CHARLES DICKENS SCHOOL – DESIGN AND TECHNOLOGY

Facilities

The Department of Design and Technology comprises of a brand new workshop (from September 2021). In addition to this, there is a technician's preparation room/storage area for the workshop. The teaching areas have access to laptops and a small bank of desktop computers. An A3 colour printer and photocopier is located within department for department use. The Engineering Design equipment includes a laser cutter, 3D printer, CAM vinyl cutter/plotter, along with the usual workshop equipment and tools. The department employs a full time DT Technician who supports Engineering Design.

Key Stage 3

This is an exciting time to be joining the school as we are looking to develop a brand new curriculum for our students at KS3. The students don't currently study D & T at KS3 but it is something we are very keen to include as part of our full and varied curriculum.

Key Stage 4

We offer Engineering Design at KS4 as this is an exciting course that our students can go on to study at a higher level. KS4 is taught across 5 hour lessons per fortnight. We currently follow the OCR Cambridge National examination for Engineering Design.

In year 9 we offer a skills based curriculum which is based on the Engineering Design course to allow the students to build up the skills they need to move onto the assessed units.

The course is split into four sections, which are assessed, R105, R106, R107 and R108 and is weighted 75% coursework and 25% examination.

R105 is the examination unit.

R106 focuses on products analysis and research, students will research existing products and the types of users and other design possibilities.

R107 focuses on developing and presenting engineering design. Students will develop different techniques to present ideas professionally, such as 2D/3D pentation techniques including Computer Aided Design (CAD) which is reflected in industry.

R108 3D design realisation – students make a final product and need to document the making stages.