

Unit 25: **Combinational and Sequential Logic**

Learning hours: 60

NQF level 4: BTEC Higher Nationals – H1

Description of unit

This unit overlaps with and extends the logic theory contained in the specialist unit *Digital and Analogue Devices and Circuits*. It develops the theory from an understanding of digital techniques to more practical and complex applications of both combinational and sequential logic. The minimisation of digital circuits by the use of Programmable Logic Devices (PLDs) is also covered.

Summary of learning outcomes

To achieve this unit a learner must:

- 1 Design and build **circuits using combinational logic**
- 2 Design and build **circuits using sequential logic**
- 3 Design and evaluate a **digital system**.