

Design and Technology



The Design and Technology Department is conveniently situated in purpose built facilities at the far end of the main teaching block. These facilities consist of a generously proportioned ground floor, multimedia workshop (DT1), a large upstairs design/drawing area (DT2), an adjacent design/ICT suite with 18 networked PCs (DT3) and a smaller ICT/teaching area (DT4) mainly used by smaller GCSE and Sixth Form groups. The workshop is very well equipped to allow a wide range of manufacturing processes to be carried out involving a number of 'resistant' materials (wood, metal, plastic, etc.) and 'compliant' materials (cardboard, thin plastic, foam-board, etc.).

The upstairs facilities offer a spacious environment allowing graphical communication, design based activities and ICT to be undertaken by students taking GCSEs and A-Levels in the subject. Our ICT suites, which are linked to the School's intranet, offer students the option of full colour printing up to A3 size and gives them access to subject specific Computer Aided Design (CAD) programs and the Computer Aided Manufacturing (CAM) equipment: a large format laser cutter, a 3-D printer and an A1 sized plotter/cutter; which are all set up within the Department.

Design and Technology at Rishworth

Our aim is to establish and maintain a stimulating, supportive and disciplined environment that will promote the development of skills, enabling a systematic approach to problems of a technological, graphical or practical nature to be applied. We focus on three main skill areas, namely problem solving, graphical communication and manufacturing technology, which will stimulate and encourage enquiry and analysis, technological development and prepare students for GCSE, and ultimately A-Level, study in this subject.

At Foundation Level, the timetable structure allocates every pupil in Years 7, 8 and 9 one hour per week of Design and Technology with the pupils generally spending one half of the year learning the practical aspects of design and manufacture in the workshop and the other half concentrating on problem solving and the graphical techniques necessary to explore and convey ideas. Having followed this foundation course, students are in a position to continue their studies as a GCSE option in either Resistant Materials Technology or Graphic Products, and eventually to A-Level.

Our results at both examination levels are extremely pleasing and the variety and quality of coursework produced by students as part of their assessment is quite exemplary.

Outside the Classroom

We are very keen to ensure that all students, at every level of study, are in touch with the real world when it comes to design and manufacture. Even the most basic design assignment will require pupils to research and analyse information from external sources.

When examination candidates are working on their final controlled assessment, the scope for variety is virtually limitless. Whenever possible we encourage our students to work closely with someone outside the School - a person with a disability for example. This type of extracurricular liaison has proved to be very rewarding for all parties concerned as well as beneficial to the quality of students' designing, making and testing skills.

Over the past few years we have built up a number of contacts with manufacturing and design companies that are able to accommodate small groups for visits. Such links have shown to be invaluable, especially to A-Level groups, by enabling students to experience first-hand the scale and variety that industrial design and manufacture encompass.

Every year in March, twelve students are entered in the Calderdale Rotary Club's Annual Technology Tournament (consisting of three teams of four students from Years 9, 11 and 13). We have been attending this challenging and rewarding event each year since it was established in 2002 and have achieved a very pleasing degree of success with teams frequently being placed in the top three (out of twelve or so other schools) and, whether winning or otherwise, all participants gain a great deal from their experience.

