Design and Technology

At Stoke Park we are committed to ensuring our students receive top quality teaching and learning experiences. Students will be taught by experienced members of staff who are passionate about their subject. Students have the opportunity to learn new content and alongside the course, they will have numerous super curricular opportunities and experiences to develop skills that will support them with their future aspirations.

Entry Requirements

To take A Level Design you need:
5 grade 5 GCSEs including English Language

Topics covered

Year 12 topics

- Topic 1: Materials
- Topic 2: Performance characteristics of materials
- Topic 3: Processes, techniques and specialist tools
- Topic 4: Digital technologies
- Topic 5: Factors influencing the design of products
- Topic 6: Effects of technological developments

Year 13 topics

- Topic 7: Safe working Practices
- Topic 8: Features of manufacturing industries
- Topic 9: Designing for maintenance and the environment
- Topic 10: Current legislation
- Topic 11: Information handling, modelling and forward planning
- Topic 12: further processes and techniques

Skills you will develop on the course

Throughout this course you will have the opportunity to develop the following skills:

- Your ability to design Products of value, aesthetically and functionally
- Gaining an understanding of materials and processes applicable to the wider world
- Your ability to use a wide range of tools and equipment to product working products
- Evaluating and analyzing existing products and proposing solutions

Assessment

There is one external exam in Year 13 alongside a substantial design and make coursework that begins in year 12 and ends in May of year 13.

The external exam is:
Component 1: Principles of Design and Technology
Component 2: Independent Design and Make Project

Educational trips, visits and wider experiences

We commit to organising a range of guest speakers in Design and Technology, ranging from the engineering sector to F1 and prototyping. Students are able to lead on extra curricular clubs including an Art and Design club and a STEM club. Students are also able to develop their leadership skills and work with local primary schools to deliver Design and Technology classes to younger students as part of the transition experience.

What type of students will do well on this course?

To do well on this course you need to be passionate about Designing and making, dedicated to an extended piece of coursework and be able demonstrate your creative and problem solving skills to a wide range of problems. Keeping to strict deadlines is also a desirable characteristic.

For more information contact:

Mr Jandu - Head of Art and Design
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Post-School Progression Opportunities

University	Entry requirements	Other similar courses offered
Nottingham Trent University Product Design Ba (Hons)	BBC	Furniture Design Ba (Hons) Product Design BSc (Hons)
Coventry University Product Design Ba (Hons)	BBC	Automotive and Transport BA (Hons) Graphic Design BA (Hons)
Edinburgh College of Art Product Design BA (Hons)	BBC	Graphic design BA (Hons) A range of Design courses including Animation, Fashion, Illustration, Textiles
Birmingham School of Architecture and Design Architecture Ba (Hons)	AAB preferably a Design course or Social Science	Art and Design Design Visualisation
Loughborough University Product Design and Technology BSc (Hons)	AAB preferably a Design course or Social Science	Design BA (Hons) Industrial design BA (Hons) Product Design Engineering BEng (Hons)
University of Leeds Product Design BSc	ABB ideally in Design and Technology	Mechanical Engineering BEng (Hons) Automotive engineering BEng (Hons)

Career Opportunities

Architect

What would I do?

•create hand sketches, 3D models and detailed technical plans using computer aided design (CAD) software

•create a plan, following building laws and safety regulations

•find cost-effective ways to work within budgets

•manage construction projects

•choose or advise on materials

•visit sites to check building work and progress

•communicate and share ideas with clients, other architects, and architectural technologists and technicians

•write reports and job proposals and complete planning applications.

Salary: Starting: £30,000
UK average: £30,000 to £45,000
Routes in: Bachelor's degree in Architecture

Product Designer

What would I do?

•discuss what your client wants

•investigate how existing products work or how services are used

•develop ideas and make initial sketches or outline plans

•decide on suitable materials or resources

•use computer design software to produce detailed blueprints

•make samples or working models, known as prototypes

•test and refine designs

Salary: Starting: £15,285
UK average: £22,000 – £45,000
Routes in: Bachelor's degree in Product Design

Genetic Counsellor

What would I do?

•meet clients to discuss their requirements and ideas

•develop designs to suit clients' needs, their budget, and the type of building

•prepare initial sketches and mood boards for the client to approve

•advise on use of space, colour schemes, fabrics, fittings and furniture

•work out costs and prepare estimates

•create detailed drawings from the initial sketches, usually on a computer

•find suppliers of fittings, furniture, fabrics, and wall and floor coverings.

Salary: Starting: £31,000
UK average: £18,000 - £45,000
Routes in: Bachelor's degree in interior, Art and Design or Interior Architecture