

Q. HOW CAN I FIND OUT MORE?

There are a number of ways that you can find out more about Technology and Design. These include:



CCEA microsite
www.ccea.org.uk/technology



teachers at your school
or college



students who have already
studied the subject

**Student
Guide**



REVISED GCSE STUDENT GUIDE TECHNOLOGY AND DESIGN

For first teaching from September 2009

For first assessment from Summer 2010

For first award in Summer 2011

**tech
nology
and
design**

**Student
Guide**





GENERAL INFORMATION

Technology and Design allows you to learn about Systems and Control or Product Design. It 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?

It's fun to design and make:

- you get to create your own product or system;
- you get to work with tools and machines;
- you get to use graphics, and other methods, to communicate your design ideas;
- you get to make links between products and the impact they have on daily life;
- you get to develop your decision making skills; and
- you gain insight into related sectors such as manufacturing/engineering and the career paths they have to offer.

WHAT WILL I STUDY? OVERVIEW

Technology and Design is split into five units

- three units are compulsory; and
- one from two optional units is compulsory

You must complete Unit 1: Technology and Design Core, Unit 4: Design Assignment and Unit 5: Design Project.

You must complete either Unit 2: Systems and Control or Unit 3: Product Design.

Q. WHAT WILL I STUDY?

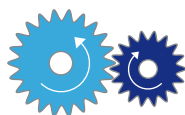
Unit 1:
Technology and
Design Core



This is a core unit and is compulsory. In this unit you will learn about:

- Manufacturing;
- Electronics;
- Mechanical control systems;
- Computer control systems; and
- Pneumatic systems and control.

Unit 2:
Systems and
Control or
Unit 3:
Product Design



You must complete either **Unit 2: Systems and Control** or **Unit 3: Product Design**.

In Unit 2: Systems and Control there are two elements. You will choose either electronic and microelectronic control systems or mechanical and pneumatic control systems.

In Unit 3: Product Design you will learn about:

- Designing and innovation
- Materials, components and fabrication
- Manufacturing practices; and
- Social responsibility of product design and market influences.

Unit 4:
Design
Assignment

This is a compulsory unit. This unit enables you to demonstrate your capability to design a product under controlled conditions.

Unit 5:
Design Project



This is a compulsory unit. This unit enables you to demonstrate your ability to design and manufacture a product in either a Systems Design and Manufacturing or a Product Design and Manufacturing element under controlled conditions.

Q. HOW WILL I BE ASSESSED?

There are two external assessments worth 20% each and two controlled assessment tasks, one worth 20% and the other worth 40%.

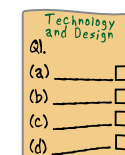
TYPE OF ASSESSMENT

Unit 1:
Technology and
Design Core

You will sit a 1 hour external examination paper worth 20% of the overall GCSE qualification.

Unit 2:
Systems and
Control

You will sit a 1 hour external examination in the element that you have studied. This is worth 20% of the overall GCSE qualification. The paper is split into:



Electronic and Microelectronic Control Systems; and

Mechanical and Pneumatic Control Systems

Unit 3:
Product Design

You only complete the element you have studied.

Unit 4:
Design
Assignment

You will complete a Design Assignment which is set by CCEA. This controlled assessment is worth 20% of the overall GCSE qualification.

Unit 5:
Design Project

Systems Design and Manufacturing Project or Product Design and Manufacturing Project.



This controlled assessment is worth 40% of the overall GCSE qualification.