

Design &

Manufacture

S3
COURSE CHOICE

“Product Design leads to the creation of a new product or the improvement of an existing one. The product goes through an analytical process and relies on a problem-solving approach to improve the quality of life of the end user and his or her interaction with the environment. It is about problem-solving, about visualizing the needs of the user and bringing a solution.”

Course Structure:

Students will follow a BGE curriculum until Christmas of S3 to reduce their assessment load and increase engagement with level 4 benchmarks.

More specifically, pupils will:

- **Understand approaches to designing and that a range of strategies and phases can help arrive at a potential proposal that meets specific criteria.**
- **Use modelling techniques to evaluate design concepts and design proposals.**
- **Justify design decisions.**
- **Select tools and equipment to mark-out, cut, shape, form and finish models/products independently.**
- **Identifies potential health and safety risks in the manufacture of models/products and plan the safe working practices required.**
- **Produce accurate prototypes, in scale, by reading drawings and sketches to retrieve dimensional and material information.**

Post-Christmas pupils will follow a range of topics from the National 5 Units:

1. **Design.**
2. **Materials and Manufacture.**

Careers & Opportunities:

Design & Manufacture leads onto, and is a acceptable entry qualification for, degree courses in a range of engineering, design, arts & craft disciplines such as:

Product Designer

Exhibition designer

Furniture designer

Mechanical engineer

Interior designer

Jewellery designer

Materials engineer

Textile designer

Automotive engineer

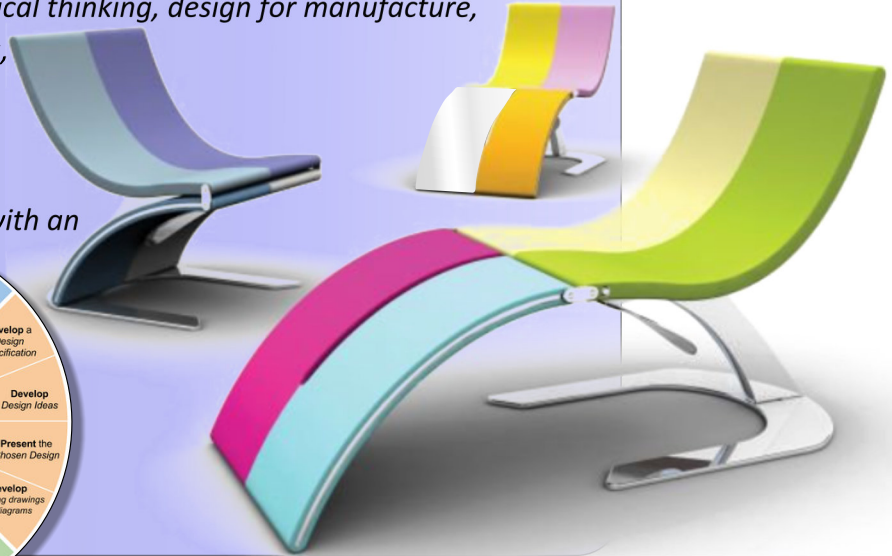
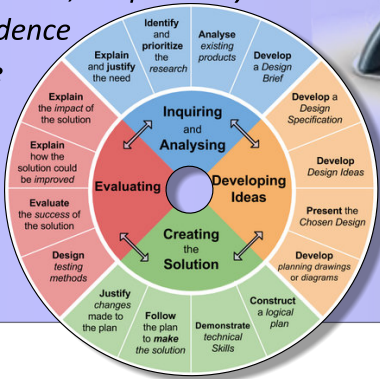
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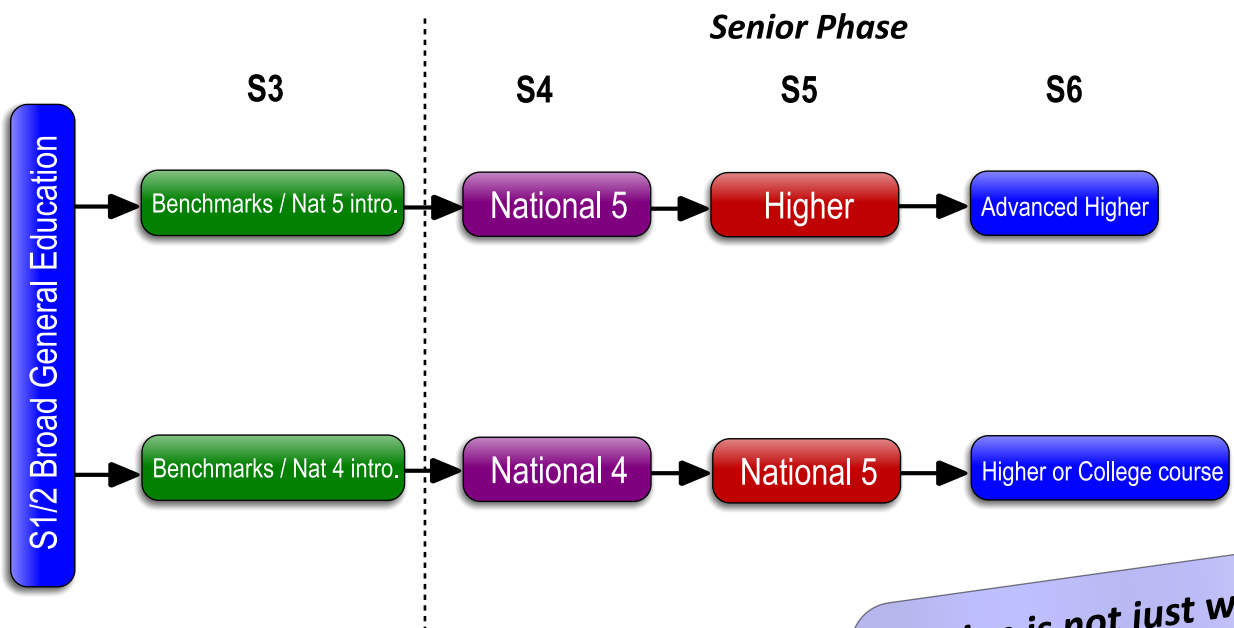
Course information:

Pupils in S3 will have the opportunity to study different methods of research, analytical thinking, lateral thinking, idea generation techniques, critical thinking, design for manufacture, virtual and physical prototyping and user-testing, product design sketching techniques and presentation skills.

Through a hands-on approach, we provide you with an understanding and confidence in crucial elements of the product design cycle, enabling you to design highly original, useful and thought-provoking products.



The Learner Journey for Design & Manufacture



S3 Design & Manufacture

“Design is not just what it looks like and feels like, design is how it works”
- Steve Jobs