



WELCOME TO THE COURSE

Welcome to BTEC Level 3 Engineering. You have chosen this course because you would like to embark on a career in engineering and this course is your next step along that journey. We want you to enjoy your learning in this subject and we look forward to helping you get prepared for a successful and fulfilling career. Our standards are high; we know that you will need to work hard in lessons and independently in your own time if you are to achieve your best.

Your two year course is divided up into 10 units:

- Unit 1: Engineering Principles,
- Unit 2: Delivery of Engineering Principles Safely as a Team,
- Unit 3: Engineering Product Design and Manufacture,
- Unit 4: Applied Commercial and Quality Principles in Engineering
- Unit 5: Specialised Engineering Project
- Unit 9: Work Experience in the Engineering Sector
- Unit 10: Computer Aided Design in Engineering
- Unit 22: Electronic PCB Design and Manufacture
- Unit 25: Mechanical Behaviour of Metallic Materials
- Unit 39: Modern Manufacturing Systems

These are very different to each other but do have a lot of overlapping content. You will learn fundamental principles, knowledge and skills that will allow you to enter the exciting world of engineering. The units will be taught by different teachers in different rooms and will be assessed using a range of methods.

A lot of your lessons and study time will be spent in the Engineering department and you will be expected to act as a positive role model to the younger pupils that will also be using the department. You will be expected to contribute to the department and actively get involved in supporting the teaching and learning of pupils in different year groups.

You will need to be exceptionally well organised and be fully prepared for the lessons that you will be attending. You will need a range of books, folders and resources for the different units you will study. It is a basic expectation that you bring the correct resources to the relevant lessons. Presentation of your work is important and your folders must be kept neat and complete throughout the course. All homework must be completed to the best of your ability and handed in on time.

Engineering is a fascinating, challenging and multi-disciplined subject. It is very much about the application of knowledge and skills to solve problems and manufacture products. By studying this course and working hard on it you will gain an in-depth foundation that will enable you to successfully move on to the next stage of your engineering education and career.

Good luck.
Mrs James
Course Director

USEFUL WEBSITES

Women in Science and Engineering

- <https://www.wisecampaign.org.uk/>

This is Engineering

- <https://www.thisengineering.org.uk/>

The Engineer

- <https://www.theengineer.co.uk/>

BBC News

- <https://www.bbc.co.uk/news/technology>
- [https://www.bbc.co.uk/news/science and environment](https://www.bbc.co.uk/news/science_and_environment)

Institute of Civil Engineers

- <https://www.ice.org.uk/what-is-civil-engineering>

Institute of Engineering and Technology

- <https://www.theiet.org/membership/>

Institute of Mechanical Engineers

- <https://www.imeche.org/>

TASK: Having a broad understanding and knowledge base of exciting Engineering projects is really going to help you on this course. Your first task is to visit the websites listed above and apply for membership at least three of them.