Course Structure and Units – Starting in Year 10 and into Year 11

Unit 1: Manufacturing Engineering Products requires learners to interpret engineering drawings to BS8888 standards, practice health and safety, plan a manufacturing sequence, and safely use hand and machine tools to make a product.

Unit 2: Designing Engineering Products focuses on understanding product function, sketching ideas, using Computer-Aided Design (CAD), and proposing iterative design solutions to applied problems.

Unit 3: Solving Engineering Problems is a 90-minute external written exam assessing mathematics, science, material properties (including smart materials), and practical engineering problem-solving.

Typical Two-Year Timeline

Year 9 – Introduction into Engineering skills and focusing on 3 main projects – Bottle Opener, Automata and Production**.**

Year 10 introduces workshop equipment, health and safety, and foundational practical skills, usually culminating in the completion of the Unit 1 non-examination assessment portfolio. Level 2 Vocational

Award in Engineering: Manufacturing (Unit 1 skills building) Marking Out (Unit 1) Shaping Engineering Drawing (making task) Presenting Engineering Information Engineering Drawing (Unit 2 Skills Building)

Year 11 transitions into the Unit 2 design tasks alongside focused theory revision, calculation practice, and exam preparation for Unit 3.