



# DESIGN & TECHNOLOGY

## Curriculum Intent

### What do students' study for each Key Stage?

- At Hilbre High School, students initially build on prior learning from primary school which have been laid in KS1 and KS2. For the majority of students, there is a significant change in the learning environment in which D&T is taught. The use of specialised rooms and equipment enables a greater depth of learning that many students will not have experienced in primary school.
- In key stage 3, students initially develop their skills in a number of Focussed Practical Tasks (FPTs) and some initial Design and Make Activities/projects (DMAs). FPTs and DMAs initially are more closed design brief during the first few projects. This is to develop their skills further for more challenging activities in secondary school. As the curriculum progresses, key elements of the D&T curriculum are revisited to help secure key subject knowledge.
- In key stage 4 and 5, students will be equipped with a wide range of experience, FPTs and DMAs become more challenging, open and independent in nature. Students learn a number of theory principles; mathematical skills; develop knowledge of careers and industries; etc. Students then apply their subject knowledge and their problem-solving skills independently for their NEA and examinations in Year 11-13.

### What we think is important about our subject?

- The philosophy of the department, in summary, is that through the iterative processes of 'design, make and evaluate', students gain a sound education in technology whichever the medium they are working in. This can be thought of as a series of stages - the perceived need for a product, the design stage, the use of practical skills to work safely with equipment and materials in producing a product, and the evaluation of the finished article.
- Students learn to recognise needs, wants and opportunities within society and respond to these by producing a range of ideas and products. It encourages creative thinking, independence of thought, perseverance, the development of craft skills and the ability to offer a critical evaluation of their work.
- It encourages students to think about safety and the need for discipline in what can be a potentially dangerous environment.
- The study of Design and Technology enhances the quality of students' learning through developing attitudes of cooperation and collaboration.
- Students learn about our technological heritage and about influence of technology in society.

### The Curriculum

#### KEY STAGE 3

##### Year 7-8

- Students in year 7 will be timetabled for 2 D&T lessons a week.
- The teaching groups are split into ten teaching groups, to ensure that there is a maximum of 20 students.

Year 9

- Students in year 9 will be timetabled for 1 D&T lesson a fortnight.
- The teaching groups are split into ten teaching groups, to ensure that there is a maximum of 20 students.

#### **KEY STAGE 4**

Year 10-11

- At Key Stage 4, Hilbre High School are offering the following courses:
  - AQA Design & Technology
  - OCR Cambridge National Level 1/2 in Engineering Design
- This is delivered through 5 lessons per fortnight.

#### **KEY STAGE 5**

Year 12-13

- At Key Stage 5, students can choose from the following AS/A Level course:
  - AQA Design & Technology (3D Design)
- This is delivered through 5 lessons per fortnight.

#### ***What do we expect students to get from our subject?***

- To make students inquisitive about the developed world that we live in. Develop creatively and cultural awareness and appreciation.
- Work within a safe learning environment and develop their confidence with a range of tools and equipment.
- Apply cross-curricular links into real world application (i.e. D&T and STEAM).
- To gain the necessary skills, knowledge and experiences to be equipped for potential future pathways/qualifications/careers linked to D&T.
- Develop a number of life and transferable skills (e.g. healthy lifestyle/practical application/problem solving skills, etc.).

#### **What are your assessments?**

- Baseline test at the start of key stage 3 to test prior knowledge from key stage 2.
- End of unit tests throughout the curriculum, as well as mock examinations to track pupil progress and assess pupil's theoretical knowledge, as well as promoting the academic aspect of D&T.
- Summative assessment (Attitude to Learning scores, homework, FPT/DMA assessments) to track attainment and pupil progress, as well to help identify targets for improvement.
- DIRT and formative assessment to inform effective teaching and learning and future planning.