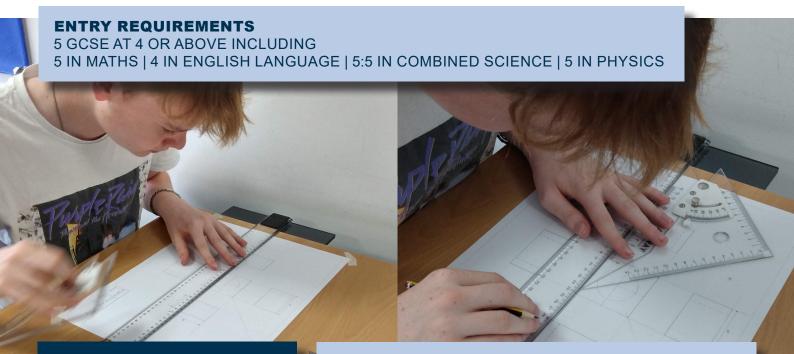
## CAMBRIDGE ADVANCED NATIONAL IN

# ENGINEERING





### **TOPICS STUDIED**

#### **MANDATORY UNITS**

Principles of Engineering Assessed by external exam

Materials Science and Technology Assessed by external exam

Engineering in Practice Assessed by an assignment In this unit you will analyse products, produce engineering CAD drawings and make a component and a circuit prototype

#### **PLUS TWO OPTIONAL UNITS**

Programmable Electronics Assessed by assignment

Computer Aided Design Assessed by assignment

Mechanical Product Design Assessed by assignment

**Electrical Devices and Circuits Assessed by assignment** 

#### **COURSE DESCRIPTION**

The 'how and why things work' course for the curious amongst you, providing the opportunity, through applied learning, to develop your understanding of the fundamental mathematical and scientific principles that underpin all engineering. This advanced alternative qualification (AAQ) is equivalent to one A level and complements Maths, Physics, Environmental Science and Business.

You might be interested in this qualification if you want to apply what you learn to practical, real life contexts such as:

- recreating physical products as a 3D model;
- assembling, testing and programming electronic devices;
- disassembling a product to investigate how it works.

In this course you will develop independence and confidence in using skills that are relevant to the sector and that prepare you for progressing to university. You will develop transferable skills that can be used in both higher education and other life and work situations, such as safe working practices, effective communication, project based skills and using thinking and problem solving skills in order to identify solutions. You will explore and design the products and systems that make up the world around us.

Learning about design and technology encourages you to develop design thinking skills that open up a world of possibility - giving you the tools to create your future.

67 **O/** EXAMS 33 **O** COURSEWORK

