

# KS4 & KS5 Curriculum Journey

## Product Design



Using innovation to creatively solve real life problems

**13**

**Component 2:  
Independent Design and  
Make Project**

Non-examined  
assessment

50% of the qualification

Equipping students with design skills for the future

**Component 1:  
Principles of Design  
and Technology**

Written examination: 2  
hours 30 minutes

50% of the qualification

**12**

**GCSE**

**11**

**Component 2: NEA**

30-35 hours  
100 Marks  
50% of qualification

Applying knowledge and understanding in practical contexts

**Component 1: Core,  
Technical and specialist  
design principles**

Paper 1 2hours  
100 Marks  
50% of qualification

**10**

Preparing students to participate in a technological world

### Next Steps:

Higher Education in Product Design, Industrial Design, Architecture Engineering or CAD

Apprenticeships in engineering

Jobs in Design and Manufacturing

### Skills for Life

Problem solving  
Applied Maths  
Practical skills  
Analytical skills  
Time Management  
Creativity

### Next Steps

A level Product Design  
FE College  
Apprenticeship

### Skills for Life

Problem solving  
Applied Maths  
Practical skills  
Analytical skills  
Time Management  
Creativity

### Skills and Knowledge Building

- Material properties and characteristics
- Processes and specialist tools
- Digital technologies
- Product development
- Safe working practices
- Features of the manufacturing industry
- Designing for maintenance
- Information Handling

### Skills and Knowledge Building

- New and emerging technologies
- Energy generation and storage
- Developments in new materials
- Systems approach to design
- Mechanical devices
- Materials and properties
- Forces and stresses
- Ecological footprint
- Sources and origins
- Scales of Production
- Design Strategies

