

SCIENCE, ENGINEERING AND MANUFACTURING TECHNOLOGIES (SEMTA) FACT SHEET – NORTHERN IRELAND

OVERVIEW AND PROSPECTS



The Engineering manufacturing industry in Northern Ireland involves working with metals, electrical equipment, electronics, automotive manufacture, and transport equipment (aerospace and marine - boat and shipbuilding). Semta and The Engineering Training Council Northern Ireland (ETCNI) also represent research and experimental development in pharmaceutical manufacturing companies and the medical devices sector. The engineering manufacturing industry employs over 33,200 people in 1,780 establishments.

OCCUPATIONS WITHIN THE INDUSTRY

Occupation	Percentage of engineering manufacturing workforce 2005	Annual recruitment requirement estimated to 2014*
Managers and Senior Officials e.g. Production Manager, Marketing Manager, Sales Manager	10.1%	190
Professional Occupations e.g. Production and Process Engineers, Design and Development Engineers, Mechanical Engineers	6.3%	130
Associate Professional and Technical Occupations e.g. Science and Engineering Technicians	9.8%	180
Skilled Trades e.g. Metal Working Production and Maintenance Fitters, Welders, Metal Machine Setters and Setter Operators	31.0%	320
Process Plant and Machine Operatives e.g. Metal Working Machine Operatives, Assemblers, Plant and Machine Operatives, Inspectors and Testers	17.2%	250

Source: Semta/IER Projections 2007

*This includes replacement demand due to retirement and other reasons.

A future shift in the occupational structure of the workforce is expected away from manual and unskilled jobs towards higher level managerial, professional, sales and customer services jobs.¹

¹ Northern Ireland Engineering Skills Balance Sheet 2008, Semta

SKILLS AND ENTRY REQUIREMENTS

There are various routes of entry into the engineering manufacture sector. For craft skilled occupations and some assembly and operator occupations, entry will tend to be through apprenticeships and NVQs. For engineering technician and professional engineering roles entry will tend to be through HNDs and degrees or progression from apprenticeships. In the science sector entry to laboratory science occupations and senior roles normally requires a degree or PhD studies. Some employers are beginning to explore further education and work based learning entry for laboratory technician roles. For further information go to www.semta.org.uk/careers__qualifications.aspx.

CURRENT VACANCIES AND SKILL SHORTAGES

In 2007, 17% of engineering companies in Northern Ireland reported having hard to fill vacancies in the previous twelve months.² The majority of these were for skilled trades/craft (56%) and professional (16%) roles. The main reasons given by employers for recruitment difficulties were a lack of applicants with the necessary skills, work experience and qualifications, such as appropriate NVQs or equivalent, or academic qualifications such as GCSEs, A levels or HNDs. Other reasons were lack of applicants with required working experience (33%) and general lack of applicants (25%). 18%² of Engineering employers reported difficulties recruiting engineering graduates. For further details go to www.semta.org.uk/employers/science__bioscience.aspx and www.semta.org.uk/public_bodies/research/engineering_balance_sheets.aspx.

DID YOU KNOW THAT IN NORTHERN IRELAND...

- 31% of all Engineering companies employed apprentices or recognised trainees¹
- 82% of the Engineering workforce is male
- women are under represented across all sectors of engineering in craft, skilled, professional and management job roles
- over a quarter of the electrical equipment and electronics workforce is female
- 95% of engineering manufacturing establishments employ less than 50 people
- it is estimated that there are 50-60 companies employing almost 4,000 people in the Northern Ireland 'Life Sciences' sector.³

USEFUL LINKS

Careers Service NI	Provides an impartial all-age careers information, advice and guidance service: www.careersserviceni.com
Semta	The Sector Skills Council for Science, Engineering and Manufacturing Technologies: www.semta.org.uk/about_us/media_centre/research_reports.aspx www.sectorcareersinfo.co.uk/
ETC NI	Engineering Training Council, Northern Ireland: www.etcni.org.uk
JobCentre Online	Contains vacancies currently notified to Jobs and Benefit offices: www.jobcentreonline.com
Scenta	Engineering careers and Science news from the Engineering and Technology Board: www.scenta.co.uk

Information provided by Semta. Last updated March 2009. To check that this is the most up-to-date fact sheet to www.careersserviceni.com

² Semta LMS Survey 2007

³ Invest NI