Guest editorial

Updating the University of Canterbury Forest Engineering Programme

Just three years ago the Forest Engineering programme was in a vulnerable position with low student numbers and the imminent retirement of the very long serving Ron O'Reilly. However, the School of Forestry Advisory Board and School of Forestry leadership continued to see a strong future, not only in the opportunities but also the skills that our forest engineering graduates could bring to the NZ forest industry.

Ensuring a continued success of the programme included the hiring of an assistant lecturer (Simon Fairbrother - doing his PhD at the same time), myself into the Director of Studies role, and a strong effort across all staff to promote the programme. This year's intake into the 1st Professional year was 17 students, which is in stark contrast to just three graduating students this year.

Programme Changes

Forest Engineering is accredited by the Institute of Professional Engineers NZ (IPENZ), and that is a real strength for graduating students. It allows them to become registered engineers and work across different sectors, as well as their qualification automatically being recognised in many other countries. A number of industry people kindly assisted in the IPENZ mandated review and it was successfully completed in 2009. It specifically identified the need to add business, finance and management knowledge, as well as an increased emphasis on geotechnical skills. We also needed to retain core engineering and forestry skills that have kept the program successful.

Research Activities

A cornerstone of any successful University based teaching programme should be a vibrant research programme. We've certainly had some success over the last couple of years, including the recent completion of a large EECA project that studied efficient and effective recovery of landing residues and culminated in the publication of a Wood Fuel Recovery Good Practice Guide. In line with this, the Fiji government has committed itself to a larger component of renewable energy with a focus on woody biomass specifically. George Vuki, the CEO of Fiji Pine Ltd, has been seconded to do a PhD with us on supply and logistics to meet this need.

Simon Fairbrother’s PhD work is specifically exploring the fundamentals of good, but cost effective, forest road construction. He has been conducting a survey of road engineering capability in NZ, as well as carrying out some fundamental testing to determine the geotechnical properties of soils and commonly used aggregates. Also pleasing is the number of Forest Science students taking an interest in our research work, and Simon has been able to assist two dissertation students over the last two years.

We also work closely with Future Forest Research, looking after a project that benchmarks the productivity and costs of our logging workforce, and we have a new project starting up that looks at the benefits of different rigging configurations for cable yarder operations. This project is being led by a new PhD student that we have managed to recruit from the USA (Hunter Harrill), and this shows the benefits of being active internationally.

Forest Engineering Conference, October 2011

Finally, we are proud to be co-hosting the 2011 European Forest Engineering conference (FORMEC) that will be held in Graz, Austria. It is a two day conference and is combined with the main Austrian forestry equipment show called Austroforma. In addition to the strong focus on bioenergy, on display will be the latest in both cable yarding (such as the unmanned Valentini yarder) and steep terrain ground-based machinery.

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