

Apprenticeship Standard for: Military (Royal Naval) Electrical / Mechanical Mechanic

The following standard reflects employers' requirements for the skills, knowledge and behaviours expected from someone to be competent in the job role.

Occupational Profile

The Electrical / Mechanical Mechanic role involves working from engineering drawings, data and documentation in order to undertake the testing, fault diagnosis and maintenance of electrical, mechanical and fluid power equipment on naval ships and submarines. This can include propulsion machinery, weapons, sensors, reactor and auxiliary systems (such as water, air conditioning, electronic equipment including programmable logic controllers, power generation and distribution). It requires knowledge and expertise in the use of common, specialist test equipment and hand / machine tools and the use of a range of measuring and diagnostic equipment, processes to ensure system / equipment performance meet the required specification. The Electrical / Mechanical Mechanic must comply with statutory regulations and organisational safety requirements and will be expected to work both individually and as part of a team. They will be able to work with minimum supervision, taking responsibility for the quality and accuracy of the work they undertake.

Essential Occupation Requirements (all in a Naval context) - Knowledge

1. An understanding of mathematical techniques, formula and calculation appropriate to their role.
2. An understanding of electrical, mechanical, pneumatic and fluid power engineering technology and principles.
3. An understanding of the basic operation and maintenance of mechanical and electrical equipment and systems used on board naval vessels.
4. Correct selection and use of electrical and mechanical hand tools and test equipment.
5. A basic knowledge of material, fluid and lubricants utilised in the maintenance of equipment.
6. An understanding of quality, safety, health and environment as applied working in the naval environment.

Essential Occupation Requirements (all in a Naval context) - Skills

1. Comply with quality, safety, health and environmental regulations.
2. Read, analyse and interpret engineering data, drawings and documentation used in the operation and maintenance procedures.
3. Use hand and power tools to measure, mark out, cut, drill, shape and finish components to the required engineering tolerances.
4. Assembly, removal, maintenance and overhaul components, equipment and systems in a naval environment.
5. Apply assembly and installation methods and techniques (such as mechanical fasteners, terminations, connectors, seals, gaskets, and jointing materials).
6. Undertake testing, inspection and diagnostic activities on components, equipment and systems, making adjustments where applicable.

Employee Behaviours

Modern Engineering organisations require their employees to have a set of behaviours that will ensure success both in their role and in the overall company objectives. The required behaviours are:

- **Health, Safety and Environment:** committed to their own and their colleagues wellbeing at work and the wider environment

- **strong work ethic:** motivated; proactive; committed
- **dependability and responsibility:** punctual; reliable
- **positive attitude:** constructive thinking; optimism; motivated to succeed
- **team player:** able to work and interact effectively within a team and committed to equality & diversity
- **effective communication:** spoken; listening; body language; presentation; written
- **adaptability:** able to adjust to change
- **honesty and integrity:** truthful; sincere and ethical
- **self-motivation:** self-starter; able to make independent decisions & lead own career development
- **personal commitment:** prepared to make a personal commitment to the military.

Entry

Individual employers will set the selection criteria for their apprenticeships. In order to optimise success candidates will typically have 2 GCSEs at Grade C or equivalent (Mathematics and English).

Duration of Apprenticeship

Typically 12 to 18 months.

Qualifications and Development

Apprentices without level 2 English and Mathematics will need to achieve this level prior to completion of the apprenticeship.

After a period of foundation skills and technical knowledge training all apprentices will be required to achieve the following qualifications (**working titles -currently in development**):

- Level 2 Naval Engineering (Competence)
- Level 2 Naval Engineering (Technical Knowledge).

All the qualification requirements are mandatory outcomes for the completion and final certification of the apprenticeship. Each qualification has a core and options approach and employers will select the most applicable pathway and unit options to meet their business requirements. Further detail can be found in the Employer Occupational Brief which is an annex to the Assessment Plan.

There will be an assessment at the end of the training phase where the apprentice will need to demonstrate full competence against the knowledge, skills and behaviours set out in the standard and Employer Occupational Brief.

Level

This apprenticeship standard is at Level 2.

Review date

This apprenticeship standard will be reviewed after 3 years to ensure it remains relevant and continues to meet employers' requirements, and provides the basis for progression to higher qualifications and or job roles.

Progression

Apprentices may progress to Mechanical and Electrical Maritime Fitter at level 3.