# **E&SD Warhead Electronics Design Engineer (Graduate Trainee)**

Development of Warhead Electrical System sub-assemblies and related items.

**Discipline** Engineering - Electronic

Employment Basis Full Time

**Location** Aldermaston

**Salary Range** £21000.00 to £25500.00

**Job Reference** 27/06/01/651381

### Key accountabilities

• The design and development of electronic control systems in support of Programme Elements as tasked by line management; notably the development and maintenance of demonstrable capability to develop nuclear warhead arming and firing control systems.

### Responsibilities

- Development of control systems using microprocessors and digital electronics design techniques.
- Liaise with other sections and contractors involved in the design and manufacture of components in support of the Programme. Element activities, placing and monitoring contracts where necessary.
- Ensure that designs meet the necessary safety and security criteria inherent in their functionality.
- Maintain at all times adequate design records and documentation to demonstrate fitness for purpose of the design and to ensure that customer quality requirements as laid down in the relevant Quality Plan are satisfied.
- Plan and monitor progress of work carried out, reporting deviations to the Task Manager.
- Liaise with <u>US</u> colleagues with respect to information interchange on system requirements, design methodologies and techniques.
- Ensure understanding and apply responsibilities with regard to the company's environmental, health, safety, security and quality standards.
- Close out any raised quality or safety deficiencies to agreed time scales.
- Ensure his/her performance and development is actively managed to meet current and future business needs.

#### Qualifications

• Degree in relevant engineering/science subject or equivalent.

### Knowledge

• Knowledge of current nuclear weapon arming system philosophies (including current safety requirements), electronics design techniques, in particular digital electronics design and of hardware description languages desirable.

# **Experience**

- Some experience in the design and development of digital systems desirable.
- Some experience of designing analogue interfacing circuitry preferred.

#### Skills

- Analogue and digital electronics design, including using VHDL and schematic capture.
- Computer literate in the use of both office and technical software including PCB CAD.
- Literate and numerate to a level commensurate with the provision of technical reports.
- Ability to understand the technical specifications and requirements of Warhead Electrical Systems.
- Design of microprocessor systems.
- Good verbal and written communication skills

#### **Behaviours**

- Operating within the company's standards relating to Security, Quality, Environment, Safety and Health is essential for all roles at AWE.
- The ability to work effectively with others in achieving common goals.
- To be self-motivated, requiring little supervision.
- Commitment to continuous personal development.

## **Special Requirements**

• This role may involve travel overseas, in particular travel to the USA for varying durations.