



APPRENTICESHIPS  
at AWE

# Unique Opportunities

in a truly unique environment



**Electrical  
Maintenance**



**Mechanical  
Maintenance**



**Precision  
Machining**



**Electronic  
Maintenance**



**Control &  
Instrumentation**

# ABOUT US

## **AWE plays a crucial role in the defence of the UK.**

Charged with supporting the UK's nuclear deterrent and protecting national nuclear security AWE is a unique working environment.

As one of the nation's largest high technology research and development facilities, our people and the work we do is truly innovative.



## ABOUT THE SCHEME

We have five apprenticeship trades on offer:

- Electrical Maintenance
- Mechanical Maintenance
- Precision Machining
- Electronic Maintenance
- Control & Instrumentation

Whichever path you take, you will work towards a National Vocational Qualification and Technical Certificate which forms a fundamental part of your Apprenticeship Framework.

The AWE Skills Academy is a dedicated apprentice training facility based in Aldermaston, offering exceptional training and workshop facilities, run by a highly qualified and committed team of instructors and staff. The Academy boasts over 60 years of apprentice training expertise.

Your apprenticeship will start in the Academy learning the basic skills of your trade, followed by placements within AWE.

## ABOUT YOU

There are certain qualities we look for in all of our apprentices. The ideal candidates will work well in a close team, a genuine interest in the trade they have chosen, a clear desire to learn and have a practical hands-on approach.

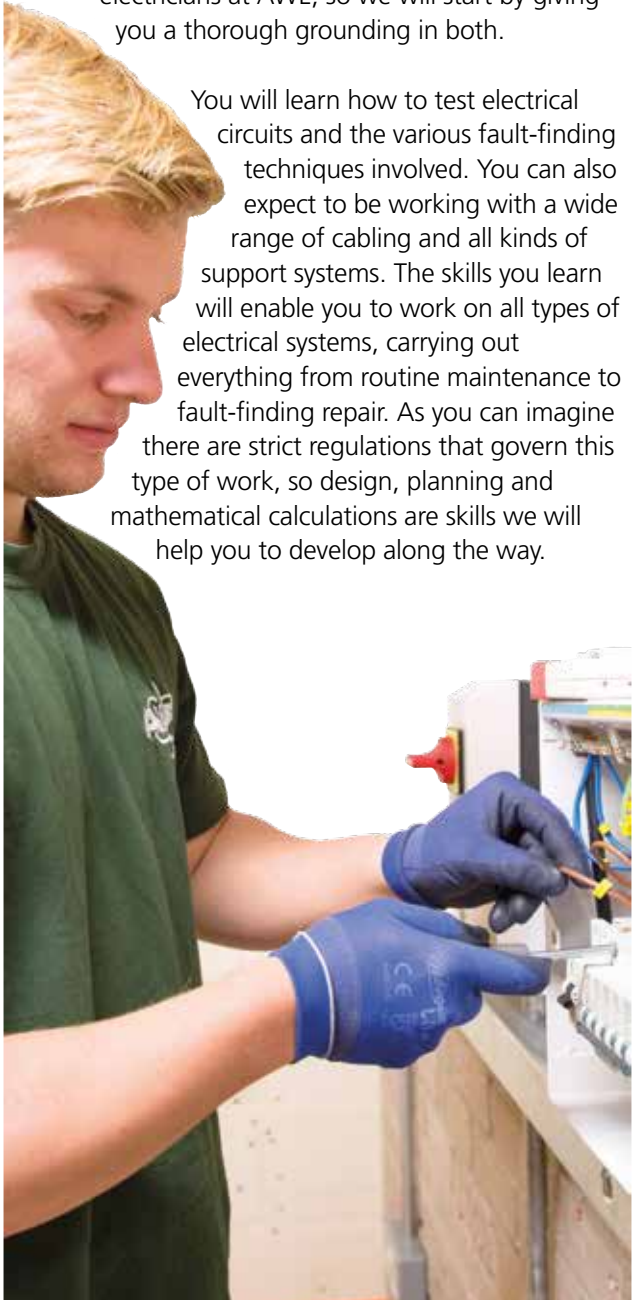
**If you like what you have read visit [www.awe.co.uk/careers](http://www.awe.co.uk/careers) to find out more and apply.**

AWE promotes diversity in employment. Because of the nature of work associated with these posts, they are subject to special nationality rules and are open only to British citizens. All selected candidates will be required to undergo security clearance.

# ELECTRICAL MAINTENANCE

Installation and maintenance skills are important for electricians at AWE, so we will start by giving you a thorough grounding in both.

You will learn how to test electrical circuits and the various fault-finding techniques involved. You can also expect to be working with a wide range of cabling and all kinds of support systems. The skills you learn will enable you to work on all types of electrical systems, carrying out everything from routine maintenance to fault-finding repair. As you can imagine there are strict regulations that govern this type of work, so design, planning and mathematical calculations are skills we will help you to develop along the way.



## MECHANICAL MAINTENANCE

During the first part of your apprenticeship, you will learn hand fitting techniques, which include measuring, marking out and filing. You will go on to learn how to use traditional machine tools and get to grips with turning, milling and grinding.

After this you will specialise in mechanical maintenance techniques. We will teach you how to take apart and put back together, pumps, compressors and explore the workings of steam systems, air systems and vacuum systems. During this part of your apprenticeship, great emphasis is placed on ensuring you are equipped with the basic skills to join the maintenance departments at AWE. This is where you will begin the next stage of your apprenticeship working alongside highly skilled mechanical maintenance craft personnel.

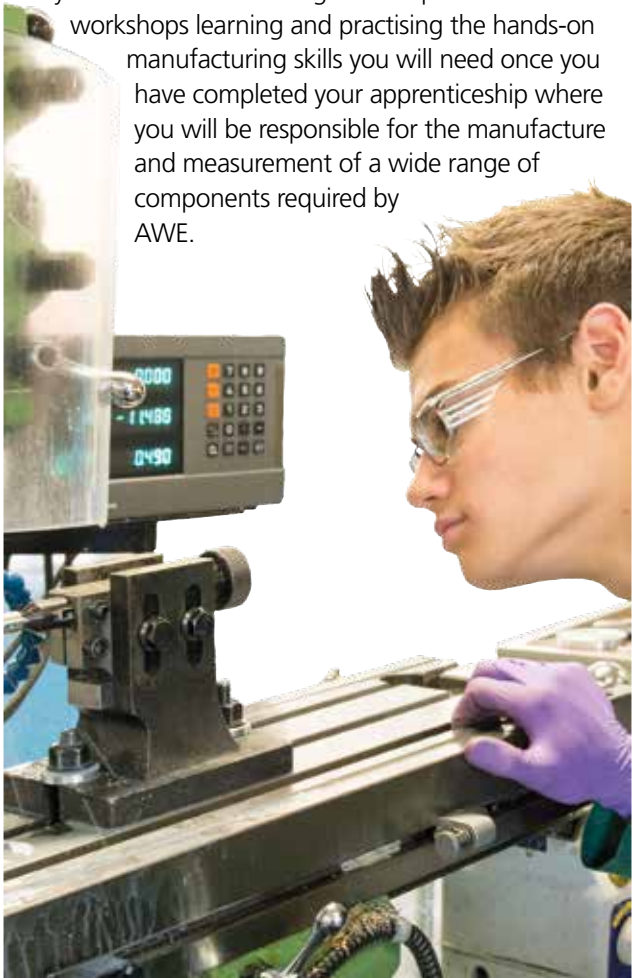


## PRECISION MACHINING

We will start by teaching you the basics of hand fitting, measuring and marking out. You will go on to learn how to manufacture components using traditional machine tools, which means you will get to grips with the basics of turning and milling. As part of your training you will manufacture a set of useful engineering tools.

During your apprenticeship you will be introduced to and use CNC (Computer Numeric Control) machines and we will teach you about materials, manufacturing equipment and processes that you will use throughout your career. Your training will be spent in

workshops learning and practising the hands-on manufacturing skills you will need once you have completed your apprenticeship where you will be responsible for the manufacture and measurement of a wide range of components required by AWE.



## ELECTRONIC MAINTENANCE

We will teach you the fundamentals of electronics within your first year in the Academy. This will include soldering skills, cable installation and management, PCB design and preparation, assembling circuits and fault-finding.

These skills will be learnt by planning your projects from start to finish. This will include the design of circuit board layouts, populating the board, soldering the components in place, testing the circuit and evaluating the completed project. Once these foundations are in place, the next step in the apprenticeship journey will be going into site placements. These will help you gain experience and working knowledge of various areas of AWE and get involved in more complex electronic activities.



## CONTROL & INSTRUMENTATION

We will start by teaching you all the skills you need to maintain all control and instrumentation equipment essential to the safe and efficient running of plant, equipment and processes found at AWE. During your apprenticeship you will learn how to repair, maintain, test and calibrate equipment including temperature, pressure and flow instrumentation. You will complete a variety of projects designed to develop the skills that you will need throughout your career.

Along the way, you will get to increase your knowledge and practical skills of circuits and systems. Once your training in the academy is complete you will move to the on site phase of training where you will use the skills you have learnt to install and maintain control and instrumentation systems found at AWE.

