

Task 4 – Evaluation and implementation

You must:

- a) produce a virtual model of the design using appropriate software incorporating any changes you have decided to make in response to feedback or as a result of manufacturing and testing
- b) produce a revision control document or report that is typically 500 words justifying why changes were made or not made as a result of the peer review feedback
- c) produce a report evaluating the proposed design. The report should typically be 800 words. This must include:
 - an explanation of the test methods used, reasons for their use and their limitations
 - a summary of the capabilities of the circuitry
 - an evaluation of the fitness for purpose of the design proposal and its conformance to the design criteria and specification
 - the information necessary for a third party to implement the prototype
 - an outline of any additional factors that may need to be considered during the implementation, including:
 - cable types to be used to connect the sensors to the circuitry, if appropriate
 - health and safety considerations
 - applicable requirements from wiring regulations
 - any improvements or adaptations required to the prototype, including any reasoning and justifications if adaptations or improvements are not required.

Conditions of assessment:

- the time allocated for this task is **6 hours**
- you must carry out the task on your own, under **controlled conditions**.

Controlled conditions:

- you must only work on the tasks in the allocated times
- assessment evidence must be handed in at the end of each session for secure storage which cannot be accessed
- you must not share or discuss your work with other candidates
- you are not permitted to bring any materials into the assessment session.

What must be produced for marking:

- outcomes of virtual modelling
- revision control document
- evaluation and implementation report.

Resources:

- copies of completed documentation from tasks 1 and 2
- feedback record form and peer review form from task 3
- access to the internet for research (e.g. costs, component data and production information)
- manufacturer's datasheets (for electronic components)
- wiring regulations.

End of assessment

Copyright in this document belongs to, and is used under licence from, the Institute for Apprenticeships and Technical Education, © 2024.

'T-LEVELS' is a registered trade mark of the Department for Education.

'T Level' is a registered trade mark of the Institute for Apprenticeships and Technical Education.

'Institute for Apprenticeships & Technical Education' and logo are registered trade marks of the Institute for Apprenticeships and Technical Education.

The T Level Technical Qualification is a qualification approved and managed by the Institute for Apprenticeships and Technical Education.

The City & Guilds of London Institute is authorised by the Institute for Apprenticeships and Technical Education to develop and deliver this Technical Qualification.

City & Guilds is a registered trademark of The City & Guilds of London Institute.

