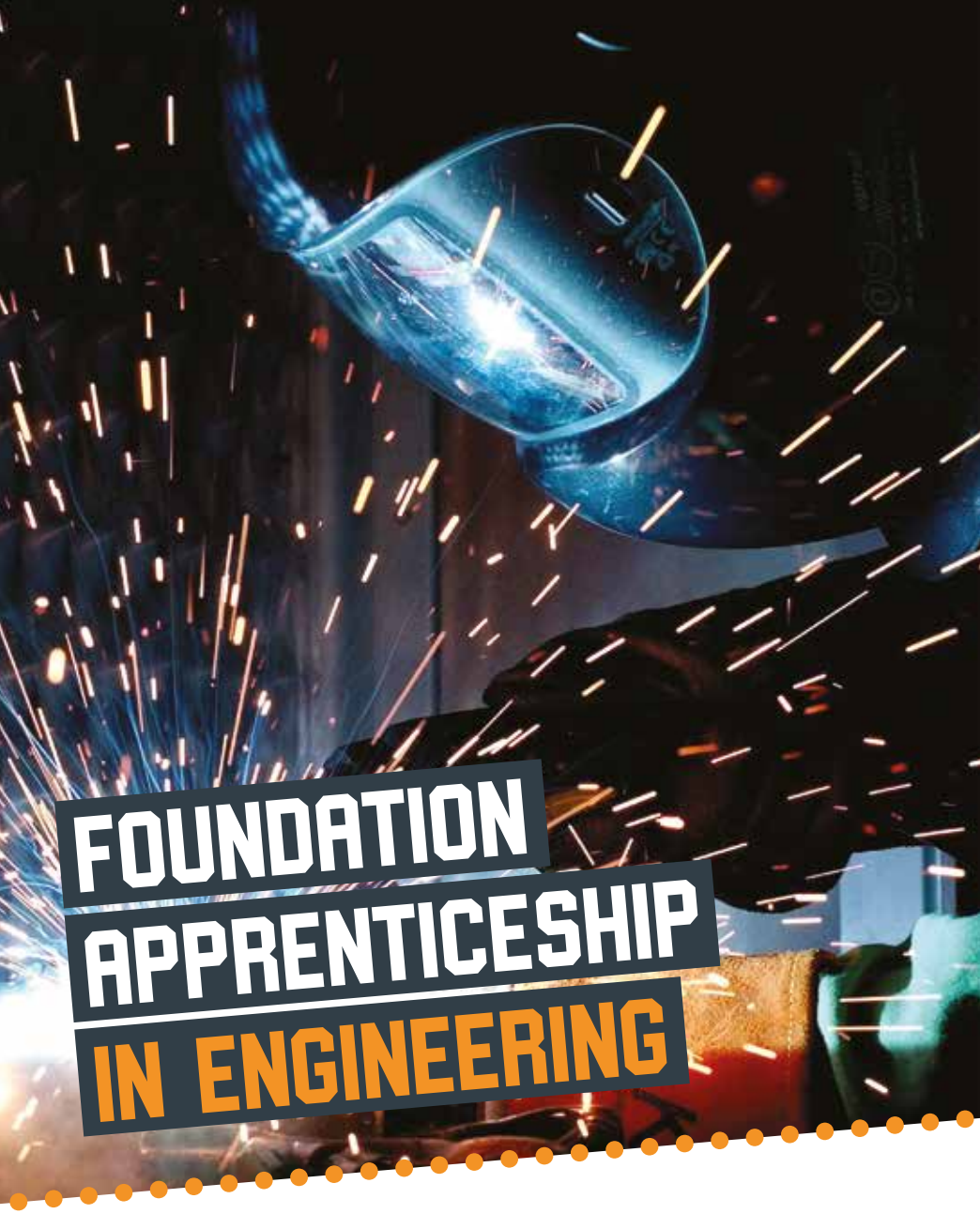

FOUNDATION APPRENTICESHIP IN ENGINEERING

Fife College

DYW

Fife Council

Skills Development Scotland

Scottish Funding Council

FOUNDATION APPRENTICESHIP IN ENGINEERING

SCQF Level 6

CAREER PATHWAYS

- Modern Apprentice, craft operative, or technical trades in the following engineering industries:
- Energy
- Petroleum (Upstream and Downstream)
- Electronics and Electrical
- Instrumentation and Control
- Industry 4.0 (Internet of Things, Mechatronics)
- Renewables
- Manufacturing and Mechanical Engineering
- Multidisciplinary Engineering
- Fabrication and Welding
- Automotive

COURSE DESCRIPTION

The Foundation Apprenticeship aims to give you the opportunity to develop the skills and knowledge to enter into a career in engineering and the advanced manufacturing sector or other engineering related industries. The programme will equip you with the industry needed theory, practice and related work experience.

Year 1: You will work towards the Performing Engineering Operations (PEO) subjects and a proportion of the subjects from an Engineering related National Certificate at SCQF Level 6.

Year 2: You will work towards completing any outstanding Performing Engineering Operations (PEO) subjects and complete the National Certificate: Engineering qualification. The majority of work-related experience is also expected to be gained in year 2.

This course is an excellent opportunity for you to gain valuable practical skills while still at school, which will support you in your future studies and careers.

Undertaking a Foundation Apprenticeship at school widens your subject choice and helps you to keep options open for future study. Choosing this FA also supports you into gaining entry into an Engineering apprenticeship which will meet industry's need to train qualified engineers of the future which will benefit Fife and Scotland.

You will be provided with opportunities to develop knowledge, understanding and skills in an engineering systems approach to the study of Engineering and achieve a degree of specialisation within one or more of the following areas: electronics, electrical engineering, mechatronics, mechanical engineering, manufacturing engineering and fabrication and welding.

The course will enhance your employability skills and you will be encouraged to develop teamwork and practical skills.

COURSE CONTENT

- Communication Core Skill unit
- Mathematics: Technician 1
- Engineering: applying information technology
- Computer aided draughting (CAD) for engineers
- Engineering dimensional control
- Engineering manufacturing processes
- Engineering workshop skills
- Graphical engineering communication
- Engineering assembly skills
- Material removal practice: milling
- Material removal practice: turning
- Engineering project
- Working safely in an engineering environment
- Carrying out engineering activities efficiently and effectively
- Using and communicating technical information

- Producing mechanical engineering drawings using a CAD system
- General machining, fitting, and assembly applications

SKILLS DEVELOPED

The Foundation Apprenticeship is a new and innovative approach to apprenticeships and will better prepare you for the world of work by equipping you with experience and skills, as well as knowledge, you require for today's changing labour market.

With shortages in most engineering disciplines, both for highly qualified engineers and experienced technicians, there is an increasing reliance on Science, Technology, Engineering and Maths (STEM skills). This FA is provides you with an excellent route into these industries whilst still at school.

Embedded into the practical activities of this course are the employability skills that employer's value. Although it is envisaged that all employability skills will be developed in this course, not all will be assessed.

ENTRY REQUIREMENTS

- 3 National 5's at grade C or above in English, Maths and Physics
- It is essential to undertake both Higher English and Maths in S5 and to attain a pc grade pass minimum in both subjects, this is vital as attainment of these support the main volume of and level of work expected within the Engineering FA. If you later require to resit Higher English and or Maths in S6, you will also be expected to undertake further SCQF Level 6 Communication and Mathematic Technician units in addition to the timetable session.
- School Transition Form
- An excellent attendance record in school
- You may be required to take part in an informal conversation as part of the application process

TARGET YEAR GROUP

S5

ADDED VALUE FOR FUTURE PROGRESSION

Fife College will accept achievement of the FA in Engineering as equivalent to two Highers which will support you to gain entry to one of the following (dependent on subjects studied): HNC: Engineering, HNC: Engineering Systems, HNC: Electrical Engineering, HNC: Manufacturing Engineering, HNC: Fabrication and Welding Engineering, or HNC: Mechanical Engineering at SCQF Level 7.

UCAS Tariff Points: 56
SCQF Credit Points: 87 (minimum)