T-LEVELS | Institute for Apprenticeships & Technical Education

T Level Technical Qualification in Building Services Engineering for Construction (8710-30)

8710-033 Core: Employer-Set Project

Task 1.1 Research

Autumn 2023

City & Guilds | eal

Contents

Task 1.1 – Research 3

Timing of assessment 3

Conditions of assessment 3

What you must submit on completion of this research task 3

Additional evidence of your performance that will be captured for marking 4

Maths, English and digital skills 4

Task 1.1 – Research

The local authority has requested a remotely operated alarm system with automatic notification, a remotely operated CCTV system, access control systems, and the use of occupancy sensors.

Review the Project Brief document carefully before you start any research.

Research the installation requirements and main components of the protection systems requested in the Project Brief document and how they can be sited, to enable you to provide suitable options to put forward to the client based on performance, aesthetics and suitability for the environment. This should also take into consideration the current Building Regulations (guidance for penetrating building structure and fabric) and health and safety working practices.

Consideration should also be given to the advantages and limitations of wired and wireless heating control systems.

Research the safe isolation of one protection system's components.

Research the requirements of working with heritage buildings and the limitations this brings when siting equipment, passing through walls and ceilings, and removing the decorative wood panels. This can be linked to any building services engineering (BSE) system.

Research the individual costs of occupancy sensors, to enable energy savings for lighting circuits. The occupancy sensors you research must meet the 'Occupancy sensor specification' in the Project Brief document.

Remember to keep a record of the different sources you have used.

You should collate your research notes and findings together so that you can reference them as part of the next stages in this project. It is likely your research findings will be approximately three sides of A4.

Timing of assessment

- You will have **three hours** to conduct your research.

Conditions of assessment

- Your research must be completed independently and working alone under supervised conditions. You will have access to the internet to conduct your research.

What you must submit on completion of this research task

- Research notes (approximately three sides of A4)
- Record of sources

Submitted as a hard copy or file saved securely as directed by your tutor/supervisor. You must ensure your work is saved as outlined in the 'Presentation of work' section of the Candidate Guidance document.

Additional evidence of your performance that will be captured for marking

- N/A

Maths, English and digital skills

- Through completion of this task, you will have the opportunity to generate evidence of your digital skills.

Get in touch

City & Guilds Technicals Quality Team

We are here to answer any queries you may have regarding your T Level Technical Qualification delivery.

Should you require assistance, please contact us using the details below:

T: 0300 303 53 52 (Monday - Friday | 08:30 - 17:00 GMT)

E: technicals.quality@cityandguilds.com

W: cityandguilds.com/tlevels

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

Copyright in this document belongs to, and is used under licence from, the Institute for Apprenticeships and Technical Education, © 2023. 'T-LEVELS' is a registered trademark of the Department for Education. 'T Level' is a registered trademark of the Institute for Apprenticeships and Technical Education. 'Institute for Apprenticeships & Technical Education' and logo are registered trademarks of the Institute for Apprenticeships and Technical Education.

We make every effort to ensure that the information contained in this publication is true and correct at the time of going to press. However, City & Guilds' products and services are subject to continuous development and improvement, and the right is reserved to change products and services from time to time. City & Guilds cannot accept responsibility for any loss or damage arising from the use of information in this publication.

The City & Guilds of London Institute. All rights reserved. City & Guilds is a trademark of the City & Guilds of London Institute, a charity established to promote education and training registered in England & Wales (312832) and Scotland (SC039576). City and Guilds Group Giltspur House, 5–6 Giltspur Street London EC1A 9DE