

DESIGN AND TECHNOLOGY – 3D DESIGN

Course Overview for Years 12 - 13

TERM	TERM 1	TERM 2	TERM 3	HOMELEARNING
YEAR 12	<p>Mini Projects for Skills building: Students undertake two mini units to develop skills in product design and the built environment, focusing on drawing, modelling, and working with a range of materials using hand tools, machinery, and CAD/CAM. They study movements such as Modernism and Postmodernism and analyse the work of Gaudí and Noguchi to understand material use, spatial perception, and manufacturing techniques. Alongside, students continue realising their main coursework piece, applying their practical skills and undertaking further exploration to refine and enhance their final outcome</p>	<p>Personal Investigation Exploration 1: Students begin their Personal Investigation by devising a self-initiated brief within either product design or the built environment. The term focuses on refining the brief and gathering information to support the design process, such as conducting site analyses for architectural projects or researching materials and existing products in product design. Through exploration and critical investigation, students lay the foundation for a focused and well-informed creative outcome. Students complete their first exploration outcome in the first of two mock exams, so they experience a practical exam</p>	<p>Personal Investigation Exploration 2: Students continue developing their coursework project, moving into the second of three explorations. This term focuses on refining the overall design and identifying key features of their intended outcome. Students engage in further investigation and experimentation based on their individual brief, deepening their understanding and strengthening the creative direction of their final realisation. At the end of this term, they visit a gallery to collect source materials to inform their final exploration</p> <p>Students complete their 15-hour practical exam shortly after the Easter holidays, working on the final outcome planned during the previous term. Spread over three school days, the exam provides an opportunity to demonstrate the full range of practical skills, creativity, and independent thinking developed throughout the two-year course.</p>	<p>Students use home learning to continue to add to and practice on their on-going coursework pieces throughout year 12 and 13. Students are advised to see as much design and architecture as they can, by visiting sites of interest or galleries. Throughout the year we will point students to places and exhibitions of interest that might enhance their project work.</p> <p>At the end of year 12, the department takes the students on a trip to the V and A, which allows the students a first-hand experience of absorbing and working from source materials</p> <p>To help students with their independent study work or get inspiration from sources, students can use the departments source booklet, which can be found on this website.</p>



YEAR
13

Personal Investigation

Exploration 3: Students continue to deepen their understanding by exploring a personalised bank of contemporary and historical artists, alongside primary research and independently selected texts relevant to their chosen theme. This phase supports sustained intellectual and contextual engagement. Practical outcomes are shaped entirely by student focus, with materials and techniques chosen to best express their ideas. This period culminates in the production of a final resolved piece, completed during the two-day practical progression exam. Students demonstrate how theoretical research informs practical outcomes, refining their creative process with greater clarity, autonomy, and personal voice. This final stage showcases their ability to synthesise research, experimentation, and intention into a cohesive outcome.

Component 2 Preparation:

Students complete the final realisation of their Component 1 project, bringing together research, exploration, and practical work into a resolved outcome. They then begin preparation for **Component 2**, receiving a set of externally set themes. From this, each student develops a personal brief, initiating a new cycle of research, material testing, and idea development. Throughout the term, they refine their creative direction through experimentation and critical reflection, laying the groundwork for a confident and well-informed practical exam outcome.

Students complete their 15-hour practical exam shortly after the Easter holidays, working on the final outcome planned during the previous term. Spread over three school days, the exam provides an opportunity to demonstrate the full range of practical skills, creativity, and independent thinking developed throughout the two-year course.