

**Overview**

Year 10 Engineering Design is taught in specialist technical workshops and ICT suites. A variety of skill based drawing and practical tasks are undertaken to develop the skills required of an engineer/designer. This includes CAD and CAM projects, focused practical tasks, learning about other engineers/designers, drawing, model-making and making products in 3-Dimensions both virtually and physically.

# Year 10

# Engineering

**Term 3**

This term you will start to make, model and evaluate virtual and physical prototypes. You will delve into who influences engineering product design and iconic pieces of design/engineering.

You will continue to work on your NEA assessment ready for moderation.

**Term 1**

You will start with being taught how to draw using computer aided design (CAD). You will be exploring the Design process, stages and strategies using a cyclic approach.

You will be doing lots of sketching, both formal and informal drawings, and using CAD/CAM. You will start to use CAD as a way to generate different outcomes with ease.

**Term 2**

You will continue to work on both 2D and 3D CAD software to turn your CAD ideas into reality with the use of CAM; working on the laser cutter, 3D FDM and 3D Resin Printers.

You will be producing a range of CAD models where you will be able to take your ideas from sketch to screen to generating 3D outcomes both virtually and physically.

You will begin work for your NEA assessment.