Research on enhancing engineering programmes

Professor Scott and Otago Polytechnic have been commissioned to provide guidelines for enhancing content, delivery and assessment of undergraduate engineering programmes.

This research is in response to recommendations from participants at the ‘Engineering E2E Talking with Employers’ workshop in June 2015, who saw the need for an engineering graduate study based on Professor Geoff Scott’s Professional and Graduate Capability Framework conducted in the New Zealand context. It will ensure that a local professional and graduate capability framework is developed and tested in a comprehensive manner, based on research rather than anecdote.

(continues overleaf)

Initiatives undertaken through the Engineering E2E programme contribute directly to the achievement of the Government’s Business Growth Agenda priority of building a more productive and competitive economy.
It is expected that the framework will:

- Enable the Engineering profession in New Zealand to check alignment with overseas developments when comparing domestic skill needs with international standards
- Enable tertiary education organisations (TEOs) to validate the relevance of their programmes – for example, the results could be compared with those produced in parallel research of engineering employers and professional bodies (such as by Western Sydney University)
- Enable TEOs to improve the content, delivery, support, and assessment of undergraduate (Levels 5-8 on the NZQF) programmes in engineering
- Help improve the engagement of new students in study, by emphasising what employers have identified as key attributes and identifying how a student’s engineering studies can develop these attributes
- Help improve TEOs’ relationships with the wider engineering profession by better understanding what industry wants from graduates.

The research will involve engagement with institutes of technology and polytechnics (ITPs) and universities. A project steering group will be assembled from employer representatives and engineering deans from two university engineering schools and two ITP engineering schools, and other appropriate organisations.

The project’s report will include: a comparative analysis with similar Australian research; guidelines for enhancing the curriculum, learning outcomes and engineering assessment in ITPs and universities in New Zealand; and real-world scenarios for use in learning and assessment.

Project progress reports and the final report will be posted on our website – see www.engineeringe2e.org.nz/Progress

MAKE THE WORLD LAUNCHED!

The Make the World campaign took off on 1 May with the launch of the maketheworld.nz website, videos, magazine articles, blogs, billboards, street posters and press releases from the Minister and TEC.

The campaign immediately received a boost with an excellent response from the media, including a Sunday Star Times article and radio and television interviews.