



BLOODHOUND Challenge Task Systems Control in Engineering

A PROJECT APPROACH TO DELIVERY

The Project Brief – Learner Copy

Task 1

You are asked to produce a circuit that could be used in the launching or timing circuits for the rocket car challenge track. Please refer to technical regulations for current limits.

You should:

- use cad simulation to:
 - o design the circuit
 - o test the circuit
 - o use appropriate tools and techniques to:
 - construct the circuit they have designed
 - test the circuit constructed
 - evaluate both the design and construction.

Task 2

You are asked to build a control system for the timing and firing circuits for the BLOODHOUND Model Rocket Car Challenge, recording the time of run and calculating the average speed.

The system should:

- have integrated plc, pic or computer control
- incorporate the circuit designed in the previous task
- be a physical system rather than a computer simulation.

This work could be undertaken as individuals or within a team. If working within a team you are expected to contribute in each of the areas in order to gain the experience and knowledge required to successfully complete the Cambridge National in Systems Control in Engineering.