



BTEC LEVEL 3 ENGINEERING

What will I learn?

5 Mandatory Units

- Unit 1 – Engineering Principles
- Unit 2 – Delivery of Engineering Processes Safely as a Team
- Unit 3 – Engineering Product Design and Manufacture
- Unit 4 – Applied Commercial and Quality Principles in Engineering
- Unit 5 – A Specialist Engineering Project

5 Optional Units

- Unit 10 – Computer Aided Design in Engineering
- Unit 22 – Electronic Printed Circuit Board Design and Manufacture
- Unit 25 – Mechanical Behaviour of Metallic Materials
- Unit 41 – Manufacturing Secondary Machining Processes
- Unit 44 – Fabrication Manufacturing Processes

How do you learn?

Practical, hands-on experience combined with written assignments drawing on real-life scenarios. Core knowledge, behaviour and practical skills that are essential in the workplace.

Qualification

BTEC

(equivalent to two A-Levels)

Start Date

September 2020

Finish Date

June 2022

How am I assessed?

Two year course, mostly internal assessment throughout the course. Study a combination of 6 mandatory units and 5 optional units.

Progression: Where next?

- Further study in Higher Education or University (level 4)
- Apprenticeships
- Progress directly into employment.

Links with industry

The course will be linked with local businesses so that the topics covered relate to real-life engineering and thus increase the students' understanding of the working world.

Entry Requirements

EITHER
Grade 5 in GCSE Maths
AND
either Grade 5 in GCSE Design &
Technology
or Grade 5 in GCSE Electronics
or a Pass in a relevant Level 2
qualification (eg BTEC
Engineering)
OR
Grade 4 in GCSE Maths
AND
either Grade 5 in GCSE Physics
or Grade 5-6 in GCSE Science
(AQA Trilogy/Edexcel Combined/
OCR Gateway)



BTEC LEVEL 3 ENGINEERING continued

How will I be assessed?

Most units are internally assessed. The assessment methods are:

- Practical Assessments
- Written Assessments
- Individual and Group Presentation
- Oral Viva
- Written tests

Future opportunities

This course prepares the learner for Higher Education and possible employment.

Career prospects include: Mechanical Engineer, CAD Technician, Design Engineering, Technical Designer, Estimator, Quality Controller and Maintenance Engineer.

Frequently Asked Questions

Are there any exams?

Yes, Unit 1 is assessed via a two hour external exam consisting of a number of short - and long-answer questions. Unit 3 is assessed via a timed design challenge set by the exam board. For all other units the assessments are internally assessed pieces of coursework. However, occasionally we may choose to assess your knowledge through informal, internal tests.

Head of Department

Mr G Richards

Tutors:

Mr M Flannery

Mr S Jones

Mrs Lowey-Lieb

Is this course right for me?

This course is particularly suitable for those who have a preference for non-exam based assessment. Continuous on-going assessment removes the pressure normally associated with exams. The course incorporates a mix of practicals, classroom lectures, industry visits and case study exercises.

How do Universities view the BTEC Diploma?

They freely accept students with this qualification due to it's strengths with research methods and an extended report as part of the mandatory units. These give the course credibility which results in our students receiving offers from their first choice University.

Other Information:

The strengths of this course are that it has research methods and an extended report as part of the mandatory units. The units prepare students for the working world, apprenticeships and higher education. Engineers are in demand as there is a shortage of trained people in the STEM areas (Science Technology Engineering Maths). Local business requires more STEM trained employees, in sectors such as manufacturing, logistics, energy production and distribution, construction, civil and water engineering. Edexcel's BTEC Level 3 in Engineering gives the learners an excellent opportunity to acquire essential skills for Higher Education and employment.

www.stmargaretsacademy.com/sixthform

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or a MERIT in a relevant Level 2
qualification (eg BTEC
Engineering)
OR
EITHER
Grade 5 in GCSE Physics
OR
Grade 5-6 in GCSE Science (AQA
Trilogy/Edexcel Combined/OCR
Gateway)