

The Defence and Marine Sector

As the economy recovers, new jobs and opportunities will emerge. The basic skills required for many of these jobs are expected to rise – it is estimated that by 2010 around 95% of all new jobs will be at Level 2 or above. These fact sheets have been designed to support people in making informed choices about future employment and / or training to make the best of these new opportunities.

The North East Defence and Marine sector

The Defence and Marine sector is well established in the North East, and offers a huge variety of interesting job roles. It is based on building and repairing ships and boats, research in marine sciences and engineering, and the research, development, building and servicing of military vehicles such as tanks. It does not include the Armed Forces (Army, Navy and Air Force).

Common job roles across the Defence and Marine sector include systems engineers, project managers, welders and metal workers, fitter and electricians, pipe workers, software designers, shipwrights, boatbuilders and naval architects.

The sector employs around 20,000 people in the North East. The region has a rich history of shipbuilding, and today it is still the leading centre for seabed trenching (to lay undersea cables and pipes). Teesport is one of the UK's three largest ports, and BAE Land Systems has a large armoured vehicle factory in Newcastle.

The Defence and Marine sector is quite a stable industry, meaning that even though the recession has been damaging to some other industries, this sector has largely remained unaffected. There are two reasons for this. Firstly, companies usually take very large orders such as for ships or armoured vehicles. Because these take a long time to build, the recession did not have a strong impact on them (they were ordered before it started). Secondly, one of the main customers for the Defence industries are UK and foreign Governments, which still need Defence equipment for international conflicts like the one in Afghanistan.



The total number of people employed in the North East Defence sector may decrease slightly over the next one or two years as it becomes leaner and more efficient, but there will be continuing demand for new applicants to replace those who retire. Quite a large proportion of the workforce is employed on a contractual basis, which means that people who can acquire transferable skills such as familiarity with IT are at an advantage if they find themselves looking for employment in another sector.

The Marine sector is likely to enjoy continued business supporting the Energy sector searching for oil and gas in the North Sea. The Marine sector now exports over half of its work which means that when the international economy picks up it will be well-placed to win new orders

Skills required in the Defence and Marine sector

The skills required in the Defence and Marine sector range from office environment skills such as IT and administration to 'hands on' trade skills like engineering, metalwork and woodwork. Having experience of working within the industry is useful for getting a new job in the Defence and Marine sector.



Employers in the North East Defence and Marine sector value skills such as:

- Numeracy and literacy
- Management (including project management) and leadership
- Problem solving
- Good attention to detail and understanding of technical information
- Craft and design skills

Many types of qualifications are valued in the sector, from Apprenticeships to NVQs to Degrees, but any qualification in engineering is useful. Some qualifications are available which are very specific to Defence and Marine. These include Marine Apprenticeships and Advanced Marine Apprenticeships, the NVQ in Engineering Maintenance (Marine), the NVQ in Marine Vessel Operation and the Degree in Aeronautical Engineering.

The Defence and Marine sector offers very rewarding careers and employment and its workforce is quite well skilled. A good starting point for people who would like to get into it is a level 1 or 2 NVQ in an Engineering or Craft subject.

Generally speaking, skills needs are changing to place more of an emphasis on people who are very highly skilled in particular areas such as boatbuilding, rather than having lower skilled general labourers. This supports the drive towards greater efficiency and the trend towards the production of more high value, hi-tech products. On the job training in the Marine and Defence sector (for people who are already employed within it) is becoming increasingly important.

Training provision for people interested in the Defence and Marine sector is available in the North East and there are many opportunities to develop skills, which will be in demand in the future. The region is home to the largest marine school in the UK, covering the fields of marine engineering, marine biology, naval architecture, offshore engineering, coastal management and small craft technology. In total there are over 50 relevant masters-level courses, 30 undergraduate degrees and a foundation degree available in the North East.

For more information about the Defence and Marine sector please see the following websites:

- School of Marine Science and Technology, Newcastle University www.ncl.ac.uk/marine
- Marine College, South Tyneside www.stc.ac.uk/marine
- The North East Marine Portal www.northeastmarineportal.com
- SEMTA – Sector Skills Council for Science, Engineering and Manufacturing www.semta.org.uk