

VISION THE AIM OF THE FACULTY

- **Design Technology at Hamilton Community College is forward looking, progressive and exciting. It is driven by an enthusiastic cohesive staff, whom believe that Design Technology education plays a vital role in preparing young people for lives in a complex environment.**
- **The aim of the Faculty is to provide a lively, stimulating environment for all people to develop their creative talents, approaches to problem solving, communicating as an individual and part of team whilst gaining subject expertise and knowledge.**
- **Students are encouraged to be responsible for their own learning through a variety of resources, advice from teaching staff and develop a mutual respect for their own work, environment and that of others. Students feel safe and valued and can develop the skills to work co-operatively and safely with teaching staff, their peers and other adults.**

DT TEAM

Mrs Jan Southorn SO	Full-time	<ul style="list-style-type: none"> ▪ Head of Faculty ▪ NQT inductions 	Textiles	DT8
Mr Craig Curtis	Full-time		Product Design Resistant materials/Graphics	DT9
Miss Louise Fisher FI	Full-time	<ul style="list-style-type: none"> ▪ ITT Mentor 	Textiles Resistant Materials	DT7
Miss Heena Patel PL	Full-time	<ul style="list-style-type: none"> ▪ BTEC 3D Studies 	Resistant Materials	DT2
Mrs Louise Beech-Dcra BC	Part-time	<ul style="list-style-type: none"> ▪ DT Student Council 	Resistant Materials	DT5
Miss Debbie Abbott AT	Full- time	<ul style="list-style-type: none"> ▪ Instructor ▪ TA ▪ First Aider 	NVQ Catering & Hospitality / KS3 Food	DT4
Mr Liam Coleby	Full-time	<ul style="list-style-type: none"> ▪ Instructor ▪ Technician ▪ Cover supervisor ▪ Trained first Aider 	NVQ Catering & Hospitality Resistant Materials/ CAD/CAM	DT4
Mrs Aileen Hunt	Full- time	<ul style="list-style-type: none"> ▪ TA ▪ Technician ▪ Trained First Aider 	Food/ Textiles	

The following DT Software is available in addition to Microsoft applications:

Software	CAD/ CAM Facilities	Other Facilities
<ul style="list-style-type: none"> ▪ Bordworks KS3/4 (I drive> Design> Boardworks) ▪ Pro-Desk Top 8 ▪ Corel Draw ▪ Photoshop ▪ 2D Design ▪ Speed Step 	<ul style="list-style-type: none"> ▪ CAMM1 (DT9) ▪ Denford 4th axis router (CAD/CAM room) ▪ A3 Laser cutter (CAD/ CAM room) ▪ Computer Aided sewing machines (DT7 and DT8) 	<ul style="list-style-type: none"> ▪ Spray paint booth with extraction (DT2) ▪ Casting kiln (CAD/CAM room) ▪ Vacuum former (CAD/ CAM room) ▪ Strip heater (CAD/ CAM room) ▪ 2 Fully equipped Resistant Materials rooms (DT2 and DT5): Hegna saw, band saw, metal lathe, pillar drill and sander
<ul style="list-style-type: none"> ▪ 2 Fully equipped Food rooms (DT3 and DT4) ▪ 2 Textiles rooms equipped with embroidery machines, over-lockers, iron presses, batik facilities, screen and painting ▪ 1 Graphics room (DT9) <p>The following rooms have interactive white boards: DT5, DT7, DT8, DT9</p>		



The DT Curriculum (KS3)

Students will experience the full range of DT subjects throughout KS3. This gives them the opportunity to find the subject in which they are the most successful or the one they have the most interest in to pursue at GCSE. Students undertake design and make projects in Graphics, Resistant Materials, Textiles, Systems & Control and Food. They will use a variety of CAD/CAM and traditional methods. This is done on a rotational system whereby they move round to a new area after a designated time period. Students are awarded a National Curriculum level for each project.

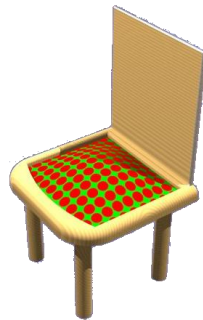
ABLE & TALENTED:

Some students are able to take a GCSE in Product design in year 9. They are required to design and make a prototype model of a mobile phone handset and the packaging. This project enables students to achieve National Curriculum levels of 7 & 8.

Examples of KS3 work



Year 8 graphics



Pro desk top rendering



Able and Talented



GCSE Product Design Year 9



The DT Curriculum (KS4)

OCR GCSE GRAPHIC PRODUCTS: (Yr 10= 2 lessons per wk: Yr 11= 3 lessons per wk or vice-versa)

The course assessment consists of 60% coursework and two terminal examination papers. Students will consider how graphics are used to promote products. They will learn how to communicate their ideas using various drawing techniques including CAD (Computer Aided Design) and realize their design through CAM (Computer Aided Manufacture). In year 10 students will learn and practice key skills and undertake a mid year exam to assess knowledge & understanding. Year 11 will consist of the exam coursework unit, which is to design and make the packaging and insert tray for a fragrance/ aftershave range

AQA GCSE TEXTILES: (Yr 10= 2 lessons per wk: Yr 11= 3 lessons per wk or vice-versa)

The course assessment consists of 60% coursework and one themed terminal examination paper. Students will learn about equipment, materials, working properties of fabrics, colouring and decoration of fabric, construction techniques and fabric care. In year 10 students will undertake a series of FPT's (Focussed Practical Tasks), which develop a range of practical skills. Year 11 will consist of the exam coursework unit, which will be to identify a need for a textile item, investigate, design and make the item.

AQA GCSE RESISTANT MATERIALS: (Yr 10= 2 lessons per wk: Yr 11= 3 lessons per wk or vice-versa)

The course assessment consists of 60% coursework and one themed terminal examination paper. Students will learn about tools and equipment, materials, construction methods, surface finishes, manufacturing processes (including CAD/ CAM), quality control and mechanisms. In year 10, students will learn how to communicate their design ideas and undertake a series of FPT's (Focussed Practical Tasks), which develop a range of practical skills & an understanding of construction techniques. Year 11 will consist of the exam coursework project, which will follow a theme/ style chosen by the student.

BTEC 3D STUDIES

This is equivalent to 3 GCSE's

This is an internally assessed course with no terminal examination. Awards are categorized as Pass, Merit or Distinction.

Students will undertake 5 units which include: Product Design, Materials, Techniques and Processes, 3D Design Crafts, Exploring Surface Decoration and 2D/3D communication.

Examples of GCSE work



Textiles & Graphic Products