ENGINEERING – NCFE Level 1/2 Technical Award

Students that choose this option will gain an experience of the science and mathematics that is applied in engineering; they will use machinery and tools and gain an understanding of what the engineering sector may involve. The units within this qualification help develop a significant core knowledge and understanding in engineering and allow the student to apply that knowledge through a project. Students will be able to develop a deeper understanding of how to read technical drawings, using tools and machinery and how materials are applied to particular uses in Engineering.

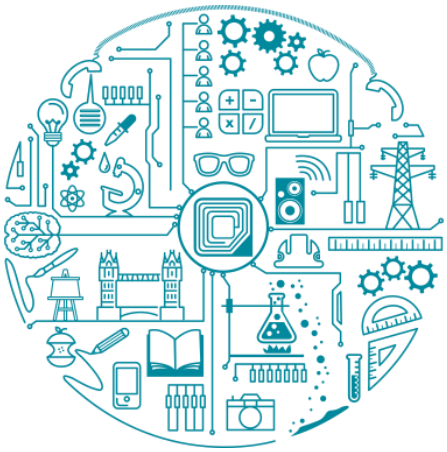
The course is split into two units.

Unit 1: This is the externally assessed exam worth 40% of the overall qualifications grade. This unit will test a range of engineering knowledge, for example reading technical drawings (line type, dimensioning, scale and proportion when producing engineering drawings), maths and science within engineering, material properties and various engineering sectors/disciplines.

Unit 2: This is a mandatory unit which will introduce them to the knowledge and skills needed to become a competent engineer through research, testing and practical development tasks within a synoptic project. This is worth 60% of the overall qualifications grade. This unit is internally assessed and externally moderated. Students are expected to produce a practical outcome and a portfolio of evidence; this is based from the exam's boards synoptic project brief.

Throughout Year 10, all exam-based technical knowledge will be taught, these focused engineering topics will prepare students for the two external exams in Year 11. At the end of the autumn term of Year 11 students will receive their synoptic brief (coursework project), which will be developed through Year 11 up until the summer term.

Students choosing this option need to have a real enthusiasm for the engineering sector and be willing to access the opportunities given to develop the skills necessary to achieve the higher merit and distinction awards for all the units undertaken.

This VCERT award can lead to further studies and a vast range of careers:

- Diploma in automotive engineering
- Diploma in electrical and electronic engineering
- Diploma in engineering maintenance
- Diploma in engineering toolmaking
- Diploma in electrical power engineering
- Diploma in engineering construction
- Mechanical engineering
- Gas and heating engineer
- Industrial design engineer
- Various other construction/engineering tradesman