

TECHNOLOGY FACULTY – ELECTRONIC ENGINEERING
YEARS 7 & 8

<i>Topic(s) covered</i>	<i>Resources available</i> <i>e.g. Website</i>
<p>Students will investigate ideas for the development of their product by researching the following –</p> <ul style="list-style-type: none"> • Similar products • Designing ideas linked to the preferences of the client. • Material properties and the machines used to fabricate them into products 	<p>Worksheets and computers will be used to complete the research tasks.</p>
<p>Year 7 – students to design a logo and wording to decorate a laser cut sign post that will be illuminated by the colour changing mood night light.</p> <p>Year 8 – students to design a logo made from acrylic.</p> <p>Skills covered – opening and setting up software, page size adjustment, drawing tool control, shapes and their alteration, selection of drawing object, deleting and modifying drawing and insertion of text.</p>	<p>Use 2D design software to produce drawing and lettering styles to decorate the flat surfaces of an A6 sheet of acrylic. In addition, using the laser cutter to cut acrylic to shape of sign post/logo.</p>
<p>Year 7 – The night light will be housed in a case consisting of beech and mild steel.</p> <p>Year 8 – Make a miniature safe made from steel. Solder and attach an alarm circuit to the safe.</p>	<p>Pupils to manufacture their products using the following machines.</p> <p>Lathe – door handles</p> <p>Milling machine – logo recess holder</p> <p>Pillar drill – to attach screws</p> <p>Laser cutter – sign post and logo</p>

TECHNOLOGY FACULTY – ELECTRONIC ENGINEERING
YEAR 9

<i>Topic(s) covered</i>	<i>Resources available e.g. Website</i>
Electronics and metal work theory	Use of internet for research on Electronics and metal work.
Designing using worksheets (production plans) to plan and make a variety of circuits and follow the correct manufacturing stages.	Worksheets
Step-by-step work planning	Worksheets
Transfer of design to computer using 2D design, then transfer to laser cutter software and cut out using the laser cutter. Cut, file, mill and lathe where applicable.	Use of computers for design work and production, using laser cutter and 2D design software. Milling machine, lathe and pillar drill.
Testing and evaluation.	