

SYNOPSIS

D&T product design prepares students to become the innovate & creative designers and engineers of the future. It will provide them with the skills and knowledge to work in the U.K's cutting edge creative and design industries.

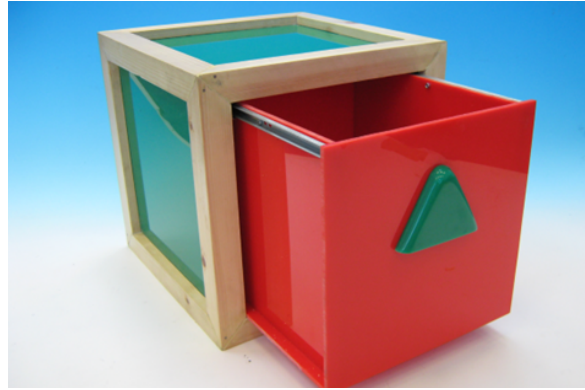
Students will learn about famous product designers, design movements, cultural and social influences on design and a myriad of technical D&T knowledge on materials and advanced manufacturing during the course.

The content will be taught through 'hands on' practical design & make activities and will require students to enjoy sketching, modelling, making, testing and evaluating. And working both with their hands and in a virtual computer based design environment.

Students will be able to design products in whatever material specialism (or combination of specialisms) that they are most comfortable with, be it timber, metals, plastics or composites. Students are also encouraged to incorporate electronics and programmable control technology into their products and conduct independent research.

They will work with industry level 3D CAD software, 3D printing, laser cutting and modern CNC machines alongside more traditional workshop machinery and craft tools using Collingwood's well resourced workshop and design facilities.

The core principle of this course is teaching students to design & develop products to solve real-world problems and improve human lives. Students will be expected to research topics and briefs to help them design products to benefit society, and solve these problems through application of the knowledge & skills learned during the course.



COURSE STRUCTURE

Unit	Type	Duration	Weighting
1	Exam Paper – Core technical principles & Core designing & making principles	2 Hours	30% of A-Level
2	Exam Paper – Specialist Knowledge – Technical and designing and making principles	2 Hours	20% of A-Level
3	Coursework (Internally assessed) Design & Make task requiring construction of practical outcome and a design portfolio – Design Brief set by student.	Worked on in years 1 & 2)	50% of A-Level

Further Information, please contact Mr Thomas
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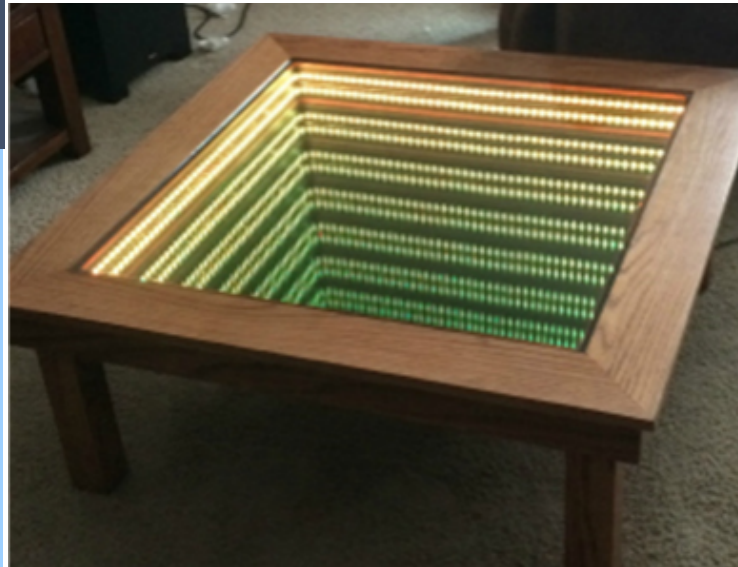
PRODUCT DESIGN

CAREER OPPORTUNITIES

This course will provide a good basis for career opportunities in the following fields:

- Product design
- Engineering (many disciplines, materials, mechanical, design engineering)
- Manufacturing and automation
- 2D and 3D CAD design
- CAM programming

In addition, many universities require a Technology or design based practical subject such as this in addition to Physics and Maths A-Levels as minimum entry requirements for their Engineering or design courses.



COLLEGE FACILITIES

- 3 and 4 axis CNC Milling machine
- 2 Laser Cutters
- 5 3d Printers
- 3D Scanner
- Centre lathes, milling machines, brazing hearths and casting equipment, MIG, TIG and ARC welding equipment
- Specialised electronics, engineering & design workshops
- Dedicated I.T & CAD design suites

