

# Design & Technology Learning Journey AQA



At NHTS – Technology students design and make high-quality prototypes, across a wide range of material areas. The curriculum is built upon the skills and knowledge found in the creative, technical, and practical expertise required to manufacture a range of innovative products – that ultimately meet the users needs.

## Understanding and Applying D&T Skills

Year 7

Year 11

- Unit 1: New and emerging technologies
- Unit 2: Energy, materials, systems and devices
- Unit 3: Materials and their working properties
- Unit 4: Common specialist technical principles
- Unit 5: Specialist material areas
- Unit 6: Designing principles
- Unit 7: Making principles

**YEAR 11**  
Terms 2/3

Unit 1 Recap  
Unit 2 Recap  
Unit 3 Recap  
Unit 4 Recap  
Unit 5 Recap  
Unit 7 Recap

Revise for CEE

**Y11 Exam**

Revise

**YEAR 11**  
Term 1

NEA

Identifying & investigating

**EOYE PLUS NEA CONTEXTS**

NEA

People, culture & society  
Forces & stresses  
Industry & enterprise

**YEAR 10**  
Term 3

NEA

Surface treatments & finishes  
Processes  
Tolerances & allowances

**EOYE**

Material Properties  
Material Categories

**YEAR 10**  
Term 1

Skills Projects/ Practice NEA

Energy generation/storage  
Composite materials  
Materials and their working properties recall

**YEAR 10**  
Term 2

NEA

Production techniques  
Ecological & social footprint  
Sustainability & the environment

**Folding Stool Project**

Options

Material Properties  
Material Categories

**NEA Contextualised Challenge Project**

FPT

Unit 4: Analyse products considering life cycle analysis (6 R's)

**Sweet Dispenser Project**

FPT

Ergonomics, anthropometrics

**Angle Poised Table Lamp Project**

FPT

Methods of manufacture  
Evaluate and modify a product to improve performance

**YEAR 9**

NEA Contextualised Challenge Project

Designers/Engineers

**YEAR 8**

FPT

Unit 1: Investigate and analyse new and emerging technologies

**NEA Contextualised Challenge Project**

FPT

Unit 5: Polymers Textiles Electronic Systems

**Sweet Dispenser Project**

FPT

Apply mathematics to help design and make products

**YEAR 9**

NEA Contextualised Challenge Project

Unit 2: Mechanical systems

**YEAR 9**

NEA Contextualised Challenge Project

Unit 5: Metals & Alloys

**YEAR 9**

NEA Contextualised Challenge Project

Designers/Engineers

**NEA Contextualised Challenge Project**

FPT

Unit 3: Investigate the physical properties of materials

**NEA Contextualised Challenge Project**

FPT

Unit 5: Papers & Boards Natural & Manufactured Timbers

**Desk Tidy Project**

FPT

Material joining techniques

**YEAR 7**

FPT

Unit 3: Physical properties of materials

**YEAR 7**

FPT

Unit 3: Physical properties of materials

**YEAR 7**

FPT

Unit 3: Physical properties of materials

**YEAR 7**

FPT

Unit 3: Physical properties of materials

Acquire • Develop • Secure • Master