FUTURE CAREERS PROGRAMME

WHAT IF...

...you could work on something that you can't test… but cannot afford to fail? That could have spent years on a submarine, is launched into outer space (where the temperature is below -250c); comes hurtling through the atmosphere, being heated up and shaken and then must work? Some challenge.

For 70 years, AWE has been at the forefront of nuclear weapons research and development. Today, AWE employs around 6000 women and men undertaking some of the most important work, in support of the most important mission – keeping the nation safe. We have some of the most brilliant people, working on some of the most complex challenges – working with research equipment that can simulate the temperatures and pressures at the heart of the sun; that can x-ray through lead a metre thick… using the most powerful computer in the UK. We have scientists and engineers who explore advance composite materials, and the use of advanced, 3D printing – making things of impossible precision.

It is an exciting time at AWE as the Government has asked us to start the process of conceiving of, designing, prototyping, manufacturing, testing and commissioning a replacement system. This will be by the next generation of people.

This is why our Future Careers Programme is so important. Over the next decade or so, we will need to recruit, train and develop around 6,000 people: scientists, engineers, technologists, machinists, designers… and people that support some of the most complex facilities and operations. We are proud of our commitment to development – our apprentice and graduate schemes – and the opportunities they offer to grow and build a career.

Alison Atkinson

Chief Executive Officer

WHO WE ARE

We are a team of remarkable people achieving extraordinary things. We have a critical mission: to support the defence and security of the UK. Our role in keeping the nation safe is to manufacture, maintain and develop the warheads for Trident, the UK's ultimate deterrent, and use our unique skills and expertise to support nuclear threat reduction.

Apprentices

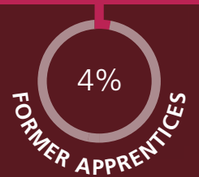
777
Former & Current Apprentices

157 Current Apprentices

620 Former Apprentices

7
of our leadership team are former apprentices

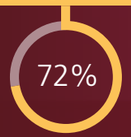
Senior Leadership Team



2006

674
Employees have joined the apprentice scheme since 2006

Still Employed



Long Service 52 years

Average length of service 18 years

Graduates

768
Former & Current Graduates

180 Current Grads

588 Former Grads

24
of our leadership team joined via the graduate scheme

Senior Leadership Team

Long Service 24 years

Average length of service 11 years

WHAT WE DO

WARHEAD

The warhead team works with a range of disciplines and experts across the business, striving to find innovative ways to exploit new technologies and further our expertise within nuclear defence. Our engineers certify the nuclear warhead and its associated equipment that form a vital part of the UK's Continuous At Sea Deterrence programme.

PHYSICS

Our physicists support the programmes, using world-class experimental techniques coupled with mathematical and computational modelling. Together, they assess system performance of the UK's nuclear deterrent, and provide innovative solutions to safeguarding national security.

Materials & Analytical Science (MAS)

MAS provides the technical capability to understand the underlying phenomena of the behaviour and characterisation of materials under different and often, extreme conditions. They apply nuclear know-how and expertise to help understand and model when real live world testing is not an option.

"I love the variety involved with my work and my proudest moment was bringing a previously archived experiment back online"
April, Materials and Analytical Science

ENGINEERING SITES & ASSETS (ESA)

Engineering Sites & Assets are responsible for supporting the delivery of our programme of work. ESA delivers this via Design Compliance, Project Engineering, Construction Management, Commissioning and Handover and Operations Engineering.

FINANCE & BUSINESS MANAGEMENT (F&BM)

The Finance & Business Management Function (F&BM) underpins our business performance by providing specialist business support to programmes. The team ensures that we operate efficiently and effectively within a framework of financial controls and systems to deliver value for money.

SECURITY

Security's principal aim is to fully achieve and sustain `defence in depth' by promulgating an integrated system of security components across the company.

WHAT WE DO

PROGRAMME & PROJECT MANAGEMENT (PPM)

Programme & Project Management is the management of time, cost and quality within the various projects that we undertake to deliver our mission. It involves effective leadership, good planning, risk mitigation and stakeholder engagement to ensure project success.

Nuclear Threat Reduction (NTR)

NTR is at the heart of the defence of the UK against radiological and nuclear threats. It integrates a brilliant and diverse team of people, applying world-class technologies to ensure the country is prepared for any kind of nuclear threat our future may bring.

INFORMATION SERVICES (IS)

Information Services provides the People, Processes and Technology to facilitate the collection of company data, knowledge and information from contributors, managing and storing it to optimise its efficient retrieval.

ENVIRONMENT, SAFETY & HEALTH (ESH)

The management of Environment, Safety and Health (ESH) underpins all operational activities; whether in support of complex nuclear processes or those things we do every day.

HUMAN FACTORS

Human Factors are involved right across AWE's project lifecycle from concept and feasibility to detail design, management and supervision of construction, commissioning and operation which interfaces strongly with Process Plant and Equipment. The level of involvement extends to the decommissioning and demolition of our buildings and associated infrastructure.

"One of the best things about my job is that the work I do has a direct impact in ensuring the safe operations on site and keeping people safe"
Adam, Nuclear Safety Assessment Specialist

OUR GRADUATE PROGRAMME

Our two-year graduate programme is designed to be flexible to incorporate a range of experiences as well as business needs. You will undertake a number of placements to enable you to expand knowledge of your discipline and give you opportunities to develop yourself and your ongoing career. Your Line Manager will work with you and support you to create an appropriate pathway for you.

Your development will be supported by on- and off-job learning, via online and classroom training courses, largely tailored to your discipline. You will have the opportunity to be a part of a graduate project team to focus on a company deliverable, a key experience in developing your team working skills and creating a network across the business. With the support of your Project Sponsor, you'll gain an insight into the challenges of delivering a group project to time, cost and quality.

Our graduate programme currently holds accreditation with nine professional institutes, confirmation of the high standard of continuous professional development that we have. You will be supported by a mentor and have access to our Heads of Profession to assist your initial and onward journey to achieving chartered status within your chosen discipline.

Our opportunities

We have a variety of opportunities covering our Engineering, Science and Business Functions within all of which contribute to supporting the delivery of the UK's Nuclear Defence strategy:

Engineering:

Whether working within the Warhead, Manufacturing or SITE teams as an Engineer you will be working on exciting and crucial projects to support our mission. You will work alongside subject matter experts on key projects: ranging from core weapons projects to building services and processes, facilities, plant and construction. We have opportunities in the following areas:

- Electrical & Electronic
- Mechanical
- Safety
- Manufacturing
- Chemical Process
- Civil & Structural
- Systems Engineering
- Quality

"I love how on the graduate scheme you get to mix with many different teams and meet lots of new people as you move around the business on placements."
Hayden, Graduate Physicist

Science:

As a scientist you will work on extraordinary projects and research. This could be working with the warhead team, to understand the environmental impacts on site, through to using your knowledge to ensure on-site safety or advising the customer and UK Government on handling possible threats to our national security. Our Science opportunities cover:

- Materials & Analytical Science (Chemistry, Mathematics)
- Applied/Theorectical Science (Physics)
- Environmental
- Nuclear Safety
- Nuclear Threat Reduction

Business:

Our business functions are wide ranging and support every aspect of mission and business delivery. The work is often fast paced, challenging and adapting to the changing needs of the business. Supported by subject matter experts you will help ensure that we remain operational.
We currently have opportunities spanning:

- Project Management
- Business Management
- Human Factors
- Security

OUR UNDERGRADUATE PLACEMENT PROGRAMME

During the your undergraduate placement, you will focus mainly on one or two projects or areas. This will give you a deep insight into the work that is done within that area. You will also be supported by a Line Manager and a Mentor who is there to help you to navigate your time and support you in developing the skills to build a future within the defence industry.

Your on-programme learning will be a combination of a corporate induction - to help you find your feet - coupled with on-job training and some classroom based or online learning dependent on your role.

Alongside this, your off-programme learning will include the opportunity to get involved in a group project. You will be part of an undergraduate team working on a business deliverable during the time you are with us. We will also create opportunities for you to network with each other, as well as the graduate community, to start the foundations of your contacts within the business.

Our opportunities

From Engineering to Project Management, we have a number of Undergraduate opportunities to help you gain more insight into your field:

Engineering:

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- Electrical & Electronic
- Manufacturing
- Mechanical
- Safety
- Systems Engineering
- Process Engineering
- Civil & Structural

"AWE has an extensive range of opportunities and the placements mean I can develop a broad range of knowledge and skills whilst also finding which area I enjoy the most."

Danielle, Nuclear Threat Reduction Specialist

Science:

As a scientist you will work on extraordinary projects and research. This could be working with the warhead team, to understand the environmental impacts on site, through to using your knowledge to ensure on-site safety or advising the customer and UK Government on handling possible threats to our national security. Our Science opportunities cover:

- Applied/Theoretical Science (Physics)
- Materials & Analytical Science
- Nuclear Threat Reduction

Business:

Our business functions are wide ranging and support every aspect of mission and business delivery. The work is often fast paced, challenging and adapting to the changing needs of the business. Supported by subject matter experts you will help ensure that we remain operational.
We currently have opportunities spanning:

- Cyber Security
- Business Management
- Project Management

OUR APPRENTICESHIP PROGRAMME

Our Skills Academy has been offering apprenticeships for as long as we've been in business. With a range of opportunities, at Level 3 (Advanced) and Level 6 Degree Apprenticeships, we develop both the talent of young people right at the start of their careers, and those looking to change their career.

Our apprenticeships are rated 'Outstanding' by Ofsted. We're also proud to have been recognised with awards for both the Academy and for a number of our apprentices.

Once you've successfully completed your apprenticeship, you'll be offered a role within one of the areas of the business where you can utilise your skills and the knowledge you've gained. This will give you the opportunity to develop your potential even further and build your career with us. We're proud that many of our apprentices have gone on to play significant roles at very senior levels within the business.

Our opportunities

Science, Engineering, Business Administration… whatever your interest, we offer a wide range of apprenticeships:

Business Administration

Initially you'll be based at our onsite training facility, where you'll develop core administrative skills and knowledge, before developing these skills in a live working environment.

Civil Engineering Degree

As a Civil Engineer, you will work alongside, and in conjunction with, a network of engineers of other disciplines, as well as other project and safety professionals, delivering modern facilities and infrastructure that support our ongoing future nuclear warhead programme.

Ordnance Munitions and Explosives Degree

An OME Professional can carry out a range of technical, engineering and scientific activities which may include laboratory based investigations, engineering studies and scientific experimentation in their specialist field. They will analyse, interpret and evaluate technical information, concepts and ideas and use these to develop subsequent products, experiments or investigations and to propose solutions to problems.

Infrastructure Technician

You'll support internal and external customers. You'll help them to be productive when using technology to do their own jobs, by using tools to problem solve and trouble shoot non-routine problems. The Infrastructure Team sets people upon systems and provides support when they need it, rectifying issues to maintain the organisation's productivity.

Lab Technicians

As a Laboratory Technician, your work will underpin the science that we undertake as part of our mission delivery. As an apprentice here, your work may involve aspects of physics, material, chemistry and biological science and each apprentice will have the option of working predominately in a Physics, Analytical Chemistry or Materials laboratory.

OUR APPRENTICESHIP PROGRAMME

Technical Author C&I
Become one of our specialists, generating written instructions on how to perform all kinds of technical tasks in a safe, controlled way. It's a skill that's in demand across a wide range of industries ranging from car assembly, aircraft maintenance to telecommunications.

Project Controls
As a Project Controls apprentice you'll work within a variety of different teams and disciplines within our Finance and Business Management Function, developing competencies within all aspects of Project Controls.

Manufacturing Engineering Degree
Manufacturing Engineers primarily support the activities involved in bringing design programmes into manufacture. This role is pivotal to the launch planning and smooth delivery of exciting new products or product refresh programmes. The focus is on the advanced manufacturing techniques and project management skills required to launch products on time, on cost and to the right quality. Typically Manufacturing Engineers work closely with a range of other engineers, functions and managers both within their own company and supplier base.

Nuclear Engineer Degree
As a Nuclear Engineering degree apprentice you'll complete the BEng in Nuclear Engineering with specialist units, or BSc in Nuclear Science. You'll develop a fundamental and core knowledge of engineering/science principles and practices, and the skills and behaviours required to enable systems and equipment to operate safely.

Quality Inspectors
As a Quality Inspector apprentice, your role will include inspecting various mechanical and electrical components that are used within a production or trials environment. You'll grow the knowledge and experience required to work to process following written procedures and interpret requirements directly from drawings.

Precision Machining
As a Precision Machinist apprentice, you'll learn basic machining and hand fitting skills through a series of supervised machining tasks, in which you'll manufacture a number of useful engineering tools.

Mechanical Maintenance
As a mechanical maintenance apprentice you will learn the basics of hand tools before moving onto various machining skills such as milling and turning. You will also learn how to troubleshoot and maintain various pieces of industrial equipment through lectures and practical workshop projects.

Control and Instrumentation
C&I engineers create, simplify and automate processes. As an apprentice here, you'll deal with systems that measure and control all kinds of things – from the flow of water, to the temperature of a furnace. Our goal is to make sure complex processes can take place at the simple press of a button.

Electronic Maintenance
As an Electronics apprentice you'll work on a number of projects. These will help you to develop your skills and knowledge in basic electronic theory, components, basic circuit design, circuit construction and reporting. You'll also attend lectures designed to increase your understanding of further electronic theory.

Electrical Maintenance
During your first two years, you'll train in our Academy environment, learning about electrical theory, cabling and wiring infrastructure. Working on small projects, you'll be involved in designing, installing, repairing and maintaining electrical systems, after which you'll join our qualified trades people on site for on-the-job training.

Mechatronics
As a Mechatronic maintenance technician at AWE, your role will include servicing, repairing and installing various Mechanical, Electrical, Electronic, Hydraulic and Programmable logic control (PLC) systems, all of which are commonly used onsite to support the Machine Tools department and Trials & Test Technology Centre.

WHAT WE CAN OFFER

No matter which programme you join, you can expect a competitive reward package, along with the opportunity to develop new skills through experience and training.

Here's a quick summary of what's on offer:

- A competitive base salary
- Generous paid annual leave entitlement plus bank holidays
- A 9-day working fortnight, which means you get every other Friday off
- Pension plan membership
- Employee discounts on a wide range of products and services as well as concession schemes with a number of companies.

We know that the transition from School, College or University can be challenging. So, as well as the above benefits, you will also be assigned a buddy to help you on a peer to peer basis in the lead up and initial months with AWE, as well as a professional Mentor to help you to navigate your future career with us. We also have regular touch points through the offer process as we know that the clearance process can take time and we want to keep you updated on what is happening.

To apply for one of our Future Careers programmes, you'll need to meet the minimum academic qualifications for the role as advertised as well as;

- A practical aptitude for engineering, technology or business skills
- Computer literacy (PC)
- Excellent team working skills
- Good communication skills
- Awareness of health and safety
- A real passion for ongoing learning and development

Our 3-stage application process is simple, straightforward and designed to show the best of you as an individual.

1. Online applications form; where you submit a cv, cover letter and answer some important security questions

2. Online assessments; designed to assess your aptitude and suitability for the programme applied for

3. If successful, you'll be invited to an on demand video interview where you'll record your answers to role specific questions. There will be an interview and also a technical presentation.

Because of the nature of the work we do, all offers are subject to satisfactory security checks and health assessments. Because of this all applications must be submitted online so we can complete checks at all stages of the process.

Find out more about joining one of our Future Careers Programmes online:

www.awe.co.uk/careers/future-careers

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If you require this document in an alternative format; such as large print, on alternative paper, or electronically, please contact the Media Group Graphics Team 0118 982 5249 who will be happy to help.

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