

T Level Technical Qualification in Design and Development for Engineering and Manufacturing

**Employer-Set Project
(8730-035)**

**Task 3
Summer 2024**

Task 3 – Plan

Part A

You have been asked by your supervisor to produce a programme of work detailing the stages and considerations required to complete the design, development and manufacture of your final buoy design.

The plan should include the production of 100 buoys, equally split between 50 for entering the harbour channel and 50 leaving the harbour channel. You can assume a manufacturing capacity of 2 buoys per week and a required overall timeline of 70 weeks to complete design, prototype development and manufacturing.

The programme of work will need to include:

- key stages of the project, including approximate cost for each stage
- technology, resources and equipment required to manufacture the buoys
- a critical path analysis to ensure accurate duration and sequence of activities.

The programme of work should be presented in an industry-recognised format of your choice. You must use digital software to present your planning. The programme of work will typically be **two** sides of A4.

Part B

Alongside your programme of work, you will need to provide a supporting statement justifying the approaches you have taken during planning which considers:

- health and safety requirements including risk assessment
- quality control
- key stages for manufacturing the buoy
- waste management and environmental factors
- all assumptions relating to in-house manufacturing capabilities and resources.

The supporting statement will typically be 1000 words.

Timing of assessment

- You will have **five hours** to complete your programme of work plan and supporting statement.

Conditions of assessment

- Your programme of work and supporting statement must be completed working alone under supervised conditions.
- You must not share or discuss your work with other candidates.
- You will have access to software that may be required to create the programme of work (e.g., word processing software, spreadsheets etc.).
- You will have access to copies of your responses to the previous tasks (for review purposes only).
- You will **not** have access to the Internet for the completion of this task.
- Assessment evidence must be handed in at the end of each session for secure storage which cannot be accessed.

What you must submit on completion of this task

- **Part A - Programme of work** (two sides of A4)
- **Part B - Supporting statement** (typically 1000 words) – copy of file saved securely (eg in a secure online location or on memory stick to be handed in).

Additional evidence of your performance that will be captured for marking

- N/A

Marks available

- 18

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:

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E: technicals.quality@cityandguilds.com

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