

A-Level Engineering

Examination Board: Edexcel

Contact Teacher: Miss Giddings



Course Details and Assessment

The A Level Engineering course has been developed to provide a broad educational basis for understanding engineering sectors. Learners will understand the nature of different areas of engineering and the demands related to industry. We investigate a variety of engineering techniques, processes and technologies, as well as looking at the design process and prototyping. Students will be expected to complete both coursework and exam elements to this qualification, where they will develop practical skills and general engineering skills like how to read an engineering drawing.

The course will cover the following Engineering topic areas:

AS Course	Full A Level
Engineering Materials, Processes and Techniques <ul style="list-style-type: none"> Material types Properties of materials Joining materials Material Processing The Role of the Engineer <ul style="list-style-type: none"> Application of Technology Legislation and Standards Modifying products Principals of Design, Planning and Prototyping <ul style="list-style-type: none"> Engineering Products Engineering Drawings Project Planning Design Manufacturing a prototype 	Applied Engineering Systems <ul style="list-style-type: none"> Structural Systems Electrical Systems The Engineering Environment <ul style="list-style-type: none"> Environmental Impact Application of Technology Evaluating Engineering Products Applied Design, Planning and Prototyping <ul style="list-style-type: none"> Research Technical Specification Generation of ideas Planning Production Prototype Production

The course is assessed in the following way:

Students who wish to achieve qualifications in Engineering must complete all the assessments below:

AS Level			A Level		
Assessment	Outline	Grading	Assessment	Outline	Grading
Unit 1 Engineering Materials, Processes and Techniques.	1hr 30mins Written Paper	33% AS (16% A2)	Unit 4 Applied Engineering Systems	10hr Practical Exam	16% A2
Unit 2 The Role of the Engineer	Internal Assignment	33% AS (16% A2)	Unit 5 The Engineering Environment	Internal Assignment	16% A2
Unit 3 Principles of Design, Planning and Prototyping.	Internal Assignment	33% AS (16% A2)	Unit 6 Applied Design, Planning and Prototyping	Internal Assignment	16% A2

Career/Higher Education	Entry Requirements
<ul style="list-style-type: none"> Automotive technology Aerospace technology Electrical engineering Electronic engineering Mechanical engineering Civil engineering 	Merit or Distinction at Level 2 BTEC Engineering or Grade 4 or above in Design & Technology Grade 4 or above in English Language

“The human mind is a channel through which things to be are coming into the realm of things that are”
Henry Ford