

**Staff Contact: Mr F Stewart (ststewartf@selstonhigh.org.uk)**

### What skills and qualities do I need?

- Able to read and research efficiently.
- Plan your work in a logical order and keep a record of your progress.
- Talk to your teachers about your ideas and how to achieve the best results.
- Produce drafts and final copies of your work.
- Produce good quality work with high standards of grammar and spelling.
- Present your work in a suitable format according to the purpose and the audience.
- Evaluate your work and make suggestions for improvement.
- Listen and manage your time to enable you to meet strict deadlines.



### What will I do on the course?

- Use a range of drawing skills to present ideas and concepts;
- Use a range of materials to produce models and prototypes
- Use the Internet as sources of secondary evidence;
- Using multi-media software to present information;
- Using technological equipment/machines when making engineering products;
- Using software to produce design solutions, e.g. CAD (Tinkercad, GoogleSketchUp and 2D Design). 3D printing and laser cutting;

The qualifications have been devised around the concept of a 'plan, do, review' approach to learning where learners are introduced to a context for learning, review previous learning to plan activities, carry out activities and review outcomes and learning.

### How is the course organised and assessed?

Unit 1 Engineering Design. The purpose of this unit is for learners to analyse engineered products in order to propose design solutions to meet requirements. 30 **Guided Learning Hours (GLH) Internally Assessed**

Unit 2 Producing Engineering Products. The purpose of this unit is for learners to use skills developed to produce an engineered product. 60 **Guided Learning Hours (GLH) Internally Assessed**

Unit 3 Solving Engineering Problems. The purpose of this unit is for learners to use their knowledge and understanding of engineering processes and material properties to solve problems. 30 **Guided Learning Hours (GLH) Externally Assessed**

Points available are shown in the following table:

Unit	Points per unit			
	Level 1	Level 2 Pass	Level 2 Merit	Level 2 Distinction
Unit 9791	1	2	3	4
Unit 9792	2	4	6	8
Unit 9793	1	2	3	4

The qualification grade is then calculated by comparing the learner's point score to the qualification grade table below.

Qualification	Overall grading points	
<b>WJEC Level 1 Vocational Award in Engineering</b> <b>9790</b>	Pass	4-6
	Merit	7-10
<b>WJEC Level 2 Vocational Award in Engineering</b> <b>9790</b>	Pass	11-13
	Merit	14-15
	Distinction	16
	Distinction*	

### Future Pathways/Careers:

The successful completion of this qualification could provide the learner with opportunities to access a range of Level 3 qualifications including GCE, apprenticeships and vocationally related qualifications. These include:

- GCE in Engineering;
- GCE in Design & Technology;
- Principal Learning Level 3 in Engineering;
- Apprenticeships in Engineering.

Learners would normally be expected to have attained other qualifications at this level, including GCSE Maths at grade C or above.

Future pathways include the following: Advanced Manufacturing, Bus and Coach Engineering and Maintenance, Engineering Construction, Engineering Environment Technology, Engineering Manufacture, Food and Drink Manufacturing, Improving Operational Performance, Nuclear Working, Rail Infrastructure Engineering, The Power Industry, The Water Industry.

