# BTEC LEVEL 1/2 FIRST AWARD IN ENGINEERING



## WHY CHOOSE ENGINEERING?

Is it using materials and processes to manufacture a single item? Is it applying new technologies to the mass production of well-known products? Or is it implementing methods to reduce waste and improve the sustainability of energy sources? Engineering is all of these things and many more.

Level 1/2 Award qualifications are designed to provide specialist work-related qualifications in a range of sectors. The Level 1/2 Award provides a specialist work-related focus whilst completing the qualification. It is broadly equivalent to one GCSE.

## WHAT WILL I STUDY?

The BTEC Level 2 course provides a practical, real world approach to learning and develop knowledge and skills learners require to work successfully in the Engineering industry.

The course is split into 3 units and the assessment is both internal and external. The BTEC consists of 2 mandatory units - units 1 and 2 and ONE optional unit. Unit 1 is the board set external examination, in the form of an online test.

Unit 1 The Engineered World Externally assessed

Unit 2 Investigating an Engineered Product Internally assessed and externally moderated

Unit 7 Machining Techniques
Internally assessed and externally moderated

# **HOW WILL I BE ASSESSED?**

Whilst individual unit grades are rigorous in reflecting achievement in a specific area of knowledge, qualification grades are calculated through an aggregation process to reflect performance, achievement and competence across the whole course.

The amount of external assessment remains proportionate - at least 75% will be internally assessed with a maximum of 25% externally assessed.

# WHAT SKILLS WILL I DEVELOP?

The BTEC Level 1/Level 2 First Award in Engineering provides underpinning knowledge, understanding and practical skills that reflect the needs of employers and higher and further education professionals.

Employers value employees who are able to communicate effectively both verbally and using electronic communication methods. The qualification provides opportunities for learners to develop their communication skills as they progress through the course. This can be achieved through presentations and in discussions where they have the opportunity to express their opinions.

# **CAREERS IN ENGINEERING**

The BTEC Level 1/Level 2 First Award in Engineering provides a good foundation for learners in post-16 education, or to entry level job roles within the sector.

Achievement at Level 2 provides a suitable foundation for further study within the sector through progression on to other vocational qualifications at level 3, such as BTEC Level 3 Nationals in Engineering or Electrical/Electronic Engineering. Successful learners at level 2 may also consider general qualifications at Level 3 such as GCE AS or A Levels in Engineering or Design and TechnologyProduct Design.

Learners who achieve the qualification at Level 1 may progress to the Level 2. Alternatively, learners may also consider progression to general qualifications such as GCSE Engineering or Design and Technology – Electronic Products, Graphic Products or Resistant Materials.

# LEVEL 1/2 AWARD IN CONSTRUCTING THE BUILT ENVIRONMENT

# WHY CHOOSE CONSTRUCTION?

The WJEC level 1/2 Award in Constructing the Built Environment offers a learning experience for 14 – 16 year olds which focuses on gaining and applying knowledge, skills and understanding through purposeful tasks.

It provides an ideal introduction to the construction industry.

### WHAT WILL I STUDY?

Unit 1: Safety and Security in Construction
In this examined unit you will study the nature and importance of safety and security in the construction industry. Fire extinguishers, safety signs, regulations and the law, hazards, risks and control measures

all feature as content. You will need to apply your knowledge of safety and security to realistic construction situations.

Unit 2: PracticalConstruction Skills
In this non-examined assessment unit (NEA) you
will develop three separate construction skills. As a
part of your assessment, you will complete
construction tasks which will demonstrate your
abilities in these skills.

Unit 3: Planning Construction Projects
In this non-examined assessment unit (NEA) you will study the various stages of the project planning process, the types of jobs which exist within the industry and how construction work is costed.

### **HOW WILL I BE ASSESSED?**

Unit 1: Safety and Security in Construction will be assessed through a written examination.

- 1hour
- a range of questions based on realistic situations
- 25% of the Award on construction sites on-screen

Unit 2: Practical Construction Skills will be assessed through non-examination assessment (NEA): marked by your teacher, externally moderated by WJEC.

- 14 hours
- evidence will include photographs of completed work
- 50% of the Award

Unit 3: Planning Construction Projects will be assessed through non-examination assessment (NEA): marked by your teacher, externally moderated by WJEC.

- 6 hours
- · evidence will include a Gantt chart
- 25% of the Award

## WHAT SKILLS WILL I DEVELOP?

By studying for the Level 1/2 Award in Constructing the Built Environment you will develop three practical skills from nine possible skills. Those available are Wood, Brick, Plaster, Decorating, Tiling Electrical, Plumbing, Heritage and Textiles. Your teacher will tell you which ones are available. In addition to these practical skills you will gain other construction related skills including budgeting and project planning.

You will also be able to gain essential employability skills that are valued by employers, further and higher education, including:

- literacy and numeracy
- digital literacy
- critical thinking and problem-solving
- planning and organisation
- · creativity and innovation
- · personal effectiveness

## CAREERS IN CONSTRUCTION

This qualification provides a general insight into the construction industry alongside developing your abilities in a range of practical skills. It provides a potentially suitable foundation for further study, an apprenticeship or employment. This qualification will also provide a satisfying and worthwhile course of study for you if you do not progress to further study in this subject. The qualification will also introduce you to many new aspects of the construction industry which could help you make informed decisions about a wide range of career pathways.