

Year 10 Engineering

Students develop the key skills that they have started in year 9, developing the range of materials knowledge specifically around the course requirements which in Technology include EDEXCEL Design Technology and WJEC Engineering. Through these modules retrieval questioning will be carried out through google quizzes/assignments either in lesson or as a homework task.

Year 10 Curriculum	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Engineering	Spanner project, gaining understanding of metal working tools, marking out, working with metal to a high degree of accuracy using a working drawing.	Orthographic drawing learnt and practised by hand using correct views, labels and dimensioning. Google sketch up and export this to create a CAD orthographic drawing	Bottle opener, students carry out a mock practical piece of coursework based on the skills they have learnt from the spanner project. Timing management, gantt charts, tools skills, reading working drawings.	Materials knowledge. Students cover all the main properties outlined in the specification, including metals, plastics, woods, composites, smart, testing of materials and finishing of materials. Class will also be gaining experience on using the metal lathes.	Early entry exam preparation. Students can revisit drawing skills knowledge, material lessons and also cover process knowledge in more detail whilst completing past papers.	Designing Students are to be introduced to Accessfm through product analysis of existing products and develop sketching and designing skills, including use of 3D software google Sketchup.
Assessment	Through classroom work and quiz based activities. Through practical project.	Through classroom work and quiz based activities on google sketchup. Through practical project.	Through classroom work and quiz based activities on google sketchup. Through practical project.	Through classroom work and quiz based activities on google sketchup. Through drawing test project.	Through classroom work and quiz based activities on google sketchup. Through drawing test project.	Through classroom work and quiz based activities on google sketchup. Through practical project.

Independent Work

Details of what types of activities will be set to do as independent work (homework), no need to list every task specifically

Students will complete work that is not done within the lesson and they will also be given quiz questions that they need to complete until they get a required mark which is based on individual targets. The key point to students in this subject is that they must complete work quickly as practical and drawing projects have strict time frames which students must complete work within.