

Intention of BTEC Engineering

The BTEC level 3 engineering course is designed to enable students to experience a wide range of disciplines they would expect to experience within the engineering sector. The mandatory and optional units provide a foundation of knowledge and skills that will provide a natural transition onto either an engineering degree, apprenticeship or degree apprenticeship.

It is our intent to provide students with an experience that reflects current engineering practices. Experiences include having a solid grasp of mathematical and physics principles that commonly emerge in engineering contexts - understanding how materials can be processed into engineered solutions - creating industry standard visual communication - managing a team involved in safe manufacturing of components and developing solutions to given briefs.

The optional unit chosen focusses on the mechanical behaviour of metallic materials. The intent behind this choice is to establish a good understanding of metals and their behaviours being the main material used in the industry. This will include observing metals under stress and load as well as how to measure and monitor this happening.

Where possible it is our intent to use machinery, equipment and software that will reflect that which is used in industry. This will be the case in the workshop, laboratory as well as in CAD based learning.

As students move on from MV16 student to higher education or apprenticeship they will feel equipped to engage and converse in the technical and visual aspects of the sector and have the confidence to contribute - whether that be within meetings, peer assessing engineering concepts, risk assessing activity or planning complex manufacturing processes.