

Key Stage 5: Year 12 – 3D Design

| Overall Curriculum Goals | | | | | |
|---|--|--|--|---|--|
| <p>-To be introduced to a variety of experiences that employ a range of traditional and new media, processes and techniques appropriate to the chosen areas of study.</p> <p>-Gain a knowledge of art, craft and design, developed through research, the development of ideas and making, working from first-hand experience and secondary source materials.</p> <p>-Record experiences and observations, in a variety of ways using drawing or other appropriate visual forms; undertake research; and gather, select and organise visual and other appropriate information</p> <p>-Explore relevant resources; analyse, discuss and evaluate images, objects and artefacts; and make and record independent judgements</p> <p>-Use knowledge and understanding of the work of others to develop and extend thinking and inform own work</p> <p>-Generate and explore potential lines of enquiry using appropriate media and techniques</p> <p>-Apply knowledge and understanding in making images and artefacts; review and modify work; and plan and develop ideas in the light of their own and others' evaluations</p> <p>-Organise, select and communicate ideas, solutions and responses, and present them in a range of visual, tactile and/or sensory forms.</p> | | | | | |
| Half Term 1 | Half Term 2 | Half Term 3 | Half Term 4 | Half Term 5 | Half Term 6 |
| <p>Various workshop activities, and the start of the lighting project.</p> <p>To include; Technical drawings (isometric and orthographic), Modelling with card, 3D and 2D CAD, Laser cutting, nesting, resin and concrete casting.</p> | <p>Lighting Project as a practice NEA project.</p> <p>To include; Completing research into a chosen design movement. Producing a range of sketched ideas. Producing a range of technical drawings, using the knowledge and understanding obtained in Year 11. Producing a range of card models to allow for analysis of the best design ideas.</p> | <p>Lighting Project as a practice NEA project.</p> <p>To include; Development and Testing of materials, manufacture of final product, evaluation of completed product.</p> | <p>NEA and personal focus.</p> <p>To include; Introduction of the coursework task. Research into a range of design movements, research into a variety of designers within the movements. Identification of chosen product area, and research and responses to existing products.</p> | <p>NEA and personal focus.</p> <p>To include; Production of a range of design ideas, technical drawings of a selection of design ideas, the manufacture of a series of modelled ideas (mock exam day) using card and other appropriate materials.</p> | <p>NEA and personal focus.</p> <p>To include; The development and testing of a wide range of materials, processes, assembly and finishing methods. The beginning of the manufacture of their chosen product.</p> |
| Key Vocabulary/Concepts/Ideas | Key Vocabulary/Concepts/Ideas | Key Vocabulary/Concepts/Ideas | Key Vocabulary/Concepts/Ideas | Key Vocabulary/Concepts/Ideas | Key Vocabulary/Concepts/Ideas |
| <p>Isometric. Orthographic CAD/CAM Design Ideas Concept sketching Presentation drawing and rendering Design Development Prototype, 3D modelling, casting.</p> | <p>Problem, research, brief, design movement, interview, client, analysis, ACCESSFM, feedback, primary and secondary research.</p> | <p>Development and testing, manufacturing, specific material names and processes as required by project outcomes. Prototype, 3D modelling. Final outcome. Evaluation, feedback, in-situ.</p> | <p>Problem, research, brief, design movement, interview, client, analysis, ACCESSFM, feedback, primary and secondary research.</p> | <p>Design Development Prototype, 3D modelling. Final outcome. Evaluation, feedback, in-situ. Specific material names and processes as required by project outcomes</p> | <p>Development and testing, manufacturing, specific material names and processes as required by project outcomes</p> |
| CIAG | CIAG | CIAG | CIAG | CIAG | CIAG |
| <p>Tolerance, accuracy, template, construction lines, scale, CAD/CAM, offset, tutorial, technical, manufacturing. Theory topics above.</p> | <p>Students are required to find a real client who can give them an insight into their needs and requirements, and also provide regular feedback. Theory topics above.</p> | | <p>Students are required to find a real client who can give them an insight into their needs and requirements, and also provide regular feedback. Theory topics above.</p> | | <p>Learning and understanding health and safety. Learning how to use a wide range of industrial processes.</p> |

Key Stage 5: Year 13 – 3D Design

| Overall Curriculum Goals | | | | | |
|---|---|---|--|---|---|
| <p>-To be introduced to a variety of experiences that employ a range of traditional and new media, processes and techniques appropriate to the chosen areas of study.</p> <p>-Gain a knowledge of art, craft and design, developed through research, the development of ideas and making, working from first-hand experience and secondary source materials.</p> <p>-Record experiences and observations, in a variety of ways using drawing or other appropriate visual forms; undertake research; and gather, select and organise visual and other appropriate information</p> <p>-Explore relevant resources; analyse, discuss and evaluate images, objects and artefacts; and make and record independent judgements</p> <p>-Use knowledge and understanding of the work of others to develop and extend thinking and inform own work</p> <p>-Generate and explore potential lines of enquiry using appropriate media and techniques</p> <p>-Apply knowledge and understanding in making images and artefacts; review and modify work; and plan and develop ideas in the light of their own and others' evaluations</p> <p>-Organise, select and communicate ideas, solutions and responses, and present them in a range of visual, tactile and/or sensory forms.</p> | | | | | |
| Half Term 1 | Half Term 2 | Half Term 3 | Half Term 4 | Half Term 5 | Half Term 6 |
| <p>NEA and personal focus.</p> <p>To include; Manufacturing the final product, using a wide range of processes appropriate for their individual chosen product.</p> | <p>NEA and personal focus.</p> <p>To include; Completing the manufacture of the product using a range of materials and processes. Evaluating the final product and considering the improvements that could be made for the product.</p> | <p>Exam</p> <p>To include; Introduction of the exam task. Research into a range of design movements, research into a variety of designers within the movements. Identification of chosen product area, and research and responses to existing products.</p> | <p>Exam</p> <p>To include; Production of a range of design ideas, technical drawings of a selection of design ideas, the manufacture of a series of modelled ideas (mock exam day) using card and other appropriate materials.</p> | <p>Exam</p> <p>To include; The development and testing of a wide range of materials, processes, assembly and finishing methods. The beginning of the manufacture of their chosen product.</p> | <p>Exam</p> <p>To include; Manufacturing the final product, using a wide range of processes appropriate for their individual chosen product.</p> |
| Key Vocabulary/Concepts/Ideas | Key Vocabulary/Concepts/Ideas | Key Vocabulary/Concepts/Ideas | Key Vocabulary/Concepts/Ideas | Key Vocabulary/Concepts/Ideas | Key Vocabulary/Concepts/Ideas |
| <p>Development and testing, manufacturing, specific material names and processes as required by project outcomes. Prototype, 3D modelling. Final outcome.</p> | <p>Development and testing, manufacturing, specific material names and processes as required by project outcomes. Prototype, 3D modelling. Final outcome. Evaluation, feedback, in-situ.</p> | <p>Problem, research, brief, design movement, interview, client, analysis, ACCESSFM, feedback, primary and secondary research.</p> | <p>Design Development Prototype, 3D modelling. Final outcome. Evaluation, feedback, in-situ. Specific material names and processes as required by project outcomes</p> | <p>Development and testing, manufacturing, specific material names and processes as required by project outcomes</p> | <p>Manufacturing, specific material names and processes as required by project outcomes. Prototype, 3D modelling. Final outcome. Evaluation, feedback, in-situ.</p> |
| CIAG | CIAG | CIAG | CIAG | CIAG | CIAG |
| <p>Tolerance, accuracy, template, construction lines, scale, CAD/CAM, offset, tutorial, technical, manufacturing.</p> | <p>Learning and understanding health and safety. Learning how to use a wide range of industrial processes. Returning to speak with a specific client.</p> | <p>Students are required to find a real client who can give them an insight into their needs and requirements, and also provide regular feedback.</p> | | | |