

Business area: Aerospace, Defence, Security and Technology (ADS&T)

Requirements: On track for a minimum of a 2.1 Bachelor's degree in: Control Engineering, Electrical/Electronic Engineering, Mechanical Engineering, Marine Engineering, Naval Engineering, Chemical Engineering, Physics, Aerospace, Engineering, Environmental, Engineering, Ergonomics & Psychology

Our teams and what they do

You'll be joining a great team who help to make our world safer, secure and more sustainable; through the implementation of our ideas and by solving the Engineering challenges of the future.

Our Resilience Engineering team forms part of the cutting-edge Advanced Engineering Delivery and Consultancy (within ADS&T), offering a range of independent advice across both industrial and defence focused domains to a wide breath of clients.

What is Resilience Engineering?

Resilience is the capability of systems, equipment and infrastructure to protect against safety, environmental and security/cyber threats throughout its lifecycle. We analyse, assess and develop requirements to mitigate against these threats, providing assurance to our clients. A critical system is any system whose 'failure' could threaten human life, the system's environment or the existence of the organisation which operates the system.

What is Asset and Analytical Engineering?

Applied throughout the lifecycle, Asset and Analytical Engineering is a consistent, systematic and iterative process, used to maximise equipment availability at optimal whole life cost. Asset Engineering is focused on influencing equipment design for support, such as, maintenance access, use of existing tools/testing equipment and facilities. Analytical Engineering is digitising and utilising complex data to support effective decision making.

Type of activities undertaken:

- **Training Needs Analysis** allowing companies to identify training and development needs of their employees so that they can do their job effectively.
- **Human Factors Engineering**, the discipline of applying what is known about human capabilities and limitations to the design of products, processes, systems, and work environments. It can be applied to the design of all systems having a human interface, including hardware and software.
- **Failure Modes Effects Analysis** is a process which is applied to derive potential failure modes, their causes and effects, including human error based on engineering judgement.
- **Safety Engineering** ensures that the design, development, installation, operation and disposal of products, services or systems are acceptably safe. Using appropriate application of key risk controls systems, including recognised good engineering practice, and requiring knowledge of failure modes that can contribute to an accident/incident.
- **Supply Chain Management** assists in the range of activities required to plan, control and execute a product's flow, from acquiring raw materials and production through distribution to the final customer, in the most streamlined and cost-effective way possible.

- **RCM and Reliability Analysis** is a structured framework which is applied to optimise the maintenance regime, focused on analysing the failure consequences. Reliability analysis is used to predict/determine equipment reliability. High reliability must be designed and built into a system to achieve required levels of in-service availability.
- **Asset Management & Integrated Logistic Support** identifies support requirements and influencing equipment design to maximize availability (including planning for obsolescence) at minimal through life cost.
- **Environmental Management** consultancy for national strategic equipment acquisition programmes; covering requirement setting, environmental impacts and risks, developing mitigation strategies and reporting.

To apply, please return to the main job specification