New Rolling Stock Degree

The Faculty is offering a new course in rolling stock engineering from Autumn Session this year. Initially, we are offering a Graduate Certificate in Rolling Stock Engineering and are currently going through the approval process for a Master of Rolling Stock Engineering commencing in 2008. Students completing the requirements for the Graduate Certificate will be able to transfer to the Masters degree.

The course was developed by UOW under the direction of Dr Richard Dwight, with Ms Chris Brewer from CEDIR providing course design advice and eLearning development. The course development is being funded under contract from the CRC Rail, at the request of the Australian rail industry in order to address the shortage of rolling stock engineers, with input from rail experts including Ian Rossow and John Phelan from Queensland Rail, Bryan Turnbull from RailCorp and Chris Venn-Brown, David Ferris and Ray Kimppton. The objective of the course is to develop specific knowledge and application of more general engineering principles to rolling stock and rolling stock systems. The course is delivered under a licensing agreement with the CRC. The course is offered by distance delivery, with one face-to-face workshop at the commencement of each subject.

We have had 15 new enrolments for the course this semester – they are employees of a variety of companies, such as Queensland Rail, Worley Parsons Rail, AVTECH, BHP Iron Ore and United Group. We are also fielding enquiries from as far away as Western Australia for students to enrol in second semester. Our new students recently spent two days at UOW and had the benefit of tuition from academic staff and industry experts providing guest lectures.

The lecturing staff is comprised of external experts under the guidance of Richard Dwight and Chris Brewer (CEDIR). Course design, assessment activities and training of tutorial staff has occurred with the assistance of Anna Carew. Marketing and administrative issues are being handled by Lorelle Pollard with contract arrangements hammered out over some considerable time by Troy Coyle.

Dean’s Spot

The Faculty of Engineering has had another exceptional year for new enrolments in 2007. Both International and Domestic students are choosing to study with us in greater numbers than ever before. This year we will accept over 400 new students across all undergraduate programs in Engineering and Physics at Wollongong. About 33% of these are in Civil Mining and Environmental, 26% in Mechanical Mechatronics and Materials, 16% in Electrical, Computer and Telecommunications, 15% in various double degree programs such as Engineering/Commerce and Engineering/Science, and 10% in Physics and Medical Radiation Physics. This is an overall increase of about 17% over last year’s intake, which is well above the national average, and is the 5th consecutive year of increases at Wollongong. The Mining and Resources boom in Australia is responsible for some of this increase, but there have also been increases in all of the Faculty’s courses, including Physics which, though suffering a decline in most countries of the world, is certainly thriving at Wollongong. The increases in all of the main engineering disciplines are substantial, and we’re certainly pleased that our Faculty is able to demonstrate such a strong ability to assist in the training of the next generation of young professionals to help overcome the serious shortage of Engineers and Physicists currently being experienced in Australia and in many other parts of the world.

We have also had an increase in new enrolments in our Postgraduate Course work programs. Nearly 70 new International students have enrolled in our Masters of Engineering Practice and Master of Engineering Management programs for first session 2007. There are two intakes per year for these programs (the second intake is in July). These new enrolments are also a substantial increase over the previous intake in 2006. New students from all over the world, including India, China, Sri Lanka, Latin America, Europe and South East Asia, have joined us to further build on their undergraduate education and increase their skills in their selected engineering and physics disciplines.

We warmly welcome all our new students, and we wish you a very productive and enjoyable stay with us.

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Staff News

New Staff Member
Iain Lockie joins the Faculty of Engineering as International Coordinator after concluding his work with the University of Wollongong’s central marketing and admissions unit, UniAdvice.

Iain has worked in the Australian International Education sector for a number of years, and has been involved in the development and implementation of recruitment plans for countries in Southern Asia (including extensive work in Indonesia) and the Middle East. Iain has also worked on the University of Wollongong Internationalisation strategy, several Faculty Internationalisation documents, and has a strong background in University of Wollongong international representative development.

Iain recently celebrated his 25th birthday while on the road in Pakistan for UOW. Suicide bombings in Islamabad interfered with Iain’s attendance at exhibitions in that city. However, travels to Lahore, Multan and Karachi in Pakistan and also Kathmandu, Nepal and several Indian cities proceeded as planned.

Initially he will work on mapping the Faculty’s current international profile and engagement. He will then work towards driving the Faculty’s Internationalisation plan (onsite student recruitment, developing linkages with universities overseas, encouraging domestic students to do some of their study overseas, and expanding visiting practicums). Please feel free to contact Iain if you would like further information (lockie@uow.edu.au, +61 2 4221 3012).

Conference Attendance
Prof. Robin Chowdhury recently attended the International Conference "CENeM - Civil Engineering in the New Millennium – opportunities and challenges" held at the Bengal Engineering and Science University (BESU) in Shibpur, West Bengal, India.

Prof. Chowdhury presented an invited plenary paper entitled “Perspectives for the future of Geotechnical Engineering”. The paper was jointly authored by Dr Phil Flentje and featured innovative developments in real-time geotechnical monitoring initiatives developed by Dr Flentje with financial support from Wollongong City Council, Roads and Traffic Authority and Railcorp. The major thrust of the paper was concerned with the importance of geotechnical risk assessment and management and the need for preventive risk management in preference to dealing with the aftermath of ‘natural’ disasters. The plenary paper was very well received very by the audience and Robin was also invited to chair three specialist sessions devoted to geotechnical engineering.

The conference had about 700 participants including leading national and international

Outstanding PhD Graduate
Waikong Yeoh, a PhD student with ISEM and supervised by Professor S. X. Dou and Dr J Horvat, has been offered two postdoctoral positions in the United Kingdom following telephone interviews, and has decided to accept a three-year appointment at Cambridge University. There were a large number of applicants for this position, with six making the shortlist and Waikong was comfortably placed first. Cambridge University is ranked second in the world and Waikong is the second of ISEM’s PhD graduates to be offered a postdoctoral position at this prestigious university. Waikong will work with Professor Cardwell, who is a Professor of Superconducting Engineering, at IRC in Superconductivity.

Waikong has been an excellent student, making significant progress during his three year PhD program and he has contributed to a number of published papers, including Physical Review Letter, Advanced Materials, and six Applied Physics Letters. His ability to identify and grasp new information has been very impressive. His literature review and another review article have been accepted as a book chapter and for a special issue in Physics C.

English proficiency has also been high on Waikong’s agenda, he and Professor Dou always communicated in English rather than Chinese and this has made a huge contribution to Waikong’s excellent communication skills in English. This, combined with his excellent record gave him preference over other candidates for the same position.

Congratulations to Waikong and we wish him well at Cambridge and congratulations also to ISEM for nurturing another outstanding PhD graduate.