

## Year 9 - Construction Curriculum Intent

### What the curriculum is designed to do

The construction course in year 9 acts as a foundation for the BTEC construction and the built environment course. This qualification has three aspects, carpentry, and joinery skills, understanding forces and structures and sustainable building design. Throughout the year we aim to develop pupils' practical skills and knowledge and understanding of how buildings stand up and how they are designed. We ensure that pupils work with a range of hand tools and machines to make a set of products. The focus is on working safely and understanding risk in the workshop. We expect pupils to work accurately to make their products and achieve a good quality of finish.

### How we deliver the curriculum

The curriculum is delivered through a blend of theory and practical lessons and pupils have 2 lessons a week delivered in the appropriate specialist room. Our focus is to provide every pupil with the necessary skills, knowledge and understanding to enable them to successfully complete the BTEC Construction in Year 10/11.

In Year 9, pupils will build on the skills and knowledge of making learnt in Years 7 and 8 by developing their practical skills in the workshop. We encourage pupils to be able to read working drawings and follow step by step processes to make products. This prepares the pupils for their practical exam in Year 10. They will undertake a series of projects. Initially completing a set manufacturing task followed by a series of structures challenges. The summer term involves investigating sustainable building design and producing a model of their own designs

The main projects are:

- **Project 1 – Timber skills and bird box** – Pupils make a range of different wood joints and use this skill to produce a bird box
- **Project 2 – Structures and forces** - Pupils complete a series of challenges including the egg drop challenge and building the strongest structure from paper. Groups then make a bridge which is tested to destruction
- **Project 3 – Sustainable architecture** - Pupils investigate how buildings can be made sustainable and the materials they are made from. Using this information, they design a sustainable house and make a model of this to present their idea

### How we assess students

Students will complete at least one summative assessment per half-term. These assessments will cover both practical and designing skills. Theory will be tested in end of unit tests of key knowledge.

### How it benefits students learning and personal development

In construction learners will learn theory while also developing practical skills, such as using tools and materials safely with vocationally correct techniques, interpreting and understanding the requirements for safe and efficient work, and specialist design techniques. This is reflected in the engaging internal task-based assessments, in which learners have the opportunity to apply and develop hand skills, express creativity and put learning into practice in a useful way, solving construction-related problems.