# Micros Report Template

## Introduction

Coursework aims and what the report covers. Team member roles. Control system chosen and its advantages and disadvantages. IDE and programming language chosen, with advantages and disadvantages.

## Block Diagram

Hardware/Firmware block diagram and/or Work Breakdown Schedule showing individual responsibilities. Explanation of diagrams.

## Justification

Key capabilities of chosen hardware, firmware, programming language, storage, security, and version tracking. Risks, hazards, and compliance. Effects of these on functionality (e.g. accuracy, reliability, repeatability, sustainability, etc.).

## Design Specification

To include:

Technical Capability (e.g. accuracies, ranges, tolerances, etc.)

Useability

Availability

Safety and Security

Environment

## Interface Specification

Hardware technical requirements – currents, voltages, power, pin types and numbers, etc.

## Analogue Signal Processing

Hardware interfacing, e.g. amplifiers, motor drivers, buffers, LED resistors, etc.

## Software Development

Flow charts and/or pseudo code with descriptions of operation.

## Code

Code snippets with explanations. Evidence of version control. Full code should be in an appendix.

## Simulation

Screenshots showing functional and timing simulation. Demonstrating advanced use of simulator and/or emulator. Evidence of problem solving. Note simulator/emulator used with its version.

## Test Procedure

Hardware connections with photos and/or video links. Note IDE and micro used with their versions. Well organised and logical test procedure testing all aspects of Design Specification.

## Test Results

Screenshots, photos, and/or video links of everything tested in Test Procedure. Could be combined with Test Procedure in a pass/fail table.

## Results Evaluation

Critical evaluation of all results in Simulation and Test Results.

## Team Evaluation

Critical evaluation of team working, individual roles, collaboration, and successes/failures.

## Conclusion

Summary of project and team. Knowledge gained. Summary of achievements and failures. Recommendations.