Despite Brexit uncertainties, the engineering sector is buoyant. Almost one in three employers (31%) say that they have expanded their engineering and technology workforce in the last three years. And 46% anticipate growth over the next three years.

But the skills outlook is poor and many businesses consider this to be their biggest barrier to success. As the digital revolution transforms industry, companies recognise the need to upskill and reskill their workforce. But only 20% of employers expect the supply of engineering and technical skills to improve in the next 3 - 5 years. This is too low to meet industry needs.

This chronic shortage is worsened by an ageing workforce and too few people choosing engineering or technical careers. A lack of workplace skills in new recruits is an added concern for 73% of companies surveyed. New entrants have adequate academic knowledge. But cognitive and interpersonal skills - teamwork, collaboration, initiative, enterprise and self-learning are severely lacking. These will become more important than ever as jobs are transformed by technology.

In brief, it’s created a perfect skills storm.

So how is the government responding? Recent government policy recognises the need to tackle skills shortages. 2020 will see the launch of T Levels - new qualifications combining classroom learning and a compulsory 45-day industry placement. A Higher Education review is taking place to strengthen and update Higher Technical Education at Levels 4 and 5. The aim is clear, to help students gain the right skills to meet industry needs. Is this approach likely to be successful with such a heavy reliance on industry engagement?

Partnership with academic institutions is a highly effective way to develop tailored and innovative staff development schemes. But only one in four companies (26%) currently partner their local Further Education college or university to develop such programmes. Also the success of new T Levels are at threat if not enough employers have capacity to provide work experience opportunities.

To retain talent, businesses need to keep developing their staff through flexible learning models, allowing training to fit in around work and home life.

The UK is facing a crucial and exciting challenge - keeping the current workforce of engineers skilled, growing the profession, and ensuring effective and joined-up training programmes to meet future needs in a changing, complex and competitive technological world. At the IET, we are committed to bringing together government, academia and business to boost skills. We urge you to approach us so we can make a difference both at a national and local level.

More information: publicaffairs@theiet.org
theiet.org/skills

The IET’s Skills and Demand in Industry Survey is a biennial report, which gauges the evolving state of skills in UK engineering and technology sectors. The 2019 survey collected the views of over 700 UK employers of engineering and technology staff and highlights the chronic shortages in engineering and technology skills in the UK.