Solar project powers up
System to export electricity direct to Queensland grid

QUT researchers are harnessing the sun’s energy to generate electricity for export to the Queensland grid.

A photovoltaic (PV) system comprises many solar panels, which are sealed gel batteries and a synchronous inverter has been installed on the roof of the ITE building on the Gardens Point campus.

“Dr Kame Khouzam from the School of Electrical and Electronic Systems Engineering said the solar panels were capable of generating electricity which could be stored in the batteries or exported directly to the grid through the inverter.

“The inverter is bidirectional, it is capable of converting direct current to alternating current to feed into the grid or converting alternating current to direct current to charge the batteries,” he said.

The QUT system is the second solar system in Queensland to be connected to the grid and the first to use batteries.

“Dr Kame Khouzam said the installation of the PV system also had a number of educational benefits,” he said.

“Students will be able to conduct a number of experiments in solar energy and photovoltaics,“ he said.

“At the turn of the century, you can only be learned such as performance-evaluation of the system for different modes of operation, reliability of the system components, technical issues like start-up and shut-down, real and reactive power flows and safety.”

Dr Khouzam enlisted the help of two final-year electrical engineering students, Reg Nobles and Loo Lucht, to construct the system.

“He said the project would form part of their final-year assessment.

Dr Kame Khouzam said he believed research on the system could provide valuable information to energy suppliers.

“A study needs to be done to identify cases and parameters for which economic advantages to the utility may favour installing either stand-alone or grid-connected photovoltaic systems.

“The decision on whether to install a PV system should be based on an evaluation of the economic benefits to the system owner.

“We also need to assess the failure rate of components, optimise the sizing of the system and the cost benefits to the system owner whether it be the utility or the customer.

“pv system owners may in fact make money by exporting electricity to the grid by selling at a high rate during the day, currently 11.5 cents per kilowatthour, while buying cheaper energy during off-peak times.”

He said the results of such a study would be of use to electricity utilities considering options for its future energy mix.

“With greater demands for the reduction of pollution to the environment, the growing concern over our dwindling conventional energy supplies and the conflicts between nations over energy reserves, it becomes obvious that the utility must consider all the options when making decisions,” he said.

TV programmers ignoring needs of hearing-impaired

AUSTRALIAN television is ignoring the needs of our hearing-impaired community by neglecting to screen readily available programs for this minority, according to QUT film producer and director Cameron Davie.

Mr Davie has recently returned from a three-month overseas study of television for the hearing-impaired, the result of the award of a Churchill Fellowship.

His topic for the fellowship was to investigate broadcast television programs made primarily for and by hearing-impaired people in the USA, the United Kingdom, Denmark and Sweden.

He said more than 16,000 hearing-impaired Australians, whose first language was Australian Sign Language (Auslan), were being denied access to basic information and entertainment of English, he said.

“Mr Davie said he first became interested in the issue when he was asked to produce a QUT/Griffith University video about the hearing-impaired community which he said was also how he met his wife, research fellow and prominent hearing-impaired activist, Breda Carty.

“Dr Breda Carty has been addressed through the broadcast of at least one hearing-impaired activist, Breda Carty.

“The Australian Government formally recognised Auslan as one of Australia’s official languages in 1987, yet very little has been put in place to provide signing hearing-impaired people with information.”

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“In almost every other developed nation, this issue has been addressed through the broadcast of at least one regular television program delivered in sign language.”

“Channel Four in Britain has just shown our TV pilot program and the BBC has recently screened two of our other programs, yet none have been shown in Australia. Nothing is happening here,” Mr Davie said.
The article critiqued the governmental view iterative in Queensland Government’s Plan- ning. The article argued that the Planning and Surveying Bill will benefit Queenslanders. The article noted that the Planning and Surveying Bill will benefit students and teachers. The article argued that the Planning and Surveying Bill will benefit Queenslanders. The article noted that the Planning and Surveying Bill will benefit Queenslanders.
Hospital health care to worsen

ASSOCIATE staff member of QUT’s Australian Air Transport Training Centre, Dr Tony Morton, has a pessimistic view about the future of hospital health care in Queensland.

Dr Morton said he believed that, over time, hospitals will become smaller, but busier, with significant increases in the seemingly pernicious bureaucratic constraints and regulations which led to unsatisfactory morale.

He said until this scenario was confronted by the consequences of complacency and infections within hospitals would continue to increase.

Dr Morton said he had more than 20 years experience as a hospital staff specialist and has a particular interest in statistical aspects of various clinical indicators of a hospital’s quality accreditation performance.

He said there were a number of insidious issues that came into the balance sheet of the day-to-day running of a hospital.

“In a sense we are very much in danger of using short-term quick-fix policies that in the long term will have very little impact on the issues they have dealt with in the short term,” Dr Morton said.

For the past year, Dr Morton has been involved with the work being conducted at the University of Queensland at the Prince Alexandra Hospital at the University of Queensland.

“We have taken statistical process control methods from manufacturing industry and industrial quality control and applied them, particularly in the area of infection control in hospitals,” Dr Morton said.

“I think that in the long term will have a significant impact on hospital care and are being programmed into the hospital data collection computer systems to give a signal if the situation is changing to any significant degree.”

He said each hospital had its own methodology and were included a patient’s length of stay in hospital, infection rates, complications following operations, and unplanned readmissions to hospital.

“The results are such data are used for benchmarking, that is, finding those hospitals that do have the most successful processes so that others may benefit, overall improvement should follow,” Dr Morton said.

“However, after adjustment for several factors, those results are found to be due to random variation.

“Nevertheless, when a hospital examines its outcomes, particularly using statistical methods and control charts, there is a high probability high quality work will result,” Dr Morton said.

Brigitte Echaudard...getting the edge is costly and time-consuming

Brigitte Echaudard has high hopes for a career in commercial aviation

QUT science student Brigitte Echaudard hopes her degree will give her a flying start to the highly competitive world of commercial aviation.

But getting “the edge” is a costly and time-consuming venture for the 17-year-old former Stano Sisto Girl’s College student.

Dr Morton said it was an increase in the incidence and problems of complications.

“One of the major determinants of hospital-acquired infections is a consequence of work overload,” Dr Morton said.

“Many of the professional image that focuses on the world we have, in essence, grown a wound and post surgery infections and hospital, infection rates, complications within the profession of architecture is changing to any significant degree.”

“The benefit for Queensland if we have a mini mum of 1000 hours flying time under your belt,” she said.

“The major requirement for going into the engines as the plane started up and we accelerated down the runway,” Brigitte said.

“Majoring in mathematics, Brigitte is well into her commercial pilot’s course and is working on her private license. She will then try for the tougher Air Transport pilot’s licence.

“Very tough to get into the training system at Qantas you have to have a minimum of 1000 hours flying time under your belt.”

“We have also looked at a recent study of architects working in the private sector. By TRISH PENNICOTT

THE profession of architecture is changing and architects need to move from being creators of buildings to work in and live in, play spaces, and artists and provide better environments for people. They need to know when they get out of architecture as a knowledge-based profession, exposed to a predominantly artistic profession.

“QUT’s architecture school is very active, Interior and Industrial Design, the Graduate School of Design, Harvard University, Massachusetts, and the University of Michigan, Professor Seidel is probably best known for his publications in person-environment studies and architectural practice.

He has also edited-in-chief of the Journal of Architectural and Planning Research having developed and created this internationally respected journal more than 10 years ago. He is Professor of Urban Planning in the School of Architecture, Interior and Industrial Design, Associate Professor Gordon Holden said the journal was “arguably the most distinguished journal in the world in our area of research.”

“One area we are keen to move forward in architecture is research.”

While Professor Seidel is at QUT he is running seminars for senior students on research.

“He is also giving staff seminars and personal sessions with staff.

“His current research relates to telecommunications and computer science.”

Professor Holden said the school had been invited to make a submission to edit a thematic edition of the Journal of Architectural and Planning Research.

“This is an honour, simply to be invited in this capacity,” he said.

Professor Seidel was keynote speaker at the QUT 1995 Architecture Winter Colloquium — The Knowledge Needs for Architectural Practice— Knowing How to Know on August 19.

校园速递

The Vice-Chancellor and Deputy Vice-Chancellor have moved to level 1 of the Nursing Building at Kelvin Grove Campus for the next few months.

“It’s not that they are likely to need nursing care at short notice, but it gives them the freedom to work in the internal area of the school,” he said.

“The Block at Gardens Point is being renovated.

The campus is one of the biggest in Australia and its move is an early warning system for any significant issues that may occur within the hospital.”

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A PhD student at QUT’s School of Mathematics is applying by using her brain to delve deeper into the human brain to seek more specific answers to as yet unanswered questions.

Ms Monica Hurdal is endeavouring to reconstruct a 3D computer image from scans of her own brain to reconstruct a 3D computer image from them.

She said, “I am trying to create a ‘cortical magnification map’ to determine the amount of neural tissue which processes information from the visual field. “For example, central vision processes finer details than peripheral vision, and so more area of the brain is devoted to processing central vision. “I am endeavouring to map and describe the relationship between specific areas of the visual field and the electrical brain activity.”

“The information may be used by centre directors, heads of schools, pro-vice-chancellors right up to the vice-chancellor.”

Ms Wood said the PIRIS team had aimed for an end product that was as flexible and accessible as possible to best meet the needs of a diverse range of users.

“By the end of this year, programming should be written and a test version will be ready. The system will then be used to reconstruct a 3D surface for computer speech recognition.”

“Rather than being of use to the academic community only, we’d like to see our work being used in the private sector, for example for computer speech recognition.”

“Scientists develop disease-resistant pawpaws for southeast Asian market”

QUT’s Centre for Malarial Biotechnology has received a grant of $429,000 to genetically engineer disease-resistant pawpaws for south-east Asia.

Dr James Dale said an epidemic of the papaya ring spot virus had devastated crops in south-east Asia.

In Thailand in the mid-1980s they were exporting around $US70 million in pawpaws. Because of this virus they now can’t even supply their domestic market,” Professor Dale said.

“The virus is spreading throughout south-east Asia. Typically it remains at a low level for three to five years before erupting into an epidemic. Once that epidemic hits, it’s impossible to stop.”

Professor Dale said they now can’t even supply their domestic market,” Professor Dale said.

“We have already done this successfully in Australia and other countries.”

Professor Dale said the project was funded by the Australian Centre for International Agricultural Research and Technology (ACIAR) and was being conducted in collaboration with scientists from the Thai Department of Agriculture, two Thai universities and the Malaysian Agricultural Research and Development Institute.

He said ACIAR had the mandate to sponsor collaborative agri-cultural research between Australia and other countries.

“The main idea of this research is to develop a very user-friendly ‘click and point’ interface operating in a Windows environment, for presenting the information in spreadsheet or graph format,” she said.

“The idea is for a very user-friendly ‘click and point’ type interface operating in a Windows environment, for presenting the information in spreadsheet or graph format,” she said.

“The idea is for a very user-friendly ‘click and point’ type interface operating in a Windows environment, for presenting the information in spreadsheet or graph format,” she said.

“By the end of this year programming should be written and we should have a test system.”

“The test will come when the system goes on-line at QUT early in 1996, where it will be implemented on our research information system.”

Ms Hurdal is carrying out her PhD work under the supervision of Professor Sean McElwain.

Professor McElwain said Ms Hurdal’s work was a prime example of how mathematics could be used in other disciplines to solve new problems.

“What we do is take ideas from one other discipline and work within a mathematical framework, developing mathematical models to aid in the interpretation of experimental data and provide more specific answers.”

Monica Hurdal... "brain function still a mystery"

Monica Hurdal... "brain function still a mystery"
Post-modern school teachers need to teach critical thinking

SCHOOLS are in danger of becoming the dead heart of education if teachers do not adapt their strategies for today’s post-modern generation, according to senior lecturer in QUT’s School of Cultural and Environment and Engineering Dr Erica McWilliam.

Dr McWilliam issued this warning after analysing the impact of today’s global information explosion on education in schools.

Her concern is that school teachers, by resisting the impact of technology, will hold children back in their learning.

“My fear is that children who don’t get the opportunity to experience technology at school will be running home each day to get on to the world-wide web and will take in what they see uncritically,” Dr McWilliam said.

A former high-school teacher with 25 years teaching experience, Dr McWilliam said “stand and deliver” teaching was no longer able to capture the attention of a generation brought up on a slick-and-quick diet of MTV video images.

“The problem today is that we’ve got modernist teachers trying to teach post-modern kids,” she said.

“For example, a modernist engagement with technology means grabbing the remote control and looking for what we want to watch on TV and settling on a program.

“For a post-modern young person, that clicking of the remote control is not about settling on one program necessarily. The college becomes the program.

“The idea that a lesson is a program and that the program has a one-way flow from beginning to middle to end is now under question because of the way young people today process information.”

Dr McWilliam cited the work of educationalist Dr Bill Green of Deakin University in Victoria who, in the book, Atoms in the Classroom, stressed that the teachers might be the aliens, not the students.

“He says that young people today live their lives by ‘choice and speed and chance’, very different from the way their parents or grandparents may have lived our lives. They make meaning of content by choosing different elements, for instance, at a film festival in Melbourne recently there were viewers buying tickets for films at the last minute, because they couldn’t cope with the disparate images coming at them.”

Dr McWilliam said the challenge for today’s teachers was to take technology and the worldwide media possibilities by the horns and use them to develop critical thinking in their students.

“Teachers can’t afford to be technophobic, but nor can we afford to give three cheers for technology,” she said.

“If we want our children to be knowledgeable people, we need them to sift and simplify information accessors then we need to be able to engage sceptically.

“We need to put critical thinking and scepticism to work without allowing it to displace the topic of the classroom.

“If we understand our work as purely information delivery we may as well give up teaching now because technology will define what is better and what will be needed to understand the difference between knowledge and information and what that means in today’s hyper-society.”

In a recent paper, Aussie Teacher, Dr McWilliam examined the kind of incentive to learn,” she said.

“We have to help students to understand the difference between the way we have to do things and the way we do things.

“Making learning seductive” both inside and outside the classroom.

“We need to develop a kinds of critical thinking that will help other people.

“We must not be critical to our students with technology as some kind of incentive to learn,” she said.

“I’m not talking about dazzling or miniatures, but will also come to understand those who use all the modern inventions, explaining why and how scientists write in their different styles.”

Dr McWilliam is publishing an edited collection of papers Pedagogy, Technology and the Body Meets Mike Jordan in Cyberspace, Tech-Vision, and the Body of “teaching” achieved by the writer. Mike Jordan has become a cultural construction able to transcend the boundaries of western knowledge, otherness, race and gender,” she said.

“The rise in images is very seductive to young people and teachers can’t afford to ignore someone like Mike Jordan in their classrooms.”

Dr McWilliam said the idea of teaching learning seductive bothered some teachers.

“Teachers may talk about dazzling students with technology as some kind of incentive to learn,” she said.

“Making learning seductive bothered some teachers. I think we as teachers need to understand the difference between knowledge and information and what that means in today’s hyper-society.”

In a recent paper, Aussie Teacher

Post-modern school teachers need to teach critical thinking

Scientists are now having the opportunity to include a writing elective in their degree course thanks to a unique inter-disciplinary cooperation.

School of Communication lecturer and subject coordinator Bernard McKeena said the subject would address the written communication needs of science students, an area previously overlooked.

“Many of the writing needs of science students are generally not considered very much even through they are required to do a great deal of writing at university and in the workplace,” he said.

“By catering for this need, QUT will give its science graduates greater confidence in their ability to communicate in traditional academic forums such as papers, reports and articles.”

McKeena said the subject, Technical and Scientific Writing, would provide valuable practical skills from gathering and organising ideas through to drafting and proofreading.

“Students will learn some basic language and writing skills and gain confidence with style,” he said.

“Graduates can choose to study particular genres such as reports or essays, but will also come to understand those who use all the modern inventions, explaining why and how scientists write in their different styles.”

McKeena said the subject would suit postgraduate science students, but would also be available to postgraduate science students.

New degree courses in Built Environment and Engineering

QUT plans to offer three new masters degrees within the Faculty of Built Environment and Engineering in 1996.

While the titles of the degrees are yet to be finalised and the courses are awaiting accreditation, the courses are in the areas of Industrial Design, Environmental and Regional Planning and Landscape Architecture.

Professor of Industrial Design Vesna Popovic described the industrial design course as an ongoing continuation of the Graduate Diploma in Industrial Design already offered within the School of Architecture, Inter- Tec and Industrial Design at QUT.

“We expect to have a great deal of interest from overseas where I think it will be very well-received,” Professor Popovic said.

“We will offer a full or part-time option with the graduate diploma as a course component and after completing that students who have at least a grade point average of five can continue into the masters component.”

Professor Popovic said the major objective of the masters was to provide postgraduate education opportunities in the area of industrial design.

“This means the program will involve an advancement of application in knowledge and expansion of the skills relevant to industrial design while also providing an opportunity for research-based and moving towards entrepreneurship.

The duration of the course is three semesters as a full-time option (a year and a half) or three years part-time.

Senior lecturer in the School of Planning, Landscape Architecture and Surveying Dr Jon Minnery said the Urban and Regional Planning course would be a professionally recognised course run over two years full-time for non-award students of five full-time years for those with a Bachelor of Built Environment.

“We will be continuing the tradition we have achieved some students of a diploma and adding additional material so there will be actually two exit points from the two-year course, one will be after three semesters, or you can go right through,” Dr Minnery said.

“Our current graduate diploma is recognised by the Royal Australian Planning Institute. We will apply for recognition of the new course and we are extremely confident that we will be successful.”

Dr Minnery said the school planned to offer specialisations within the course in the four areas of regional and local development, urban housing and community development, urban design, and environmental and rural planning.

He said the masters would appeal to those interested in a higher-level, professionally recognised, course in urban planning or those with qualifications in another area intending to get the basis for a professional qualification in urban planning.

“We will be continuing the tradition we have within our graduate diploma which is real-life projects, often done on an inter-faculty or community groups or for local authorities which is something the school is very proud of,” Dr Minnery said.

Lecturer in Landscape Architecture and nomininal course coordinator Glenn Thomas said the new Landscape Architecture course would fit into QUT’s goals of increasing the availability of professional masters degrees and of coursework masters that incorporate research components.

“The aim is to increase the body of knowledge of landscape architecture through specialisation and through research-based projects.

“It is specifically intended on offer in one of the five different areas of landscape design, landscape practice, and landscape management, and landscape research and through research-based and projects.

“How much greater knowledge and understanding of the formal and effects of landscape design will be provided by the graduation in Landscape Architecture.”

Dr Minnery said the masters would suit those with a Bachelor of Built Environment degree who were doing the final year of their diploma to gain their professional qualification.

“Those who achieve the minimum grade point average of five will also be able to do a master degree which is fully professionally accredited in two years full-time or three years part-time.”

“We are upgrading our current Graduate Dip- loma in Landscape Architecture and adding additional material so those who have already received the diploma can continue into the masters component,” Dr Minnery said.

“We will also give its science graduates greater confidence in their ability to communicate in traditional academic forums such as papers, reports and articles.”

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New degree courses in Built Environment and Engineering

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Education and industry work together

The Cooperative Education for Enterprise Development (CEED) program enables students to acquire real skills and work experience they would not otherwise receive during their study years, according to Program Coordinator, Graham Willett.

"The CEED Program adds value to the training of university students and enhances their employment prospects," Mr Willett said.

The aim of the program is to enable industry to use the talents of senior undergraduate students from a number of disciplines to complete specific industry projects as part of their fourth or honours year thesis.

Originating at the Royal Melbourne Institute of Technology in 1985, CEED is now well-established on nine Australian campuses with others getting underway. It is in its fourth year at QUT.

The program is endorsed by and received start-up funding from QUT's Office of Employment and Training. Education and Training for the first two years are self-funding.

Industry projects are selected on commercial merit and mutual benefit to ensure both industry needs and the students' training are met.

"Training in project management is undertaken in conjunction with the student's CEED project. While this makes it a little tougher, it provides the student with better and more rewarding training and it has the potential to make them more comfortable," he said.

They are required to work a minimum of eight weeks full-time on the project at the end of their third academic year during their annual vacation.

They then work approximately one-and-a-half days per week part-time on the project during their fourth academic year.

Supervision of the project is undertaken by the organisation hosting the project as well as the student's particular academic staff. This supervision is supported by the program coordinator.

Mr Willett said the program enabled industry to easily access university resources in a businesslike manner. Costs were predetermined, contained and commercially competitive.

"Work is completed in a stringent commercial vehicle of government to provide a competitive training environment and a real-time training organisation."

Organisations were able to monitor and, if necessary, realign the work to ensure its relevance to their needs.

Expenditure could also be claimed under the 150 percent taxation incentive scheme for industry training.

"CEED QUT projects underway this year include planning for the sustainable development of rural land in Blackbutt (Washington Developments Pty Ltd); quality assurance, accreditation and continuous improvement (Bentley's); reprocess engineering of the blood products laboratory (Red Cross Blood Transfusion Service); strategic decision support and its application in production processes at the Dura Plant, Brisbane (Queensland Cement Limited); or simply making improvements for local businesses (Hamil Haven Pty Ltd) and manufacturing information system development for fly ash (Pratco Industries)."

Enquiries about the CEED program can be directed to Graham Willett on (07) 3273 2804.

Ben Sawley... "very worthwhile project"

**PROCESSES for producing life-saving blood products are being streamlined through a CEED project between QUT and the Queensland Red Cross.**

QUT student Ben Sawley has been working with the Red Cross since mid-way through last year looking at ways to maximise efficiencies in the manufacture of various blood products.

The Red Cross contracted CEED to look specifically at the efficiencies associated with their manufacturing of various blood products.

"It involved business process reengineering, reengineering their production function and reorganising production equipment to maximise efficiency and getting rid of all non-value-adding tasks. They're going to achieve very significant savings in terms of time taken to produce transport and handling of materials for the different products," Mr Sawley said.

"As a test and look at whether it is possible then they're going to produce better and for longer time and also to make them more comfortable," he said.

"If you can make the production person more comfortable then they're going to produce better and for longer without getting fatigued."

Mr Sawley said the project was an excellent opportunity for him to apply, in a real-world setting, many of the concepts he had studied in his combined Bachelor of Engineering (Manufacturing Systems) and Bachelor of Business (Marketing) degrees.

"It's been a very worthwhile project for me as well as myself," he said.

"It has involved me undertaking a project of a magnitude which I wouldn't get to undertake normally in a formal final-year thesis type arrangement.

"On the manufacturing side probably more than the business side, there are some initial engineering concepts which is one aspect of our course that is directly applicable to what I'm doing at the Red Cross."

He said the chance to go beyond the theoretical and to put his recommendations into practice was the principal difference associated with a CEED project.

"With a normal project the submission of my recommendation would have been it, but because with CEED you start earlier and because you're contracted, it'll actually get a chance to implement my recommendations which is tremendous," he said.

Red Cross Queensland Quality Manager Mary Hardwick was full of praise for Mr Sawley and the CEED program.

"Ben is an exceptional student for starters, so it's been wonderful to have him come in as an outsider to look at our processes and see what can be done to improve them."

"It's helpful for us to have someone dedicated to that project because while you might have the skills internally, sometimes they just don't have the time to dedicate to it, so it's good to have someone who has it as a discrete project and they manage it and get on with it."

"They also gave us tremendous opportunities to improve our efficiency and productivity and that should translate into greater staff satisfaction with their roles and their day-to-day jobs."

Processes like blood bagging and handling of materials for the different products.

"It will also highlight for staff where our weaknesses are and where we can make improvements."

Dr Lin Ma of QUT's School of Mechanical and Manufacturing Engineering is supervising Mr Gopinathan on the project.

Mr Ma said Pratco Industries was a very traditional company that did not have any manufacturing information system in place.

"The company realised that they needed to have a manufacturing information system in place to link in with information from the shop floor manufacturing line to the marketing, to the financial side."

"It's been a very worthwhile project for them as well as for the student," Dr Ma said.

"With a normal project the submission of my recommendation would have been it, but because with CEED you start earlier and because you're contracted, it'll actually get a chance to implement my recommendations which is tremendous," he said.

The company has experienced considerable growth in the past two years, with approximately 20 percent annual growth over the last two years.

"As you grow you need to formalise your operations and become more disciplined," Mr Bowers said.

"You need to keep a record of efficiencies and procedures and a whole range of things the management information system will help with.

"It's very a worthwhile project for me as well as myself."

"It's also good for university staff to gain practical experience and the companies benefit from us doing research in the area."

"We talked to management about the project and we gave them training on the theory, measures and concepts of a Lean approach."
On account of quality

BRISBANE accounting firm Bentley’s is being aided in turning its management track record into a quality management system by QUT maths student Robert Muspratt.

Mr Muspratt is applying skills developed in a quality management subject taken in his Bachelor of Applied Science (Mathematics) degree to the challenges of the corporate world.

“What I do is to help them with their day-to-day tasks of going about the program and putting together all their manuals and I am working on some of their improvement projects, flow charting and things of that nature,” Mr Muspratt said.

“They wanted someone who had more of an analytic background, someone who could analyse processes. Other applications of maths include general statistics which we used further down the track.”

Mr Muspratt said the project was an excellent opportunity for him to learn from his academic supervisor Ian Ogle from the department of mathematics.

“The educational benefits of QED projects are immense,” Mr Ogle said.

Ad

THE rapid expansion of urban Queenslanders and the ever-increasing demand for residential land initiated the research project being carried out by planning graduate student Steven Bell.

Ms Silvester, who is taking part in the CEED Program, has been asked by the firm to look for opportunities for development near Blackbutt, two hours north of Brisbane.

Titled Planning for the Sustainable Development of the Mid North Coasts based on the example of Queensland, the project will explore the potential for residential development in the Blackbutt area.

The project has been awarded to the student of planning and a great idea for them to do while they are working on the CEED Program, said Ms Silvester.

Ms Silvester said her brief from Washington Developments had been to look at possibilities, not just in the short term for the rural block, but over the next 20 years.

“So far it has involved a lot of research looking at other ideas which have been used to develop rural land nationally and internationally and evaluating the relevance of these policy documents,” Ms Silvester said.

She said that while she has also conducted a site survey to find out exactly what’s happening on the site and also in its context and coming up with a future vision and then determining the things of that nature,” Mr Muspratt said.

“I guess I’m trying to make sense of the planning policies for them,” Ms Silvester said.

“This has entailed many hours spent in libraries poring over case studies and liaising with several government departments to work out which different policies relate to developing the site, all valuable for her future in planning.”

“I have also given me more confidence and a greater awareness of what’s happening in government,” she said.

Apart from documentary research, Ms Silvester said she had also spent many hours speaking to people in the area in an attempt to gather their ideas and opinions on uses for the land.

While this type of site, generally located on the urban fringe, would usually be cut up into large land parcels and sold forobby or semi-detached homes, Ms Silvester said her brief was to explore different ideas.

Ms Silvester said winning the bursary marked a great step forward for her and for her PhD. Her supervisor, Dr Tang said he was keen to have the student’s project be involved in the next CEED projects as well.

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History project documents QUT's rich past

W ORK on a comprehensive history of QUT, including all predecessor institutions, has begun.

Project leader Professor Noelene Kyle said two researchers had been engaged to support the research which would be authored by herself, Dean of Education Professor Alan Cumming and senior researcher Joanne Scott.

Professor Kyle, who is head of the School of Cultural and Policy Studies, said the history would examine the contribution of QUT’s predecessor institutions to technical and teacher education in Queensland.

“I was concerned that in the current drive by universities to focus on the future, the past and the educational role played by those institutions would be lost,” she said.

The history will also position QUT in the broader context of higher education policy in Australia.

“Writing a history of higher education certainly has a policy element and we will be incorporating into this history aspects of the Dawkins era as well as other public policy impacting on the tertiary sector,” she said.

“There is a great interest too at the moment among historians in writing histories of higher education institutions.

“Such history is not just about medieval universities anymore. In Australia as elsewhere, the idea of the modern university has changed.

“There has been a reexamination of what a university is, not just in relation to higher education policies, but how these institutions came to be.”

Professor Kyle is attending a conference in Montreal, Canada next month on the history of higher education.

“The reason I am going is to look at how universities came to be as well as other public policy impacting on the history of QUT,” she said.

According to Professor Kyle, many of the records of the predecessor institutions have or know the whereabouts of any photographs, old journals, student administrative documents that might assist them with the history research.

Anyone who can help can contact them at the research assistants Joanne Scott or Dr Catherine Manathunga.

They are located in room 127 of E Block on the Kelvin Grove campus or can be contacted on (07) 3864 5986.

By preserving some of Queensland’s most historic buildings, graduate architect Desley Campbell-Stewart hopes to ensure future generations appreciate our unique heritage.

A director of Quis-Kyle Architects based at Fortitude Valley, her impressive credits include the newly opened Treasury Casino complex and the Land’s End Building in Brisbane’s George Street.

She is currently working on approximately 100 projects, including historic houses and buildings, throughout the state.

An expert in conservation, design and interiors, Ms Campbell-Stewart has graduated with a Bachelor of Architecture degree from Melbourne University and an external Masters in Conservation from York University in England.

She is currently undertaking an Architecture Practice course with York University.

Ms Campbell-Stewart said she was busy helping to preserve some of Queensland’s most historic buildings and that QUT has an extremely important role to play in that position in a Brisbane history context.

In 1992, at the age of 28, she became a director - the youngest female architect to be appointed to that position in a Brisbane firm. She is currently undertaking an external Masters in Conservation Practice course with York University in England.

Ms Campbell-Stewart said work showed no sign of slowing down. As well as her other projects, she was busy helping to preserve western Queensland’s outback heritage.

She visits Charters Towers once a month to advise business people and consult with the shire council on a new town plan designed to balance the area’s history with its growth as an international tourist destination.

Preserve our heritage for future generations

INSIDE QUT August 22 – September 4, 1995
Postgrad art students exhibit works

The Genius of da Vinci on display

The Leonardo da Vinci: Models of Genius Brisbane exhibition featuring 23 scale models of some of Leonardo da Vinci’s greatest engineering inventions will run at the Queensland Museum Scicentre until October 2.

Originally set-up by the University of Technology Sydney, exhibitions have been held at Curtin University of Technology in Perth, University of South Australia and Royal Melbourne Institute of Technology.

All are part of the Australian Technology Network (ATN) of which QUT is also a member.

The scale models, commissioned by IBM and based on Leonardo’s original 15th century drawings, feature a helicopter, clock, flying machine, parachute, paddle-wheel ship, printing press, steam gun, single-tube machine gun and military tank.

All the models of this interactive exhibition have working parts and can be moved or manipulated by visitors to see how they work.

QUT Vice-Chancellor Professor Dennis Gibson said the exhibition would bring Leonardo’s extraordinary inventions to life.

“The helicopter, the parachute, the machine gun, air conditioning, all these technological commonplace of the 20th century were anticipated in Leonardo’s plans and drawings,” he said.

QUT prides itself as a university for the real world and has a tradition of teaching and research with highly practical outcomes, particularly in technological disciplines.

“With our recent expansion into areas such as education and the humanities, the university has opened up possibilities for continuing the tradition of Leonardo in creative interaction between the arts and sciences,”

The exhibition is open every day between 10am and 5pm. Admission is $5 for children and $7 for adults.

Genius of da Vinci on display


Opened on Monday, August 7, the exhibition has been organised by QUT.

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EIGHTEEN architecture/design students from the Jibun Women’s University in Japan visited QUT in early August to be tutored in architecture from a south-east Queensland perspective.

The project was initiated by Dr Adam Shoemaker, the School of Humanities’ coordinator of International Programs, and David Scott on 3864-4543.

The School of Humanities hosted a lunch on the Carseldine campus on August 4.

Dr Adam Shoemaker, the school’s coordinator of International Programs and Dr David Scott, lecturer in German in Paris, said that in the next few weeks, three more QUT students — Miyuki Watanabe, Annie-Mae Ruffles, and Roberta Ward — will leave for Germany and a fourth, Bonnie Williams, will follow early next year. He said all had received travel bursaries from the School of Humanities to offset their overseas costs.

“Since we teach four languages in the school, German, French, Indone- sian and English, we also see the particular awareness of the need to expose our students to the cultures that go with those languages,” Dr Shoemaker said.

“By far the best way to do that is to enable students to have in-country ex- perience — there is nothing else like it.”

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PhD students from the centre, is an opportunity for researchers to date with the centre’s research project.

The QUT Academy of the Arts will conduct acting workshops for high schools students during the September school holidays. There will be two separate workshops, one for students in years nine and ten and another for students in years 11 and 12.

For information on course content telephone Mark Radavan on (07) 3864 8205. For information on enrolment and payment telephone (07) 3864 3684.

People interested in bird life in Moreton Bay can enrol for a three-week-long QUT course, ‘Introduction to Waders (shorebirds) in Australia and Moreton Bay’ to be presented on October 4, 15 and 18. The course includes a field trip to an estuary in Centre North at Nudgee Beach.

Enquiries about course content should be directed to Diana O’Connor on (07) 3369 8154. Information on enrolment can be obtained by telephoning (07) 3864 3222.

More Caboolture trains

BRISBANE’s northside QUT students and staff can catch a train on the Caboolture to city rail line at least every 30 minutes. Caboolture Campus Registrar Ms Elaine Harding said that the Caboolture line trains were also more frequent in the 6.30am-8.30am timeframe.

This timetable has a number of trains leaving Caboolture less than 10 minutes apart for the city.

The Caboolture train station is staffed from 5.30am to 1.30pm Monday to Friday. The Caboolture campus also has a frequent Brisbane City Council bus service. The first bus from the city leaves shortly after 7am arriving at campus about 7.40am.

Three bus routes 502, 442, and 202 service the campus. More detailed information can be obtained from the relevant rail and bus authorities.

Inside QUT reaches 15,000 people

To have the same reach, contact Jaye McDonald at The Media Workshop — (07) 3391 6633

Action research book launched

A HANDBOOK for students, teachers and adult workplace educators outlining the strengths of action research has been published by the School of Curriculum and Professional studies.

Author Dr Mervyn Wilkinson, who lectures in curriculum and professional studies, said the book focused on action research as a tool for managing change.

“Action research is a method of doing things about real world problems or goals,” he said.

“It is a way of action that spirals through processes of questioning, planning, implementing and reflecting about particular projects or issues in continuing cycles of personal growth and organisational development and change. It is used in industry, schools, community organisations, the public service and private institutions.”

He said the book was written in a personal, accessible style and was of value to a broad audience. The book can be purchased from the QUT Bookshop for $8.90.

Classifieds

CHORAL SINGERS WANTED: Rehearsals for Concert at City Hall are to start immediately. For further information please contact Spencer Faulkner on (07) 3866 6843 or Lynne Woodland on (07) 3864 3211.

TO RENT: Four-bedroom, double-storey timber home on 100 acres of native animal laden bushland. Very private, very quiet, very beautiful. Located at Wolffdene with easy access to Brisbane and the Gold Coast. $2000 per week. Call John Armstrong, Visual Arts, KG campus (07) 3864 3394.
Cassandra Burgess ... handicap of six

Pump Heart Week to focus on teenage use of steroids

The recreation manager for QUT’s Student Guild is on a fishing trip and hopes to attract a couple of “good golfers” for a national university competition next month.

The would-be sharks, the two-legged type, are QUT students with a preferred golf handicap of less than six.

Denis Cook is one of the coordinators of this year’s Australian University Sports Federation Golf Championships to be held in Brisbane.

QUT will, for the first time, host the championships to be played on four golf courses from September 24 to 29.

‘Invitations have gone to all members of the federation, about 52 universities throughout Australia, and between 160 and 200 golfers are expected to compete,’ Mr Cook said.

He said QUT was in the process of selecting golfers to represent the university in the championships.

Individual universities are allowed two teams, men and women, with seven players in each team.

Previous university golf championships had shown an excellent high standard of play, Mr Cook said.

With recent data from a survey of Victorian secondary-school students being used by four professorial males in years 9 to 11, QUT Health Services had decided to collaborate with the universities to highlight the issues related to the use of steroids.

“It is being found increasingly that first experience with steroid use is occurring at about the age of 17 or 18 because there is such a focus on body image at that age,” Ms McMahon said.

She said research had also shown a large increase in experimentation with steroids.

But rather than take the big stick approach, Ms McMahon said the week would focus on a range of heart ‘issues’ and look at the adverse effects of steroids while aiming to provide more information to help people make informed decisions.

“Although steroids are available to athletes in prescription, it has become increasingly common for users to obtain their supplies on the black market for non-medical reasons,” Ms McMahon said.

She said steroid use tied into Pump Heart Week because they cause an increased lipid or fat, concentration in the blood which put added pressure on the heart.

The combined promotion with QUT Health Services, QUT Student Guild Fitness and QUT’s Drug and Alcohol Committee would also raise money for the Heart Foundation ‘Pump Heart Week’ will coincide with the National Alcohol and Drug Awareness Week.

While activities will be held throughout the week (see list below), the focus will be on two special days on September 5 at Kelvin Grove and September 7 at Gardens Point.

These will feature fitness displays, cholesterol-testing and risk-assessment clinics set out on a one-one basis at Kelvin Grove by Ms McMahon and nurse practitioner from St Andrew’s Hospital.

There will also be a seminar on body-building, steroids and the heart presented by Dr Anita Green who takes a special interest in sports medicine.

Dr Green works for Health Services at Kelvin Grove.

“We will be looking at heart fitness, doing cholesterol-testing, looking at weight control and general wellness to assess risk factors,” she said.

“We’re also tying up with Spotless Catering who are doing ‘healthy heart meals’ during that week and the Drug and Alcohol committee will put together a package looking at weight control and normalisation.

“There will be aerobic displays, bench pressing competitions and other events to raise money for the Heart Foundation,” she said.

The QUT student fitness centres in association with the QUT Health Service are running a number of special events during the National Heart Foundation’s Pump Heart Week from September 5 to 11.

1995 Pump Heart Week events include:

SATURDAY, September 2 —
Breakfast Fry, Swimming, Sports Centre (GP);
MONDAY, September 4 —
aerobic display.
TUESDAY, September 5 —
market day display 12pm to 2pm (KG);
WEDNESDAY, September 6 —
City Heart Promotion, Queen Street Mall, promotional stall and street display.

THURSDAY, September 7 —
market day display 12pm to 2pm (KG);
Advice from health professionals on all aspects of health and fitness; cholesterol-testing/risk assessments; ‘Bench your weight’ competition; aerobic display.

Seminar by Dr Anita Green titled Body Building, Steroids and the Heart 6pm to 7pm, aerobics room (KG);
FRIDAY, September 8 —
Male-only body building centre challenge with KG and GP competing to see who is the fittest, with cost.

SATURDAY, September 9 —
Pump Heart power walk, 9pm (GP)
followed by a hearty breakfast;
SUNDAY, September 10 —
Pump Heart monster step class, 5pm (GP).

Elderly participants.

A special interest in sports medicine.

One of the organisers of the games, School of Nursing senior lecturer Rob Thornton said the school would need to contribute more than 250 nursing students to assist in the care of the participants.

He said the School of Nursing had had an association with the St Andrew’s Respite Centre over the past three years providing nursing students to accompany senior citizens on day outings and holidays.

The games will have events modified to provide more information and help.

Competitors in the games will be drawn from the majority of respite care centres and senior citizens’ organisations throughout the week.

Eight of the top world junior teams competed in the championships.

World-team selection

EDUCATION student Gail Miller (above) represented Australia at the inaugural World Junior Water Polo Championships in Quebec in July.

Ms Miller, 18, was selected for the Australian women’s under-20 team which was placed second to Holland in Quebec.

At the conclusion of the tournament, Ms Miller was selected for the world under-20 women’s team, an all-star team nominated by the championship judges.

Following her success in Canada, Ms Miller travelled to Europe as a member of the Australian women’s open team which competed in tournaments in Italy, Greece and Hungary.

Seniors still up and running

The increasing use of steroids by young people is an issue being addressed in the Pump Heart Week at QUT from September 5.

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Nurse practitioner at Kelvin Grove campus Shayne McMahon said that while the student guild held Pump Heart Week the QUT Health Services had decided to collaborate with the universities.

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