

Cambridge National Award in Engineering Design



Course Content:

Engineering design is a process used to develop and enhance new products and systems as a response to market opportunities. This qualification is an opportunity for your students to develop a design specification and study the processes involved in designing new engineered products. They'll use practical skills such as drawing, computer modelling and model making to communicate design ideas. The qualification will also encourage them to consult with a client and, with its practical focus, will engage them in producing, testing and evaluating a prototype in the form of a model.

Skills needed and developed:

These qualifications provide opportunities for the development of the Key Skills of Communication, Application of Number, Information and Communication Technology, Working with Others, Improving Own Learning and Performance and Problem Solving

Assessment Methods:

- **Unit R105:** Design briefs, design specifications and user requirements (an externally assessed exam worth 25% of the overall qualification)
- **Unit R106:** Product analysis and research (internally assessed coursework (internally assessed coursework worth 25% of the overall qualification)
- **Unit R107:** Developing and presenting engineering designs (internally assessed coursework worth 25% of the overall qualification)
- **Unit R108:** 3D design realisation (internally assessed coursework worth 25% of the overall qualification)

Qualification gained at completion of the course:

LEVEL 2 Cambridge National Award in Engineering Design – Equivalent to one GCSE

Post 16 options on completion of the course could be a Cambridge Technical award (level2/3), Apprenticeship or an A level in Engineering then onto University.

The course develops the transferable skills and key skills that employers are looking for and can lead to a wide variety of employment opportunities. This can include further training in areas such as Design Technology, Manufacturing, Systems and Control or Product Design.