Engineering leads the way on careers

The good news is that engineering is rebalancing the UK economy and the 2012 industry figures show that the engineering turnover was £1.06 trillion in the year ending March 2011. This is 23.9% of the turnover of all UK enterprises and is three times the size of the retail sector. There are 5.4 million people employed across 542,440 engineering enterprises.

The proportion of 12-16 year olds who know what people working in engineering do has almost doubled in the past year from 11% to 19%. The likelihood of young people seeing a career in engineering as being "desirable" has also increased year on year from 29% to 38%.

UK engineering is thriving and order books are healthy. The challenge is to maintain this world class position and to ensure that we need more engineers. Engineering companies are projecting some 2.74 million job openings between 2010 and 2020 of which 1.86 million will need engineering skills. This means that we have to double the number of apprentices in the sector.

There are hurdles to be overcome. Only 43% of physics students who achieved an A* at GCSE level progress on to AS level physics. This is a much lower than the progression rate for other science subjects. Another worrying fact is that 49% of co-educational schools in England did not send any girls to study physics at A level in 2011 compared with only 14% for boys. Our targets for engineers are very dependent on doubling the numbers of young people studying GCSE physics.

Engineering offers great career opportunities. The average starting salary for engineering and technology graduates is £25,762 which is 15.7% more than the average for all graduates. Engineering technicians have an average salary of £34,018 and this tops the league of STEM (science, technology, engineering and maths) technician salaries.

Within six months of finishing their studies, 85% of engineering graduates went into either paid work or further studies. Almost two thirds of graduates who went into employment went to work for an employer whose primary activity was engineering and technology.

All of these figures come from the Engineering UK annual report of the state of UK engineering that was launched at 11 Downing Street on 3 December. CEO Paul Jackson said: "Job prospects in engineering are a good news story. It is crucial, however, that government, business, professional bodies, education and the wider engineering community continue to work together to ensure that the UK has the talent pipeline ready to meet demand."

A copy of the report can be viewed online at http://bit.ly/UVnXCO. The report is supplemented by an easy reference pamphlet that includes some of the key facts and statistics in a clear and accessible format. This has been produced as a printed flyer and is available in two formats - an online "flipbook" and downloadable PDF - via the web link http://bit.ly/1nDPY7.

**Professional plenary to act on issues**

The first annual conference of the newly-formed Professional Engineering Forum Plenary took place on Friday 30 November at the Institution of Engineering and Technology (IET).

Marking the tenth anniversary of Engineering UK and the Engineering Council, CEOs from professional institutions across engineering came together to lay the framework for collaborative action at a national level on issues that matter most to the engineering sector.

The meeting heard from Robin Mellors-Bourne of CRAC, the careers development organisation, about the current state of careers information, and from Matthew Harrison of the Royal Academy of Engineering about the business case for diversity in engineering.

Engineering UK chief executive Paul Jackson provided the Forum with a preview of Engineering UK: the state of engineering 2013, the annual report which helps the engineering community to identify challenges for joint action.

Matthew Hancock MP gave an overview of current education and business reforms and stated the importance of "getting it right" in terms of ensuring appropriate numbers enter the profession across all levels.

The afternoon session saw the group debate the key issues for engineering and develop potential projects to be taken forward.