

Design & Technology: FAQ

Do I need to be good at drawing?

No, students do not need to be skilled in drawing. We use a range of different communication methods when generating ideas which can include drawing, CAD and physical modelling, we will help students develop these skills during the course so that they are ready for the NEA.

How is the course assessed?

The course is split into two main assessment areas:

NEA - 50% of the final grade

Examination - 50% of the final grade, three areas of study taught through practical work, NEA and theory lessons:

A: Core technical principles

- New and emerging technologies
- Energy generation and storage
- Developments in new materials
- Systems approach to designing
- Mechanical devices
- Materials & their working properties

B: Specialist technical principles Timbers & Polymers

- Selection of materials & components
- Forces and stresses
- Ecological and social footprint
- Sources and origins
- Using and working with materials
- Stock form, types and sizes
- Scales of production
- Specialist techniques & processes
- Surface treatments and finishes

C: Designing and making

- Investigation, primary and secondary
- Environmental, social & economic issues
- The work of others
- Design strategies
- Communication of design ideas
- Prototype development
- Selection of materials and components
- Tolerances
- Materials management
- Specialist tools, equipment, techniques and processes

How is the course delivered?

In Y10 students will undertake a number of small design and make projects that help build skills in preparation for the NEA and certain sections of the examination. A model of 2 lessons in design and make and 1 lesson in theory is followed during Y10. In Y11 students work on their NEA project 2 lessons per week (and also as home study) and 1 lesson in theory. This structure is flexible and will often be modified to suit the demands of the course.

What is the NEA?

This is an independent design project that students carry out themselves. The exam boards issue 3 contextual statements (e.g – Safety in the Home), students pick 1, then begin to investigate, design, make and evaluate. Students will generate approximately 20xA3 sheets of evidence plus 1 physical prototype of their final design idea, manufactured at school in the workshop.

Results?

Historically the department results have always been strong with students out performing their targets year on year.

2017 – 92% A*-B

2018 – 77% A*-B

2019 – 77% 9-6

2020 – 78% 9-6

What progression and career can Design and Technology take me into?

Students can continue their studies in Design and Technology by taking A-Level Product Design, which we offer at Jumeirah College. Students often progress into University courses in Engineering, Product Design, Architecture, Design and the creative fields. The skills developed during studies in Design and Technology, such as project management, critical problem solving, technical inquisition, design and creativity (to name but a few) will accompany a multitude of career paths. Please see the option video for further insight into future career possibilities.