Subject

Design and Technology

The Design and Technology Department provides an environment where students are encouraged to work independently and collaboratively, developing an open-minded attitude towards different forms of expression.

Staff are passionate and enthusiastic with a variety of expert skills and industry experiences. This allows for a unique, varied and exciting curriculum that equips students with the skills, techniques, knowledge and understanding to produce work to the best of their individual abilities.

Design and Technology is a centre of innovation, creativity and craftsmanship where students thrive, expressing their individuality and originality. We offer a range of different subject specialisms which each have separate skills and challenges. We are a dedicated team that is committed to supporting student progress across all abilities and age ranges.

Alongside outstanding teaching and learning, students benefit from having access to the latest technology including CAD and laser cutter machines.

Curriculum Intent

Students follow a Quality Curriculum within Design and Technology. The main objective is to ensure that all students possess the key subject specific skills needed for success at GCSE by the end of Year 9.

Schemes of work and assessment procedures ensure that all students are sufficiently challenged according to their starting points and grasp the key concepts needed for high-level success at GCSE, BTEC and beyond.

Key Stage 3

Design and Technology

Students have a separate design and technology lesson where they complete a carousel of projects working with a range of materials.

Examples of projects completed in Key stage 3 include phonestands, jewellery pendants, passive amplifiers, gumball and pinball machines, lamps and animal habitats. Students also complete learning cycles in Food Preparation and Nutrition during Key stage 3 where learning cycles include topics such as healthy eating, food hygiene, international foods all with an emphasis on developing practical skills and techniques.

Students learn a range of practical skills as well as having a theoretical content. These skills include:

- exploring and analysing the work of others
- generating ideas using a range of information sources and drawing techniques
- developing and modelling ideas in order to meet a client's specification
- planning time needed to complete a task
- realising design ideas and making high quality products
- evaluating their own ideas and products to make judgements about the originality of design ideas and quality of solutions.

Key Stage 4

GCSE Design and Technology

This course focuses on a variety of materials and production methods as well as wider issues such as environmental impact, renewable energy and enterprise. These topics will be taught using a combination of skills building tasks and project work.

In Year 10 students will concentrate on acquiring the technical skills necessary to produce a variety of practical outcomes whilst learning more about the design process. In Year 11, a self-generated project showcases the techniques acquired in a creative way. The project embraces all aspects of the design process and students will need to use current industrial practices to generate, evaluate, and implement design ideas.

The course allows learners to study core technical and designing and making principles, including a broad range of design processes, materials techniques and equipment. They will also have the opportunity to study specialist technical principles in greater depth.

Assessment:

In Year 11 a project is completed that is worth 50% of the final grade; this is in the form of a controlled assessment project where students decide upon a product to make that responds to a particular contextual challenge. There is also a theory examination worth 50% of the final grade which features a variety of short and longer mark questions, as well as mathematical problem solving questions.

WJEC Level 1/ Level 2 Hospitality and Catering

This course concentrates on the hospitality and catering industry. You will develop the knowledge and understanding related to a range of hospitality and catering providers; how they operate and what they have to take into account to be successful. You will have the opportunity to learn about issues related to nutrition and food safety and how they affect successful hospitality and catering operations. In this qualification, you will also develop food preparation and cooking skills as well as transferable skills of problem solving, organisation and time management.

ASSESSMENT

Unit 1 (40%): The Hospitality and Catering Industry written component will be externally assessed with an online or paper examination that lasts 90 minutes.

Unit 2 (60%): Hospitality and Catering in Action is internally assessed: This involves completing a piece of controlled assessment in school under examination conditions. You will be set a practical cooking task by WJEC and will have to safely plan, prepare, cook and present dishes to satisfy the task.

Grading: Level 1 Pass, Level 1 Merit, Level 1 Distinction, Level 2 Pass, Level 2 Merit, Level 2 Distinction