

KS5 CURRICULUM: Technology – Product Design – Graphics (YEAR 12)

<p><u>Overview</u> This subject will allow you to gain an understanding of the processes of design, product development and production. You will learn about and practice the skills involved in the production of design media (technical drawing, model making and CAD such as Photoshop) along product manufacture and development. You will also develop an understanding of the following topics: materials and components (including smart and modern materials), new and emerging technologies, processes and manufacture, sustainability in industry and market influences.</p>
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	Focus / Topic	Knowledge & Skills	Assessment
Autumn 1	Theory: Identifying requirements and learning from existing products Practical Skills: Working with wood Mock NEA: Ergonomic design	Course requirements Exploring contexts and design solutions Stakeholder analysis Product analysis and evaluation Design movements	Exam question practice Practical skills portfolio
Autumn 2	Theory: Technological Advances and Wider Issues Practical Skills: Working with wood Mock NEA: Ergonomic design	Smart, modern and composite materials LCAs Wider issues with product manufacture Maths in PD	Exam question practice Practical skills portfolio Mock NEA presentations Assessment week (w/b 11th Nov 2019)
Spring 1	Theory: Design Thinking and Communication Practical Skills: Polymers and Packaging Mock NEA: Problems around School	Sketching skills and technical drawing Photoshop Illustrator Sketch Up	Exam question practice Practical skills portfolio PPE exam: w/b
Spring 2	Theory: Technical Understanding and Manufacturing Processes Practical Skills: Polymers and Packaging Mock NEA: Problems around School	Material Properties Selection of materials for manufacturing Components Iterative design	Exam question practice Practical skills portfolio Assessment week: w/b 14th Mar 2020
Summer 1	Theory: Health and Safety and Manufacturing Processes Practical Skills: Polymers and Packaging Mock NEA: Problems around School	Manufacturing processes Scales of Production Health and Safety legislation	Exam question practice Practical skills portfolio Mock NEA presentations
Summer 2	Theory: Materials NEA: Analysis of Contexts and research	Materials knowledge	Mock exam: w/b 22nd Jun 2020 for 2 weeks

<p><u>Further Information</u></p> <ul style="list-style-type: none"> - <u>Course code is OCR Design Technology: Product Design H406</u> - NEA cannot be started until 1st June 2018 due to exam board regulations - Students must create their own design contexts for the NEA
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