

graduate forestry business programmes found in North America or Scandinavia typically focus only on forest products marketing and include it as part of a wood science degree rather than as a business degree.

The B.Com.(Forestry) degree is one of a number of named, or specialised, commerce degrees that the University offers. Other named commerce degrees include Agriculture, Transport, Horticulture, Tourism, and Hotel and Institutional Management. As with other commerce degrees, the B.Com.(Forestry) degree is a three-year programme in which students take specialised core papers in forestry and forest business alongside selected commerce specialisations such as economics, marketing, accountancy, finance or business management. The core forestry subjects provide coverage of major forestry topics, including planting and stand management, wood science, plantation business management, and forest products markets and marketing.

To meet the demand for graduates in regional planning who have an understanding of the forestry sector, Lincoln University provides for a forestry specialisation within the Bachelor of Resource Studies degree. The general B.R.S. degree is designed to meet the growing demand for graduates with relevant specialist knowledge in resource systems, skills in problem analysis and communication, and who could respond readily to an ever-changing job market. It is primarily a generalist degree which leads to a better understanding of natural systems, an appreciation of different cultural perspectives and impacts, and the adoption of better resource management practices. Students pursuing a B.R.S. with a forestry specialisation take the appropriate core courses for a B.R.S. degree and in addition, take the same core forestry programmes for B.Com. (Forestry).

With the expansion of forestry activity on farms, there is a growing interest among individuals from a range of non-forestry disciplines to learn how to effectively integrate farming and forestry activities. To accommodate this demand, Lincoln University has introduced the Master of Applied Science (Agroforestry) degree. The M.App.Sc. (Agroforestry) is a one-year professional qualification targeted at graduates in applied science, science, commerce or social science who are interested in integrating farming and forestry. The degree covers the principles, practices and application of agroforestry and farm forestry with a focus on integrating the socio-economic needs of people.

Lincoln University is developing a Master of Engineering (Forestry) degree to provide for graduates in natural

resource, forestry, civil, or mechanical engineering who wish to prepare for professional engineering work in the forest industry, or for mature engineers who are wishing to make career changes. The M.E. (Forestry) course has a modular structure, with each module consisting of three weeks of intensive, on-campus course work. The basic course involves six core papers (modules), although students with little background in forestry would be required to sit two additional core papers in forestry. The eight core papers cover a range of topics, including silviculture, wood science, ground vehicle mechanics, forest roading, product and client management, cable systems analysis, and forest transportation analysis.

In addition to the forestry-specific postgraduate degrees, Lincoln University offers Masters and Doctorate degrees which allow the study of a wide range of forestry-related topics. Current research includes biotechnology and genetics, tree physiology, tree nutrition and site productivity, waste disposal in forests, forest ecology, dendrochronology, wild animal management, forest diseases and entomology, forests and landscape values, recreation and park management, modelling and GIS systems, systems development for optimal log recovery, mechanised harvesting, timber engineering, forestry cost surveys and social forestry. Funding for this research comes from a wide range of sources including the Foundation for Research, Science and Technology, New Zealand forest companies, regional councils, the NZ Forest Research Institute, overseas funding agencies and Lincoln University itself. Postgraduate numbers are currently closely balanced between New Zealand national and international students.

To support these programmes, Lincoln University has initiated a number of changes. There are now four academic staff who have full-time appointments in forestry-related teaching and research activities, and another 24 staff who have input into teaching or are involved in some forestry-related research. A Forestry Consultative Group has been established at the University to help coordinate the activities of staff in different disciplines. The University also has a Memorandum of Understanding with the NZ Forest Research Institute Ltd which facilitates a number of joint teaching and research appointments. There are also links with Landcare Research, another Crown Research Institute with interests in natural resource management.

Summary

Lincoln University is a new, but important provider of forestry education within Aus-

tralia. Graduates of Lincoln University's forestry programmes will be able to fill a number of identified needs within the forestry sector that are currently unfilled by forest science programmes. The structure of the degrees is such that they are complementary to the forest science degree offered by Canterbury University, and provide for a more complete coverage of the tertiary education needs of the forest sector in New Zealand. From the industry's perspective, Lincoln University's efforts can be seen as an addition to the range of disciplines from which it can recruit forestry professionals.

Lincoln University has developed a number of new degree programmes which will provide graduates who have training in a range of areas such as commerce, planning and engineering, and who have combined this with a knowledge of forestry fundamentals. The undergraduate programmes in B.Com. (Forestry) and B.R.S. (Forestry) now have students who have completed their first or second years, and current indications are that at least 25 students will be graduating from each of these degrees by the late 1990s. With a University structure where there is no forestry department or school as such, lecturers involved in the forestry programmes are located in the department of their core discipline, and cooperate to deliver integrated programmes. As a result of the new course offerings, many students from other natural resource-based disciplines will also graduate from Lincoln University with a greater awareness of the importance of the forestry sector to New Zealand.

Lincoln University's postgraduate forestry research programmes are also expanding rapidly as the university takes on new staff with forestry skills and other staff from relevant natural resource disciplines win new research contracts from clients with forestry interests. An increasing interest from overseas students is also helping to boost Lincoln University's postgraduate programmes.

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