Welcome

This issue reports on HE-related activity that the Engineering Council has been engaged in since the previous HE bulletin last September. A lot of work has been directed towards raising awareness about accredited status and encouraging universities to take full advantage of this. We are very pleased to report that a logo denoting ‘Engineering Council accredited degree’ is now available. Work is proceeding well on the production of a toolkit for universities that wish to develop work-based ‘engineering gateways’ type degrees. These degrees are now established, and there are now several graduates and also the first Chartered Engineers (CEng) have been registered. Progress has been made towards recognising the EngD for the purposes of registration, and work has begun with Vitae to produce a tool that links Vitae's Researcher Development Framework with the competence standards for CEng.

Please feel free to forward this to colleagues who might be interested. Comments on the HE bulletin and requests to be added to or removed from the circulation list should be emailed to Deborah Seddon dseddon@engc.org.uk

Accredited degree status

The Engineering Council has been surprised and concerned that many universities which have successfully achieved accredited status for their engineering degrees do not publicise this on their websites or in their prospectuses. To assist universities, a logo and supporting statement about accreditation have been developed. These are available for downloading from the Engineering Council website at: http://www.engc.org.uk/education--skills/accreditation/accredited-degree-logo.

Initial feedback has been very positive and some universities are already using the logo and statement. The hope is that in time, prospective students and their advisers will recognise the logo as a mark of assurance about the quality and industrial relevance of the degree, as well as evidence that the course satisfies the initial requirements for those graduates who subsequently seek professional registration as an Incorporated Engineer (IEng) or Chartered Engineer (CEng).
EUR-ACE® label for accredited degree

A further way by which a university may promote the status of its accredited degrees is by using the EUR-ACE® label. The EUR-ACE® system provides a set of standards to identify high quality engineering programmes in Europe and elsewhere. The label is awarded by the European Network for Accreditation of Engineering Education (ENAEE) via seven authorised agencies, of which the Engineering Council is one. UK universities may apply to the Engineering Council for a label for any degree holding accredited status since November 2006.

The Engineering Council is supportive of ENAEE and believes that the EUR-ACE® label is a valuable tool in promoting recognition of UK accredited engineering degree programmes in Europe and elsewhere. So far, uptake of the label in the UK has been limited. To encourage further uptake, and in recognition of the tendency in the UK for ‘suites’ of programmes with similar content and titles to be accredited by the same visiting panel, the Engineering Council has negotiated a reduced fee. Until the end of 2013, there is a charge of 150 Euros per first cycle or second cycle programme label. For a suite of accredited programmes, there will be a charge of 150 Euros plus a charge of 20 Euros for each additional degree programme within the same suite of degrees, up to a maximum of ten labels.

Requests for EUR-ACE® brochures and information on how to apply for the label should be forwarded to Neela Lubojacky nlubojacky@engc.org.uk

Details about ENAEE can be found at http://www.enaee.eu/

Engineering Gateways successes!

An important milestone in the development of the Engineering Gateways scheme has been achieved with IET member Richard Green becoming the first graduate of the flexible work-based MSc Professional Engineering to gain Chartered Engineer (CEng) status. Richard graduated from Kingston University in 2011 and was also able to use work from this degree, together with the competence he acquired through work, to apply to the IET for his professional review interview for CEng. Since then a second graduate has achieved CEng, and more are expected to do so this year.

The full press release can be found at: http://www.engc.org.uk/news-list/gateway-to-success-for-first-chartered-engineer

Photo caption: left to right: Deborah Seddon, Engineering Council; Mike Hope, Kingston University; Richard Green; Michelle Richmond and Roy Bowdler, IET

Engineering Gateways toolkit

It was briefly reported in the last e-bulletin that the Engineering Council had been awarded practice transfer funding from the National HE STEM programme. The aim is to develop a toolkit to assist with rolling out the ‘Engineering Gateways’ flexible work-based framework to universities wishing to adopt the Engineering Gateways work-based framework. Work on the toolkit is underway, and five universities are participating in the project as the next ‘adopters’ of this practice: Coventry, Derby, Greenwich, Leeds Metropolitan and the University of the West of England. Other universities are welcome to indicate their interest in being kept up-to-date with developments or in becoming adopters at a later stage.
Research has been completed into the adopters’ views about the issues and challenges in implementation, and the existing providers’ views about critical success factors. Mentoring partnerships have been established between existing providers and adopter universities. The toolkit will be in a checklist style with links to further information and downloadable ‘print on demand’ supporting materials. Work on the toolkit is being supported by the Centre for Engineering and Design Education at Loughborough University, and it will be available in the Summer.

For further information on the practice transfer partnership or the Engineering Gateways work-based degree programmes, contact Deborah Seddon at: dsheddon@engc.org.uk

Learning outcomes for Masters degrees other than the MEng

These were first published last year and have now been included in the re-printed Accreditation of HE programmes, that is available for downloading at: http://www.engc.org.uk/ukspec Hard copies are also available from info@engc.org.uk

Engineering Doctorates (EngDs)

In the last bulletin, we reported on the ‘in principle’ statement agreed by the Engineering Council about the EngD and its relationship with professional qualification as CEng. The next step was to consider how the EngD might be accredited as an academic award. The publication of learning outcomes for Masters degrees had paved the way for this.

With the support of the EPSRC and the three Industrial Doctorate Centre (IDC) Advocates - Professor Chris France (Surrey), Professor Patrick Godfrey (Bristol) and Professor William Powrie (Southampton) - a survey was undertaken with IDCs to explore to what extent their EngD programmes demonstrate each of the UK-SPEC Masters degree learning outcomes. Ten IDCs responded and the overwhelming majority of responses were positive. The few cautious responses mentioned that the nature of the individual’s project could influence the achievement of a learning outcome.

As a consequence of the survey evidence, the Engineering Council has approved a change to the Regulations for Registration such that in future an accredited EngD when combined with an accredited Bachelors degree with honours in engineering or technology, will provide the full exemplifying academic qualification for CEng. A guidance note is being developed for those PEIs who wish to accredit EngDs, including reference points for accreditation.

Further work is looking at the accreditation of IDCs as IPD centres. The Engineering Council has confirmed its support for this approach, subject to the usual UK-SPEC and regulatory requirements. There is a precedent for this at one university, and several other IDCs have expressed interest in exploring this possibility. In the longer term, it may also be possible to accredit the EngD as an integrated learning and development programme, and work is beginning to look at this option.

To find out more, contact Deborah Seddon at: dsheddon@engc.org.uk

Researcher Development Framework and CEng competence

Vitae is supported by Research Councils UK (RCUK) and is the UK organisation championing the personal, professional and career development of doctoral researchers and research staff in higher education institutions and research institutes.

Vitae launched the Researcher Development Framework (RDF) in 2011 which is a professional development framework for planning, promoting and supporting the personal, professional and career development of researchers in higher education. It articulates the knowledge, behaviours and attributes of successful researchers and encourages them to realise their potential www.vitae.ac.uk/rdf

In an important new piece of work, Vitae is working with the Engineering Council to interpret the RDF for aspiring Chartered Engineers by producing an engineering lens on the RDF. The lens will provide a
bridge to the UK-SPEC standards of competence for CEng so that researchers can see how their skills, behaviours and attributes can help them achieve chartered status. Examples of activities that researchers might present to demonstrate that they meet the requirements to achieve CEng will be included to aide researchers further. This should be of assistance to all academics and researchers in engineering who wish to become professionally qualified engineers.

Feedback on the draft lens will be sought from the HE sector prior to its launch in the Summer. If you would be interested in providing feedback, please contact Deborah Seddon dseddon@engc.org.uk

Responses to consultations

The past six months has seen a fair number of HE-related consultations. The Engineering Council has contributed to some responses led by other engineering bodies, as well as making its own responses to those that are of particular relevance to our work:

- BIS consultation: Higher Education: students at the heart of the system
- BIS consultation: A new fit-for-purpose regulatory framework for the HE sector
- House of Lords Science and Technology sub-committee: call for evidence on higher education in STEM subjects
- QAA consultation on the UK Quality Code for HE, Part C: Public Information

The Engineering Council was invited to nominate a member institution to provide oral evidence to the House of Lords Inquiry on 6 March, specifically on issues related to accreditation.

Kite-marking and accreditation

The HM Treasury’s Autumn statement included the establishment of an industry group to kite-mark courses that employers value across the range of STEM subjects. The group is being led by Science, Technology, Engineering and Mathematics (STEM)-focused sector skills councils (SSCs) with support from the Confederation of British Industry and Skillset. The lead SSC, SEMTA, has invited the Engineering Council to be involved in this work. BIS is not looking for uniform arrangements across STEM sectors, and there is a general recognition in the group that for engineering, the degree accreditation system in the UK is mature and rigorous, and commands respect both here and internationally. A key aim is to avoid any confusion between kite-marking and PEI accreditation, and identify where each might add value to the other. The recently published Wilson Review of Business-University Collaboration (to which the Engineering Council gave evidence) re-iterates the international reputation for UK accreditation processes and standards, and notes that whilst there may be the potential for accreditation to be a constraint, in reality it is not.

European Directive: recognition of professional qualifications

The European Commission has proposed amendments to several Articles in this Directive that covers several disciplines including engineering. The Engineering Council welcomes the progressive approach to modernisation of the Directive, and has responded positively about some aspects of the proposals.

We have expressed concern about proposed changes to Article 11 and 13 which seek to clarify the levels. Currently, Chartered Engineers, whether they hold an MEng degree or a combination of a BEng (Hons) + one-year MSc meet the description of level (e). The current draft proposes changing the description of this level so that it covers those whose academic formation is not ‘of at least four years duration’ as at present, but ‘of more than four years duration’. This could have an impact on how individuals are recognised in future.

The Engineering Council is working with BIS and the members of the European Parliament’s Internal Market and Consumer Protection Committee to ensure that UK engineers and HE qualifications are not disadvantaged. If your university has responded about this or you would like further information, please contact Katy Turff, Head of International at the Engineering Council at kturff@engc.org.uk
Global Dimension for Engineering Education project

Now in its final year of this 3-year project, the project is linking with Engineers Without Borders UK (EWB) and Engineers Against Poverty (EAP) in a major conference to:

- explore how the global dimension is being incorporated into the teaching of engineering undergraduates
- and showcase practical examples of highly innovative student projects

The conference takes place on 26 March 2012 in London and will be of interest to academic staff, students, policy-makers and employers. Full details are available at [www.ewb-uk.org/changingcourse](http://www.ewb-uk.org/changingcourse)

The event will draw on the work of the ‘Global Dimension for Engineering Education’ project that is supported by EWB, EAP, Engineering Council, Development Education Research Centre, Engineering Professors’ Council and the Centre for Engineering and Design Education, Loughborough University. Resources and other details about the project are available at: [http://www.engsc.ac.uk/global-dimension](http://www.engsc.ac.uk/global-dimension)

Free IEng eBook

To assist in raising awareness and understanding of the value of the Incorporated Engineer (IEng) professional qualification, the Engineering Council’s new IEng eBook acts as a definitive guide to becoming registered as an IEng. The innovative eBook, which includes a page specifically for students, is available to download from the Engineering Council’s website, at: [http://www.engc.org.uk/ebook](http://www.engc.org.uk/ebook)

Please assist us by telling your engineering students about this.

Risk: shaping the training of future engineers

The Health and Safety Laboratory (the research agency for the Health and Safety Executive) is currently working on a project to promote risk awareness and management in engineering students, by developing engaging and interactive computer-based teaching resources for use by universities and industry based graduate training schemes. As part of this work, HSL staff are interested in speaking to university staff and students to explore their requirements from such resources and how risk awareness is currently incorporated into undergraduate courses.

To register your interest or volunteer to participate please email contact details to: riskeducation-manager@webcommunities.hse.gov.uk A researcher from the team will get in touch.

The Engineering Council’s Risk Guidance materials are available for use with students. An eight page brochure is available to download at [http://www.engc.org.uk/about-us/guidance-on-risk](http://www.engc.org.uk/about-us/guidance-on-risk) and a handy wallet card listing the six principles, can be ordered in bulk for student groups from info@engc.org.uk

Social media

The Engineering Council now has pages on LinkedIn, Facebook and Twitter, as well as a YouTube video about becoming professionally qualified. These can all be accessed from any page on our website: [www.engc.org.uk](http://www.engc.org.uk) and provide the means for you to keep up to date with our activities. We are already linked to many universities through these pages.