

WORK WITH US TO ACHIEVE THE GOVERNMENT GOAL OF INCREASING ENGINEERING GRADUATES BY 500+ PER ANNUM

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AT OUR MOST RECENT MEETING, the Engineering eze Steering Group recommended that TEC conduct feasibility studies to fund seven micro-credentials pilots. If funded, these studies would be conducted over the next three to twelve months and followed by pilot micro-credentials programmes.

The very process of possibly launching feasibility studies has uncovered a high degree of support and interest from a range of engineering and education organisations. Having completed several micro-credentials courses myself, I understand the benefit these bite-sized chunks of learning offer and I'm looking forward to seeing how they also benefit learners in engineering.

Massey University has done research into the role engineering education hubs might play in establishing popular and effective pathways into engineering, and a single entry point for engineering qualifications. The research report identifies a facilitation and leadership function for a hub, and a role in informing and advising students and providing liaisons between students, institutions and industry. It also identifies a series of factors that need to be considered in the establishment of regional hubs. A copy of the report will be available on the Engineering eze website later this month.

In late October, I was invited to attend the successful launch of Engineering New Zealand – the new name for Engineering eze's partner IPENZ. Along with the new name comes a new membership pathway, for engineers from all disciplines at all stages of their careers. See [www.engineeringnz.org/news-insights/meet-engineering-new-zealand](http://www.engineeringnz.org/news-insights/meet-engineering-new-zealand)

Sir Neville Jordan  
 Chair, Engineering eze Steering Group

Initiatives undertaken through the Engineering eze programme contribute directly to the achievement of the Government's Business Growth Agenda priority of building a more productive and competitive economy.

## Engineering eze projects feature at NZVET Research Forum 2017

Held in Wellington in October, the New Zealand Vocational Education and Training Research Forum (NZVET) is New Zealand's largest forum dedicated specifically to research on career, work, and skills-oriented education and training.

The **Industry Training Federation (ITF)** and **Ako Aotearoa** jointly hosted the forum, where national and international speakers shared findings of projects and initiatives from across sectors. Presentations covered evidence-based



Engineering eze Chair Sir Neville Jordan and IMechE's New Zealand representative Simon Fleisher

### ANOTHER MoU SIGNED AND SEALED

Engineering eze has signed a Memorandum of Understanding (MOU) with the Institution of Mechanical Engineers (IMechE). IMechE is a UK based international engineering society. It works to raise the profile of engineering and develop links with industry and engineering institutions.

Engineering eze and IMechE have agreed to collaborate on initiatives that contribute to increasing engineering graduates by 500+ per year. We will promote activities and share information about any initiatives relevant to achieving our mutual goals.

practical initiatives as well as findings from applied and basic research.

ITF and Ako Aotearoa use the term 'vocational' in its broadest sense that includes: professional education; integrating workplace elements into education programmes; and using skills to support good outcomes for workers, industries, and communities.

The forum was attended by educators, researchers and policymakers, and organisations that work in the areas of vocational, professional, and skills-based learning. It's an annual event and next year there are plans to combine with the Australian equivalent for a conference in Sydney.

Forum presentations about three Engineering e2e projects were well attended: Jenny Barber spoke about the Secondary-Tertiary Pathways Projects; Jenny Poskitt shared experiences from her work on the degree apprenticeship project to date; and Brenden Mischewski detailed the journey to seven potential micro-credentials pilots in engineering.

All forum presentations will be available at [ako.aotearoa.ac.nz/nzvetrf2017](http://ako.aotearoa.ac.nz/nzvetrf2017) from 6 November.



## INDUSTRY LINKS CASE STUDY

### NZDE GRADS DO A WIDE RANGE OF WORK

Opus geotechnical testing technician Dave Pollard was part-way through his New Zealand Certificate in Engineering (NZCE) in Civil Engineering when the New Zealand Diploma in Engineering (NZDE) was introduced. He wanted his qualifications to be completely up-to-date, so has ended up with both qualifications.

"The interesting thing with NZDEs," says manager Sheldon Bruce, "is that, depending on the quality of the person, they are not limited to technical roles – they could easily do my management role. It's more a limitation of what they are prepared to commit to."

Read more... [www.engineeringe2e.org.nz/Employers/Case\\_study.cfm?ID=77](http://www.engineeringe2e.org.nz/Employers/Case_study.cfm?ID=77)

## NEW APPROACHES NEED SUPPORT – A LESSON LEARNED

Engineering e2e has learned many lessons over the past few years, not the least of which is that breaking from business as usual (BAU) is tough. Even the most willing and able benefit from a bit of help along the way. Our micro-credentials pilots are not BAU and to ensure their success we're taking a facilitated implementation approach to their development.

So far this approach has involved engaging an external consultant to work with candidates for the pilots, the Engineering e2e project team, stakeholders in the engineering education 'system' and Government agencies.

Engineering e2e plans to continue this and help reduce the burden on these 'innovators' in engineering education by connecting and sharing information and taking an advocacy role. Our facilitator will support the groups delivering pilots of micro-credentials to complete the initial design phase successfully and assist them to make the transition to the delivery phase for the pilots.

We've considered what support has been useful so far and have planned the following:

- Work with the candidates for the pilots through the initial design phase, providing advice on project

planning, quality assurance for their delivery plans and engagement with stakeholders.

- Work alongside the pilot candidates to identify issues that might require policy, regulatory and funding changes and make recommendations to agencies
- Work with the pilot candidates to develop a community of practice in micro-credentials that brings together participants with expertise in these innovative delivery models.
- Assisting TEC to make good decisions about whether and how best to support the transition to detailed design and delivery.
- Supporting pilot project teams to take practical steps to align with guidance from NZQA and other agencies.

We've already had a positive response to this approach from micro-credentials pilots in other disciplines. We'll team up with the Primary Industries Training Organisation to share lessons learned and have floated the idea of holding a micro-credentials forum in 2018.

**Find out more...**

To keep up to date with this and all other Engineering e2e initiatives, visit: [engineeringe2e.org.nz/Progress](http://engineeringe2e.org.nz/Progress)

IF YOU HAVE ANY ENQUIRIES, PLEASE CONTACT US: ENGINEERING E2E PROGRAMME TEAM

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