



A new Institution from the IEE and IIE

Opportunities for training the next generation of scientists and engineers

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Recruitment crisis

- IET asked businesses from a range of sectors, including energy, what issues they are facing when trying to recruit
- 40 per cent of businesses don't expect to meet their engineering and technician recruitment needs over the next four years
- More than 45% of respondents said that their recruitment needs have been driven by business expansion or diversification
- Some businesses needed to move facilities overseas to cope with the shortfall
- One third of new graduates need further training before being able to start the job
- Respondents see a need to strengthen links between industry and universities to help create more relevant study options



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The next generation

- Latest UCAS figures show that some engineering disciplines are down by nearly 20 per cent
- 1996 – 2004 35% increase in students in HE, but only 8.5% increase in engineering, maths, technology & physics
- 2004 5.8% of total cohort of UK students entering HE went into engineering (8.2% of students in Scotland)
- 1999-2005 number of pupils studying physics A level fell by 15% and Maths fell 14%
- By 2005 only 4% of cohort studying A level Physics, 7% maths, 0.1% electronics related D & T
- In 2001 there were 2143 applications from home students to electrical and electronic engineering degree courses of which only 50 (2.3%) were for power engineering.



What is IET doing about it?

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- Annual Faraday lecture – over 22,000 attend, hundreds of thousands more access via web, tv and dvd/video – Glasgow is regular venue, also now delivered in Asia
- Teacher support – training events, published materials
- Careers information for schools
- Circuit website and the IET Student and Graduate magazine
- Electronics Education and Flipside – goes to all schools
- IET committed to promoting engineering & technology careers in a more positive and aggressive way
- The Power Academy - working to bring academia and industry together through industry based learning and mentoring



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The Power Academy

- Launched 2004 in response to decreasing number of qualified power engineers
- Shortage of power electrical engineering graduates was identified by the IEE Energy Sector Panel and the Electrical Training Association, and backed up by Energy & Utility Skills (sector skills council for the industry)
- Partnership of IET with 5 universities and sixteen companies
- A mix of financial incentives, technical training and business education. Bursary of £2000pa, payment of university fees, at least 8 weeks paid vacation training with partner companies
- 111 applicants in first year – 50 scholarships awarded
- 184 applicants in 2005 – 46 Scholarships



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