# Product Design A Level

**Exam Board:** AQA
**Entry requirements:** Grade 4 in GCSE Art or GCSE Design & Technology

## Intent

### Structure

This creative and thought-provoking qualification gives students the practical skills, theoretical knowledge and confidence to succeed in a number of careers. Especially those in the creative industries. A-Level Product Design requires students to build upon the skills and knowledge learned in GCSE Design and Technology courses. They will investigate historical, social, cultural, environmental and economic influences on design and technology, whilst enjoying opportunities to put their learning in to practice by producing prototypes of their choice.

There are two main sections:

#### Technical principles

- Materials and their applications
- Performance characteristics of materials
- Enhancement of materials
- Forming, redistribution and addition processes
- The use of adhesives and fixings
- The use of finishes
- Modern industrial and commercial practice

- The requirements for design and development
- Health and Safety
- Protecting designs and intellectual property
- Design for manufacturing, maintenance, repair and disposal
- Feasibility studies
- Enterprise and marketing in the development of products
- Design communication

#### Designing and making principles

- Design methods and processes
- Design theory
- How technology and cultural changes can impact on the work of designers
- Product life cycle
- Design processes

- Critical analysis and evaluation
- Selecting appropriate tools, equipment and processes
- Accuracy in design and manufacture
- Responsible design
- Design for manufacture and project management
- National and international standards in product design

## Implementation

### Content & Sequencing

The first year of the course will build upon students' skills and knowledge and will be delivered through a range of small-scale practical projects. The second year of the course will be dedicated to producing a large-scale prototype with a supporting portfolio of research, designs, development and evaluation. There will also be a large share of time dedicated to getting students prepared and fully confident for the two exams.

### Assessment Methods

**Paper 1**

- Technical principles: written exam, 2 ½ hours, 30% of A Level

**Paper 2**

- Designing and making principles: written exam, 1 ½ hours, 20% of A Level

**Non-exam assessment**

- Design and make project: 50% of A Level

### Further information contact

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## Impact

### Onward Progression

An Improvement in problem solving capabilities that can be transferrable across many areas of the design and manufacture industries.

The skills and competence to complete project-based research, development and presentation within time frames so that deadlines are met.

The ability to work Independently and as part of a team. Students will gain a real understanding of what it means to be a designer, alongside the knowledge and skills sought by higher education and employers.

#### Courses

- Degree in Product Design
- 3D Design and Craft
- Sports Product Design
- Automotive Engineering
- Interior Design Diploma
- Carpentry Apprenticeship
- Engineering Integrated Foundation Year

#### Jobs

- Product Designer
- Exhibition Designer
- Furniture Designer
- Automotive Engineer
- Advertising Art Director
- Materials Engineer
- Point of Sale Designer
- Interior Designer