

STEAM KS4 Design Technology Unit 1 Overview – Completion date:

You will:

Complete the NEA coursework following on from your initial analysis and design work in year 10.

This coursework is worth 50% of your final grade.

Submission deadline February half term

- Use an Iterative design process
- Complete CAD modelling
- Model making
- Testing and evaluation
- Prototype refinement and communication
- Production planning
- Practical Manufacture

Lesson Overview 1. Use an Iterative design process 2. Complete CAD modelling 3. Model making 4. Testing and evaluation 5. Prototype refinement and communication 6. Production planning 7. Practical Manufacture	Key Words • Tolerance • Quality control • Input • Output • Process • Electronic • Mechanical • CNC • Repeatability • Specification
Showbie information to support this unit: Youtube Solidworks tutorials Systems diagrams examples Production plan examples AQA Markscheme	Cross curricular Maths and science for dimensions, testing, material choices and properties, tolerance, measuring and quality control, 3D modelling and understanding of shape /angles /volume.

	Complete	Teacher assessment
CAD parts modelled		
CAD assembly		
Exploded view		
CAD drawings		
CNC files (2D design and cura)		
Systems diagram		
Coding		
Production plan		
Parts manufacture		
Assembly		
Testing		
Evaluation		

Teacher assessment (1 = poor – 5 = excellent)