The EUR-ACE® Label, assuring quality engineering degree programmes

Over 1,490 engineering degree programmes in 300 universities in 22 countries have now been awarded the EUR-ACE® (EURopean ACcredited Engineeer) Label. So how does it work and what does it have to offer to employers looking for engineering graduates?

Established in 2006, the EUR-ACE® label is a reliable verification of the high quality of an engineering degree programme above the minimum standards set by national laws. There is a database of all accredited engineering degree programmes which have been awarded the EUR-ACE® Label at http://www.enaee.eu where it is possible to search by country, programme or educational institution.

ENAEE (European Network for Accreditation of Engineering Education) www.enaee.eu, is the organisation which authorises accreditation agencies (or similar bodies) in different countries to award the EUR-ACE® label to the engineering degree programmes they accredit.

What is programme accreditation?

Programme accreditation is a review process that assures the educational quality and the job relevance of an engineering degree programme against a set of standards. It helps people make important decisions about engineering education including:

- Students choosing an educational programme
- Institutions seeking to improve the education provided by their programme
- Employers recruiting well-prepared graduates
- Industry seeking to voice educational needs to institutions

How does this work?

An accreditation agency which accredits engineering degree programmes applies to ENAEE for the authority to grant the EUR-ACE® Label to the programmes they accredit at Master and Bachelor degree level. If ENAEE is satisfied that the procedures and policies of the agency satisfy the standards set out in EUR-ACE® Framework Standards (EAFS), then that agency is authorised to award the EUR-ACE® Label to the programmes it accredits.

The needs of engineering employers

To be successful in the workplace, engineers are required to have not only technical and problem-solving expertise upon completion of their engineering degree programme, but also transferable skills. Transferable skills are those which are required to work across disciplines and teams, and the ability to communicate effectively in the workplace.
The six programme outcomes of EUR-ACE© Labelled accredited engineering degree programmes are:

- Knowledge and Understanding
- Engineering Analysis
- Engineering Design
- Investigations
- Engineering Practice
- Transferable Skills

The EUR-ACE© label is relevant to all European engineering degree programmes

The EUR-ACE© label is relevant across all European countries because it uses a consistent framework of standards to measure the effectiveness of an engineering degree programme. The EUR-ACE Framework Standards (EAFS) specify engineering programme outcomes i.e. the knowledge, skills and attitudes required of engineering graduates at the Bachelor and Master level (and consequently the EUR-ACE© label distinguishes between EUR-ACE© Bachelors and EUR-ACE© Masters).

The EAFS take into account the diversity of engineering programmes that are necessary for working in the European engineering industry. Due to the way they are structured, they can accommodate innovation in teaching methods, as well as encouraging the sharing of best practice and can incorporate the development of new engineering disciplines.

An important part of the role of ENAEE is to continually ensure that the EUR-ACE© label incorporates not only the views and perspectives of industry and higher education institutions, but also relevant changes in engineering technology. So ENAEE promotes engineering education, and the EUR-ACE© label assures its quality.

How does the EUR-ACE© label help engineering employers?

Each Higher Education Institution (HEI) that has a EUR-ACE© labelled engineering degree programme must undergo regular evaluation as to the quality and relevance of its engineering education degree programmes.

Engineering academics together with engineers from industry are engaged to regularly evaluate engineering degree programmes from authorised accreditation agencies to check that these programmes comply with the EUR-ACE© standards and so retain the authorisation to award the EUR-ACE© label.

At a higher level, engineers from industry also sit on the Boards and Councils within each EUR-ACE- authorised accreditation agency. These decision-making bodies are responsible for overseeing and checking the implementation of these standards by the agencies and their review teams.

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