



A-Level Design and Technology - Product Design (Edexcel)

Staff delivering:

Mr P Burgess

Mrs E Painter

Mr R Bird

Topics/Units studied:

Unit 01: Principles of Design and Technology (50%)

- Topic 1: Materials
- Topic 2: Performance characteristics of materials
- Topic 3: Processes and techniques
- Topic 4: Digital technologies
- Topic 5: Factors influencing the development of products
- Topic 6: Effects of technological developments
- Topic 7: Potential hazards and risk assessment
- Topic 8: Features of manufacturing industries
- Topic 9: Designing for maintenance and the cleaner environment
- Topic 10: Current legislation
- Topic 11: Information handling, Modelling and forward planning
- Topic 12: Further processes and techniques.

Unit 02: Commercial Design (50%)

- Full design and make project
- Centre/student free choice
- Client/user requirement
- Increased emphasis on sustainability
- Clear assessment criteria

Key dates & deadlines:

Controlled Assessment Deadline 15th May of the examination year.

Career Pathways:

Design skills and the ability to visualise new ideas can be useful in many job families such as marketing, sales and advertising, arts crafts and design, broadcast media and performing arts, journalism and publishing, construction, as well as engineering and manufacturing. Aerospace engineer, Animator, Architect, Cabinet maker, Costume designer, Fine Artist, Illustrator, lighting technician, Mechanical engineer, Photographer, Product designer, School teacher, set designer, sign writer, Telecommunications engineer, Television/film producer, are just a few of the related career paths associated with Design and Technology.

Success

Design and Technology has a history of excellent grades at Holderness Academy and Sixth Form College. Students are successful in securing appropriate progression routes post 18, whether it is choosing to go to university to undertake degree programmes, or opting for more applied pathways such as apprenticeships or level 4 and 5 qualifications at further education institutions.

Progression

Universities and colleges offer courses in many related subject areas, here are just a few:

Architecture, Landscape and garden design, General engineering, Civil engineering, Mechanical engineering, Aerospace, Naval architecture, Production and manufacturing, Metallurgy, Planning (urban, rural and regional), Design studies, Cinematics and photography, Crafts, 3D design and Graphic design.

