

GCSE  
Technology  
and Design

STUDENT  
GUIDE



# INTRODUCTION

Our GCSE in Technology and Design gives you the opportunity to study common core material and then choose a particular specialism. There are three areas to choose from:

- Option A: Electronic and Microelectronic Control Systems;
- Option B: Mechanical and Pneumatic Control Systems; and
- Option C: Product Design.

This specification also provides a good foundation if you would like to study technology and design related subjects at a more advanced level.

## WHY STUDY TECHNOLOGY AND DESIGN?

The following are important features of this Technology and Design qualification.

- It allows you to develop transferable skills, which will benefit you in vocational training and employment.
- It makes you aware of creative, engineering and manufacturing industries.
- It incorporates product design, and systems and control.
- It encourages you to be creative, innovative and prepared to take design risks.
- It makes you aware that high quality design and technology are important.
- It makes you aware that many modern day innovations are developed from existing and historical solutions.

## UNIQUE FEATURES OF THIS SPECIFICATION?

This is the only Technology and Design qualification that provides all candidates with a foundational core of knowledge in electronic and microelectronic control systems, mechanical and pneumatic control systems, and product design.



# HOW WILL I BE ASSESSED?

CONTENT	ASSESSMENT	WEIGHTINGS	AVAILABILITY
<b>Unit 1: Technology and Design Core Content</b>	External written examination  1 hour 30 mins  Students answer <b>10</b> questions from a core area of study.	25 %	Summer from 2018
<b>Unit 2: Optional Areas of Study</b>	One of three optional written examinations  1 hour 30 mins  Students choose <b>one</b> of <b>three</b> options: A. Electronic and Microelectronic Control Systems; or B. Mechanical and Pneumatic Control Systems; or C. Product Design.  Students should select the option that reflects the area of Technology and Design they have studied.	25 %	Summer from 2019
<b>Unit 3: Design and Manufacturing Project</b>	Controlled assessment  Students complete a design project comprising a design portfolio and an associated manufacturing task.  Teachers mark the design project, and we visit centres to carry out moderation.	50 %	Summer from 2019



Unit 1

**Technology and  
Design Core  
Content**

**25%**



Unit 2

**Optional Areas  
of Study**

**25%**



Unit 3

**Design and  
Manufacturing  
Project**

**50%**

# WHAT CROSS-CURRICULAR SKILLS, THINKING SKILLS AND PERSONAL CAPABILITIES WILL I DEVELOP?



## CROSS-CURRICULAR SKILLS AT KEY STAGE 4 COMMUNICATION, USING MATHEMATICS AND USING ICT

This qualification gives you opportunities to continue to develop the Cross-Curricular Skills and the Thinking Skills and Personal Capabilities. The specification includes examples of how you can develop your skills in Using ICT, Using Mathematics, Communication, Self-Management, Working with Others and Problem Solving in ways that relate to GCSE Technology and Design.

# WHAT CAN I DO WITH A QUALIFICATION IN TECHNOLOGY AND DESIGN?

With this qualification you can progress to a GCE in Technology and Design or on to higher and further education, where you can complete many qualifications ranging from civil engineering to product design.

With the demand for apprenticeships in Northern Ireland, this qualification could provide you with the understanding and concepts you need for the world of work.

