

This Apprenticeship is for aspiring engineers who like to work with their hands as well as their heads. The programme teaches traditional welding skills and their application in the modern engineering environment, including adapting to new processes and working with new and different materials. Welding skills require continuous personal development to keep pace with the rate of change required for this type of engineering. Young engineers must have a high level of hand-to-eye coordination and the ability to work consistently and in often challenging conditions.

Welders are often required to carry out repairs in confined spaces, or to work at height, securing structures on installations such as oil rigs, stadiums and processing plants. Welding engineers can also develop excellent careers in the ship repair, conversion and shipbuilding industry. Lighter welding processes exist in the aerospace, automotive and general engineering sectors. All of these offer huge opportunities for a lifelong career with worldwide prospects.

GENERAL WELDING

What's involved?

The range of skills Apprentices develop includes:

- The theory, principles and practices behind a variety of welding techniques, from light to heavy welding processes
- Hand skills in the production of MIG/MAG, Manual Metal Arc (MMA) and TIG and potentially Gas welding techniques
- An understanding material properties and the characteristic changes that take place during and after welding treatment
- Non destructive and destructive testing processes and limitations of each method
- Advanced fusion welding processes
- Principles of Advanced welding processes including purge and submerged Arc
- Use of oxy-acetylene burning and cutting equipment

What qualifications will I achieve?

Apprenticeships are available at Intermediate, Advanced and Higher Level and are made up of the following five elements:

- A Competence Element
- Such as a Certificate or Diploma at Level 2, 3 or 4
- A Knowledge Element
- Underpinning / theoretical knowledge, which will require attendance at college
- Functional Skills
- In English, Mathematics and ICT at the required level, which will require attendance at college
- Personal Learning and Thinking Skills
- Understanding the Employees Rights and Responsibilities through assignment based activities

Progression to Higher National Certificates (HNC) may be an option for progressing your career.

