- a separate mini-site about each of the five gyms
- a search facility that links to each mini-site
- an online membership application form.

Each gym's mini-site should include:

- a location map
- images of the gym that show the unique nature of that gym
- a downloadable list of activities for the forthcoming fortnight
- a 'latest news' section.

This task may be completed in conjunction with Unit G053: Developing and creating websites.

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