



Course Description Sheets - Level 2

ENGINEERING - BTEC First Diploma Level 2

Examination Board: Edexcel

Duration: One year

Minimum entry requirements:

- Five GCSEs at grade E and, in most cases two D grades

Enrichment opportunities:

- all students have access to our enrichment programme
- visits to local employers
- careers and advice from Connexions
- open days, such as Fleetlands

Skills developed:

- communicating
- drawing
- mathematics
- making
- measuring and marking out
- working in a team
- using tools and machines

Likely next step opportunities:

- advanced (level 3) courses
- employment
- apprenticeship

Assessment summary: 100% Portfolio

Course outline: This course will help you develop a range of skills in engineering with a particular focus on manufacturing and maintenance. You will have the opportunity to get involved in a variety of design and production tasks, giving you real-life experience which will enable you to demonstrate the range of skills employers require.

This award consists of ten units which cover most aspects in engineering, developing all practical aspects of machining and assembly. Other more academic areas will be developed including Electrical and Mechanical Science, Mathematics and Computer-aided drawing techniques.

Course structure:

There are four **core** units to complete:

Unit 1: Working Practices in Engineering

- Health and Safety in the Workplace
- Communicating

Unit 2: Using and Interpreting Engineering Information

Unit 3: Applied Electrical and Mechanical Science for Technicians

Unit 4: Mathematics for Engineering Technicians

These units give you essential underpinning knowledge required for any engineering career. The remaining six units have been chosen to give you the maximum choice of career paths when you have completed the full ten units. They are:

- **Selecting Engineering Materials**
- **Engineering Assembly**
- **Using Computer-aided Design**
- **Selecting and Using Secondary Machining Techniques to Remove Material**
- **Engineering Marking Out**
- **Production Planning Techniques**

We aim to cover each unit by assignment. For each unit you will be set a problem and then guided through the assignment. What you should remember is that to pass you will need to prove competence i.e. could you do the work for the assignment without help? What you also need to remember is that work completed for one unit could be used for evidence for another. You will need to pass the unit assessment for the mandatory units to achieve the full qualification.