Spanner in the industrial works as engineering degrees lose traction

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By **Jack Grove**

Essential discipline threatened by declining domestic and foreign interest. Jack Grove reports



Credit: Alamy

Robot wars: a slump in engineering admissions has implications for industry

Engineering courses vital for British industry could be forced to close because of sharp falls in the numbers studying the subject at many universities, with postgraduate provision most likely to be affected.

The prediction by Dik Morling, chair of the admissions working group at the Engineering Professors' Council, is informed by the organisation's survey of more than 50 universities that provided details of this year's enrolment figures.

A total of 24 of the 83 departments that responded to the survey say they suffered a decline of 10 per cent or more in domestic and European Union undergraduate admissions for 2012-13, while almost a quarter say that domestic and EU postgraduate numbers fell by more than 10 per cent.

Almost a third say that enrolment on taught postgraduate courses by non-EU students, who often constitute up to 80 per cent of the intake, has fallen by more than 10 per cent.

The figures may provide an early indication of the impact of the new fees and funding regime on student numbers in a key discipline.

Certain engineering areas have been harder hit than others, the study shows.

Overall, undergraduate acceptances in electronic and electrical engineering are down 12 per cent on last year; in production and manufacturing engineering there has been a 17 per cent decline; and in computer science, acceptances are 7 per cent down, according to data obtained by the council from the Universities and Colleges Admissions Service.

"By 2020, there will be many fewer departments in certain branches of engineering," said Professor Morling, head of electronic systems at the University of Westminster, who unveiled the findings at a dedicated conference held at the Royal Academy of Engineering on 7 November, of which he was chair.

"Civil engineering was hit very badly in the 1990s and many courses were closed in that decade. It seems there is now a very long downturn in electrical engineering, computer science and production engineering."

He added: "Mainstream engineering will probably survive, but we now risk losing small postgraduate courses in narrow research areas, which produce people who are key to the technology sector."

Falling number of overseas students

The slump in the number of overseas taught-postgraduate students is a particular concern, said Professor Morling, who attributed the decline primarily to the restrictions on post-study employment opportunities.

"If overseas students stopped coming here, there would virtually be no postgraduate engineering," he said. "They make it economically viable - you can't run courses with just a handful of [UK] students."

Forty per cent of departments say that their overseas postgraduate intake is down on last year, although a third say that their recruitment has increased and others report marginal rises at the undergraduate level.

Those engineering departments that have witnessed severe declines in postgraduate numbers could face an uncertain future, warned Clive Neal-Sturgess, emeritus professor of mechanical engineering at the University of Birmingham.

"Engineering is a high-cost subject and the majority of UK departments are dependent on overseas student income to balance the books," Professor Neal-Sturgess said.

"If these courses start to disappear, what does that mean for UK competitiveness?"

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