

Engineering E2E – an introduction

There is a shortage of engineers at all levels in New Zealand. The Government has responded by allocating over \$60 million in the past four years to boost engineering education, with the goal of increasing engineering graduates by 500+ per annum by 2017. The Engineering Education to Employment (E2E) Programme was set up in June 2014 to help facilitate this goal.

ABOUT ENGINEERING E2E

The Engineering Education to Employment Programme represents a partnership between the Tertiary Education Commission (TEC), the institutes of technology and polytechnics (ITPs), Business NZ, the Institution of Professional Engineers (IPENZ) and a number of organisations that employ engineers or benefit from their services.

The Programme is guided by a Steering Group representing key stakeholder groups from the engineering sector including education and employment in a wide range of disciplines. Members are a crucial link to the wider sector and play an important role in gathering and disseminating information.

The group aims to listen, link, leverage and lead, and more specifically to:

- develop and implement a collaborative marketing campaign
- give effect to programme goals and work streams, particularly through engagement with their individual sectors
- form effective industry/education provider partnerships.

OUR KEY ACHIEVEMENTS TO DATE

Engineering E2E's initial research has confirmed that the issues behind the shortages in engineers are complex and multifaceted. To make up the shortfall will require a wholesale change in the perception and understanding of the activities, learning areas and professions that engineering encompasses.

We are working to support the collaboration of all sectors – government, schools, tertiary education and industry – through:

- a range of research projects to establish needs and identify possible solutions
- an employer workshop and report

The message is clear: this is a task that is not only worth doing, but one that simply must be done, and with all urgency.

SIR NEVILLE JORDAN

Chair, Engineering E2E Steering Group

- the development of the **engineeringe2e.org.nz** website which includes a wide and growing range of case studies on current best practice and relevant initiatives, plus a monthly newsletter.

Response from all sectors has been highly encouraging. There is a genuine recognition of, and concern over, the issues and a real willingness to seek solutions to the challenges ahead.

OUR FUTURE PLANS

We are looking for support to:

- develop and deliver a nation-wide awareness campaign
- work with schools on initiatives to develop teacher education, student achievement, secondary-tertiary transitions, and engineering preparation courses
- work with tertiary institutions to create a network of engineering educators, establish a mixed-mode course initiative, and ensure that clear education-to-employment pathways are developed
- continue employer consultation to ensure their needs are met and to promote recruitment and retention strategies.

GET INVOLVED

- Visit our website at **engineeringe2e.org.nz**
- Sign up for our newsletters at **engineeringe2e.org.nz/Newsletter.cfm**
- Check out our initiatives at **engineeringe2e.org.nz/Progress**