SUSTAINABILITY PRINCIPLES FOR ENGINEERS

Dr Brian Iddon MP, member of the Innovation, Universities, Science and Skills Select Committee, hosted a well-attended launch at the House of Commons of ECUK’s new ‘Guidance on Sustainability for the Engineering Profession’. A key milestone in the development of the profession, the guidance provides coherent direction for engineers, and provides a public declaration of the profession’s commitment to sustainability through engineering.

The ECUK guidelines describe engineers’ leadership role in sustainability and list six simple, but inspirational, principles to guide and motivate them to bring about sustainable development through their work. Each of the interdependent principles is of equal importance, with economic and social aspects included as well as those related to the environment.

Introducing the launch, Professor Kel Fidler, Chairman of ECUK said, “Professional engineers have a significant role to play in sustainability and should be the providers of options and solutions to maximise social value and minimise environmental impact. These principles will guide engineers in meeting their professional obligations to promote sustainability, and ensure that it is integrated into all their engineering activity.”

‘Guidance on Sustainability for the Engineering Profession’ has been produced in response to indications from Professional Engineering Institutions (PEIs) that they would welcome such guidelines, and is designed to complement information on aspects of sustainability already published by some PEIs.

Professor David Bogle, who chaired the working group that produced the guidelines, explained: “It is the product of bringing together representatives from across the profession, who between them possess considerable experience in a wide range of engineering disciplines, as well as sustainability expertise. A number of PEIs were also instrumental in its development, either directly as part of the group or through the provision of materials.”

Dr Brian Iddon MP, responding, said, “Engineering can play a major part in solving global problems such as climate change, food and water supply, energy security and economic stability. These six principles will help the public to understand how important engineering is in securing our future.”

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In keeping with the ethos of sustainability EC has avoided printing a large quantity of the guidance document, but an electronic version can be downloaded from www.engc.org.uk/sustainability. However handy wallet size cards for engineers, listing the six principles can be obtained from info@engc.org.uk.

RISE IN REGISTRATION ENQUIRIES

Over the past few months there has been a marked increase in the number of engineers enquiring about registration through the EC website, which we believe is partly a result of the increasingly competitive job market.

However, much of this increase can be attributed to EC’s recent marketing campaign, rolled out to inform and attract candidates from a broad audience across the profession. The campaign included editorial, advertising and an email ‘refer a friend’ scheme for current registrants.

Prior to the roll-out, we reviewed and updated the homepage and registration section of our website, making it more user friendly for the many visitors who simply want to apply for registration. A new enquiry form was added, specifically for enquirers to register an interest in CEng, IEng or EngTech through EC. During April and May over 1500 engineers completed this form – providing information about their academic qualifications and current area of work. Their details are forwarded to the relevant institutions for processing. Enquiries have spanned all PEIs and all sections of the register.

The campaign messages emphasised how registration as a CEng, IEng or EngTech differentiates candidates through added status and recognition, making registration even more important during a recession. It also highlighted that registration is open to all competent practising engineers, with different levels and pathways available.

VOLUNTEERS’ SEMINARS

During May EC hosted four one-day seminars specifically for volunteers. These provide a valuable networking opportunity for delegates to meet with their peers, receive a general update on EC activities, disseminate experience and good practice and discuss any problems or concerns.

Across the four days, 45 Liaison Officers were joined by members of the Registration Standards Committee, Quality Assurance Committee, EC employees and board members. Key topics for lively debate included TRO, IT and registration marketing.

A full review of the meetings can be downloaded here. For further details please contact Tammy Simmons on tsimmons@engc.org.uk.
ACCREDITING GRADUATE DEVELOPMENT PROGRAMMES

Many employers operate structured development programmes for engineering graduates, which are accredited by professional engineering institutions (PEIs). On 28th May ECUK brought together over 20 representatives from employers and PEIs to discuss the theme ‘Accrediting Graduate Development Programmes: Can we improve the process?’

They were joined by representatives from the Defence Science and Technology Laboratory, the Science Council and ECUK employees, board members and Registration Standards Committee, to evaluate current practice and processes and to consider whether there is scope for greater co-ordination of accreditation in the future.

The scene was set for the discussions by presentations from two employers - QinetiQ and Rolls-Royce plc – followed by viewpoints from the Institution of Chemical Engineers and The Royal Aeronautical Society.

It became clear that employers would like to see commonality in certain key areas, such as accreditation application forms and visit reports, tools for recording and monitoring the development of competence, joint Institution visits and a generic system for recording the mentoring process.

ECUK will be working to facilitate an ongoing dialogue between PEIs, to compare their approaches and processes, and to consider whether there is scope for greater co-ordination of accreditation in the future.

Delegates agreed that this first forum was of value to both employers and PEIs, and should be repeated on a regular basis. A follow-up meeting will take place during February 2010, prior to the next graduate intake. Meeting notes will shortly be available on the ECUK extranet. Contact mstewart@engc.org.uk for further information.

FIRST FOUR GAIN ICTTech

Four information technology professionals have made history by becoming the first in the world to receive the new Information and Communications Technology Technician (ICTTech) professional qualification. ICTTech was launched in January following industry demands for a competence-based professional qualification for IT and communications technicians and the IET is the first professional engineering institution to have been licensed by ECUK to award it.

Corporal Dan Hunt from the RAF is among the initial four. He said, “Being recognised by a professional body for the training I have undertaken and the skills I have gained is a wonderful thing. IT specialists have been overlooked for a long time in the engineering environment and the new professional recognition of ICTTech is hopefully just the start.”

The other three, Ben Johnston, Mark Burton, and Mike Demetriou, are all employed by the Dover Harbour Board as systems engineers and ensure the harbour board’s ICT systems, a crucial piece of infrastructure, run smoothly.

Successful ICTTech registration provides individuals with professional recognition on completion of an assessment of a broader range of skills. These not only recognise product-specific certification and relevant experience, but also assess interpersonal and professional skills that are important to any organisation.

ECUK was represented at the Engineering Professors Council (EPC) Annual Congress, at Heriot-Watt University in April, by Richard Shearman, Director of Formation and Deborah Seddon, Deputy Director of Formation.

Approximately 100 delegates, mostly academics, enjoyed an interesting programme, the main themes of which were employer engagement, research funding and profiling the future engineering intake. Among the presenters were senior representatives from funding and other HE agencies.

Mark Batho, CE of the Scottish Funding Council, confirmed that there are no plans for teaching-only Scottish universities. There was no likelihood of the current administration in Scotland introducing student fees, but he noted that this could put Scotland at a disadvantage compared to England should the Scottish government cut HE funding. He also reported that whilst the impact of the downturn in Scotland is high, the level of UCAS applications in engineering is very encouraging.

EPC presented findings from 1500 responses to its study on the school-university transition, and Jim Boyle of Strathclyde University reported on strategies that have turned around dropout rates from mechanical engineering courses to their current negligible level.

Richard Shearman presented ‘The future direction of engineering degrees – a perspective from the Engineering Council UK’, looking at engineering degrees as a foundation for a career as a professional engineer, as well as discussing current trends.

Other presentations reviewed the National STEM Centre and provided views from Thales, BAE Systems, INEOS and Shell about what industry would like to see in new graduates. All the presentations can be found on the EPC website: www.epc.ac.uk.

ECUK works closely with EPC on matters of mutual interest and was pleased to sponsor the reception prior to the congress dinner at Edinburgh castle. At the dinner the EPC Presidency passed from Professor Ray Allen of the University of Sheffield to Professor Barry Clarke of Leeds University who will hold the post for two years.
RANKING UNIVERSITIES – A EUROPEAN SYSTEM?

In the last edition of Register News we reported on the EU Commission initiative aimed at developing a European system for ranking universities around the world, with engineering and business studies chosen for the pilot study. We are pleased to confirm that the consortium which includes FEANI has now been awarded the contract to design and pilot the system. With ECUK’s Head of International Recognition Jim Birch on the FEANI Board, ECUK will have an influential position on the outcomes of the project.

ASSESSING UNIVERSITIES – A GLOBAL SYSTEM?

ECUK has also provided input to phase one of an OECD funded project aimed at establishing a global system for assessing universities. Again, engineering has been selected as a pilot subject. The initial phase is to define learning outcomes for undergraduate engineering programmes. Although the final report has yet to be agreed, early indications are that the programme descriptors will be UK-SPEC compatible.

IMMIGRATION ISSUES

The Border Agency has lifted its minimum academic qualification requirement for Tier 1 entry to master level. ECUK has received confirmation that holders of relevant professional titles (eg CEng) will be deemed to be at that level and so remain eligible for entry to the UK. ECUK will be involved in the current Migration Advisory Committee consultation on the labour shortages in the UK engineering sector and has commented on revisions to the points based immigration system regarding enhanced recognition of professional titles.

EUR-ACE LABELS FOR CAMBRIDGE

We are pleased to announce that during May the University of Cambridge was awarded Second Cycle EUR-ACE labels for the Engineering Tripos and the Manufacturing Engineering Tripos, demonstrating their international standing. Awarded by ECUK, the EUR-ACE label is the product of a European Commission backed initiative to create a degree accreditation framework with internationally acknowledged standards.

For more information on EUR-ACE labels please contact Jim Birch on jbirch@engc.org.uk or visit our website: http://www.engc.org.uk/international/eurace.aspx.

GOOD NEWS FOR APPRENTICESHIPS

ECUK has welcomed the Government’s launch of the National Apprenticeship Service (NAS). Apprenticeships have always played an important role in engineering and the NAS will undoubtedly open the door for more people of all ages to enter the profession.

The integrated training and experience provided by a large number of engineering-based Advanced Apprenticeships can offer a direct route to Engineering Technician (EngTech) registration, providing most, if not all, of the necessary competence. And many of those joining the profession as apprentices have gone on to achieve a high status in engineering, working their way up to become Incorporated (IEng) or Chartered Engineers (CEng). We are aware of several Presidents of Professional Engineering Institutions who are themselves former apprentices.

“NAS provides the necessary safeguards to ensure the quality of engineering apprenticeships throughout the UK,” says Andrew Ramsay. “It will play an invaluable role in helping to spread the word to employers as well as potential apprentices. In particular, it will make sure that the essential experience of developing competence through work in real industrial, construction or business environments remains central to, and a highly valued aspect of, the concept of apprenticeship.”

FAIR ACCESS TO ENGINEERING

ECUK and the ETB welcomed an April report by Alan Milburn MP’s Cabinet Office Panel on Fair Access to the Professions.

The report examined a number of issues facing various professions in the UK, including geographical equality. It confirmed that, when compared with other professions such as banking and finance, law and IT, engineering has much more inclusive geographical spread, with 80% of internships and work experience placements being available outside London.

This reflects the importance of engineering as a contributor to the economy, infrastructure and society across the whole of the UK. In fact, of the 250,000 professional engineers domiciled in the UK and registered with ECUK more than 97% are based outside Central London.

In addition to access from all regions of the UK, engineering has a long tradition of access from non-traditional backgrounds, providing opportunities to achieve senior positions of responsibility.
RINGING ENDORSEMENT OF CEng

In its report at the end of March entitled 'Engineering: Turning ideas into reality', the House of Commons Innovation, Universities, Science and Skills Committee gave a strong endorsement of ECUK’s professional registration process for engineers. Describing the UK’s chartering system as one of the profession’s key strengths (paragraphs 348-350), the Committee recommends that the Government and professional engineering institutions should join with ECUK in promoting a stronger understanding of the three registration categories: EngTech, IEng and CEng. (Recommendation 54, paragraph 357).

Professor Kel Fidler, Chairman of ECUK said: “We are delighted that senior parliamentarians strongly recommend the system of assessment and registration run by ECUK. We are glad they are also pressing the Government to use it to develop and recognise their own engineers and technicians.” (Recommendation 40 and paragraph 284).

Andrew Ramsay, ECUK’s CEO, added: “From the beginning of this long inquiry, we have worked closely with our partners in the profession – the Royal Academy, The Engineering and Technology Board and the professional engineering institutions – to demonstrate the quality and depth of our work. We have been rewarded through recognition of the complexity of the engineering profession, and an appreciation of the efforts we make to work together (paragraph 10) to provide ‘world-class engineering’.”


REGISTRATION NOW AVAILABLE TO ITP MEMBERS

In the last Register News we reported on a new partnership formed between the Institute of Telecommunications Professionals (ITP) and the Institution of Engineering and Technology (IET), to create a joint registration programme to raise professional standards across the telecoms sector. Launched at the end of April, the programme is now available exclusively for ITP members.

The joint ITP-IET member registration programme allows ITP members to apply for professional registration, using the IET which is licensed by ECUK to award professional qualifications. ITP members of this programme will be entitled to use the designatory letters CEng, IEng, EngTech or ICTTech after their name once they have qualified for ECUK registration.

Further details can be found at: http://www.theitp.org/UserData/root/Files/Professional_Registration_30.04.091.pdf.

ENGINEERING RESEARCH BASE – TOP OF THE CLASS

The Engineering and Technology Board (ETB) has issued a policy paper, documenting the excellent state of Engineering Research within UK Universities, and calling for increased research credits to ensure Small and Medium-sized Enterprises (SMEs) and Micro-businesses can afford to keep innovating.

The paper, based on the independent analysis of the Research Assessment Exercise, reveals that between 58 and 71 per cent of the research and development taking place in UK university engineering departments is rated as ‘world leading’ or ‘internationally excellent’, with the highest scores being obtained in chemical and civil engineering.

For the full report, click on: http://www.etechb.co.uk/_db/_documents/5684_ETB_Green_RAE_5_for_pdf_280509.pdf.

SEEKING OUTSTANDING WOMEN ENGINEERS

The Karen Burt Award from the Women’s Engineering Society (WES) provides the opportunity for an outstanding woman engineer or scientist, who has achieved CEng status over the past year, to gain even greater recognition for her qualities and skills. The award also provides a cash prize and a year’s membership of WES.

This is the tenth anniversary of the Karen Burt Award and nominations for this year’s award are now open. Professional bodies are invited to nominate their highest calibre, newly chartered female engineer, applied scientist or IT professional, who has demonstrated a commitment to the promotion of her profession. If you think you should be considered, get in touch with the membership staff of your institution to suggest that they should nominate you.

Nomination forms and further details are available from WES, tel: 01438 765506, email: info@wes.org.uk, http://www.wes.org.uk/?q=content/the-karen-burt-memorial-award. The closing date for WES to receive nominations is 1 July.
READER SURVEY
We need your help to ensure that Register News provides the sort of information you seek, in a form that best suits you. Please click here to respond to our brief questionnaire. A Waterstones voucher for £25 will be sent to a respondent picked at random.

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