The Design and Technology Department

STAFF

The Design and Technology Department at Stretford Grammar School is a committed and well established team, who enjoy inspiring students to achieve. We aim to produce stimulating contexts, and a range of opportunities for students to use their intellectual and practical skills to think of creative ways to solve real life and relevant problems.

The Curriculum currently manages one other full time member of the department and three further teachers, plus a technician who is shared between Technology and Art. Teachers specialise in Food Perpetration and Nutrition, and multiple areas of the Design and Technology Curriculum.

Students acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. They are also taught to consider aesthetic, technical, cultural, health, social, emotional, economic, industrial and environmental issues when designing. Students learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present day technology, they develop a critical understanding of its impact on daily life and the wider world. Ultimately it is our aim that students of Design and Technology will in the future make an important contribution to the creativity, culture, wealth and well-being.

PREMISES

The Department is well equipped with four dedicated rooms all situated on the ground floor of the Atrium building. There are two rooms dedicated to Design and Technology; one set up as a design studio with computers and equipment for model making, and another as a practical workshop space. These areas are well resourced with equipment such as 3D printers and a laser cutter. The Food room is due to be completely renovated over the coming summer break, with all new workspace and equipment. There is also a Graphics suite adjoining this room with a full class set of Apple Mac computers.

CURRICULUM

In Design and Technology students combine practical and technological skills with creative thinking to design and make products to meet human needs.

At Key Stage three students are taught through the new National Curriculum programmes of study. They have 3 hour lessons per fortnight timetabled as both single and double lessons. Students are taught in groups of around 22 and they spend ten to twelve weeks in each of the focus areas: Food Technology; Materials and Make and Design development with CAD CAM. Students undertake 2 focused assessments in each area, which is presented in an assessment portfolio and they work in exercise books to evidence their general lesson progress and homework.

At GCSE, students are currently following the Eduqas subject specification for both Design and Technology and Food Preparation and Nutrition. They have five periods over a fortnight taught as both single and double lessons. They are popular options for GCSE and uptake is growing year on year.

In the Sixth Form Advanced Level Design and Technology: Product Design is taught. We are currently following the Eduqas specification. Again student uptake for this A Level is continuing to grow, however student numbers historically have been relatively small and at present Y12 and Y13 classes are combined. Several of our Advanced Level students have gone on to study Engineering at degree level. Students have eight periods in year 12 and nine in year 13 over a fortnight which are mostly taught as double lessons.

RESULTS

Most students join Year 7 working at grade 1 and 2 are working at Level 3 or 4 at the end of Key Stage 3.

Last set of formal external examinations sat:

Design and Technology GCSE

Grades 7-9	62.5%
Grades 6-9	93.7%
Grades 5-9	100%

Food Preparation and Nutrition GCSE

Grades 7-9	40%
Grades 6-9	60%
Grades 5-9	90%

Design and Technology A Level – 2018 (2019 did not have a cohort)

% Grades A*/B	50%
% Grades A*-C	100%

Alps score 3

ENRICHMENT

The department has a good provision of extra-curricular activities and is keen to involve students in competitions outside school such as the regional Crest Awards and Dragon's Den competition with Manchester Airport. Teams of students have also been involved in F1 Schools competition both at regional and national level. Weekly clubs include, Textiles club, 'Design and Make It' club, as well as an Engineering club. All are well attended and supported by the school. Trips out have include visits to companies such as Land Rover Jaguar and Siemens.