

DESIGN TECHNOLOGY AT THE OPEN ACADEMY

Our school vision **“Courage in every step, faith in every journey”**

Students explore a range of technical processes which are implemented into both a theoretical written exam and a digital and practical portfolio. Students learn about product design and the careers and techniques behind how a product is made. We focus on aesthetics and ergonomics and how to make a successful product for a specific design brief. Students learn about materials and their properties as well as social, financial and cultural links to the design industry. Students learn to produce technical drawings and refine ideas, leading to a final constructed product.

RESPECT	ASPIRATION	PERSEVERANCE
<p>Students look at the work of existing designers such as Alessi, Aldo Rossi and Yinka Lori to name a few. We investigate the impact their architecture and design has on society and how culture and beliefs influence design over time. Students respect that many careers and roles are needed in the design industry to create final products that we see on the shelves. We discuss the importance of every job role and skill and realise that not everyone in the design industry shares the same strengths. Students become more confident over time with their strengths and use them to develop a personal style.</p>	<p>Inspiring students to learn a range of hand construction, CAD and technology lead equipment encourages students to explore all techniques with confidence, developing an interest into using them for their final NEA. Students partake in a series of mini makes in year 10 to practically make contextual links with theory knowledge for their end of year exam. Students are encouraged to practice drawing, CAD and hand tool techniques with different materials to learn how they behave and trial and error outcomes. Students show progress and the want to improve via constant refinement and development. Career links underpin the whole of the theory and NEA curriculum and students are encouraged to explore these career options throughout the course.</p>	<p>Throughout the DT course, students are encouraged to take risks with their work and trial new processes. Unit two of the NEA is focussed on hand and CAD design and producing a product fit for purpose. Students learn different drawing, sketching and rendering techniques, and are encouraged to perseverer with techniques they are less confident with to evidence possibilities and refinement of ideas. Students have to bring their final idea to life and make a final prototype for the final NEA component. Students prototype and test to identify any floors or amendments that need making to the design and evidence their refinement process through their written portfolio. Students must also complete long mark questions in the exam and are set practices of these questions for starter and revision activities, encouraging them to strive for developed, contextual answers.</p>

Spirituality	Global Citizens	Awe and Wonder
<p>In the Design and Technology curriculum at Open Academy, spirituality is recognised through the way designers are encouraged to consider users’ beliefs, values and cultural identities and preferences when developing products. This means that design work is not just about function and aesthetics, but also about ensuring products are appropriate and respectful to different spiritual and religious needs. For example, when designing packaging or textiles, students may need to consider religious requirements such as ensuring that symbols, patterns, colours and imagery used are culturally sensitive. In product design projects and the NEA (Non-Exam Assessment), students are expected to carry out user research, which can include understanding how spirituality influences lifestyle choices and preferences. For instance, a product designed for prayer or meditation might need to reflect calmness, simplicity, and symbolic meaning. Also, students complete a designer research unit where they are encouraged to explore designers from all over the world and look at how products may differ in different countries and dependant on religion.</p>	<p>Global citizenship is embedded in the Design and Technology curriculum through its focus on designing for a diverse, interconnected and global world. Students are encouraged to consider how products are made, where materials come from, and the social and environmental impact of global supply chains. This includes understanding issues such as fair trade, ethical sourcing, sustainability, and the working conditions of people involved in manufacturing in different countries. For example, when designing and evaluating products, students might explore the use of sustainable materials or consider how clothing and food products can be produced responsibly to support workers in developing countries. The curriculum also promotes awareness of different cultures and global needs, encouraging inclusive design that works for users worldwide, not just locally. In the NEA, students are expected to show how their design solutions take account of global issues such as climate change and resource depletion.</p>	<p>Awe and wonder are embedded in Design and Technology course through opportunities for students to explore how imaginative design, innovation and new technologies can transform everyday life. Students are encouraged to be inspired by existing products, iconic designers and cutting-edge materials or processes, which can create a sense of fascination about how things are made and how they work. For example, studying smart materials, 3D printing, or innovative technology in design can help students appreciate the creativity and scientific advancement behind modern products. In practical projects and the NEA, students often experience awe and wonder when developing prototypes and seeing their ideas become real, functional outcomes. They may also be inspired by how simple design solutions can have a powerful impact on users’ lives, such as assistive technologies or sustainable innovations.</p>