

A regular update on UniSA programs and events

Welcome to the May edition of UniSA Links for 2008. This edition will focus on program information to help you with your peak career counselling period, and keep you up to date with what's new at UniSA.

This newsletter is also available online on www.unisa.edu.au/future/advisers/unisalinks.asp

Murras on UniSA! 1 & 2 July 2008

Indigenous students from Years 9-12 are invited to visit our campuses for an exciting 2 day career development experience. **Tuesday 1 July** will showcase careers in Education, Arts and Social

Sciences, Business, Law and Commerce.

Wednesday 2 July will highlight IT, Engineering and the Environment and Medical and Health Sciences. Students can choose to attend one

or both days and lunch is included in the day's activities.

Bookings are essential contact Judy Sykes on 8302 0596 or email judy.sykes@unisa.edu.au



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▲ Team leader David Ewers (left) with team mate Deshitha Senanayake

Racing a concrete canoe sounds virtually impossible when we think of concrete in its usual form - heavy, solid and eminently sinkable.

But for third and fourth year civil engineering students at UniSA it's the execution of a simple engineering principle, as well as a whole lot of fun.

A cheering crowd on the banks of Mawson Lakes saw the students race their concrete creations against a University of Adelaide team to prove that concrete can indeed float on water.

So how does it work? This year's team leader, third year civil engineering student David Ewers, says that it's all about water displacement and relating the weight of the water to the volume of the canoe.

"We use the Archimedes principle, which says that the greater the volume of the boat the more water it displaces, which means it is more likely to float," he said.

In layman's terms the concept is much like floating an empty ice cream container, as opposed to a full one which would sink

straight to the bottom. And what works for ice cream also works for concrete.

The group of eight students worked for almost eight weeks over the summer break to design and build the new canoe, ready for racing in the first week of the uni year. A canoe used in last year's inaugural race was also freshened up for a second outing.

Ewers said the team used lightweight materials supplied by industry sponsors Adelaide Brighton Limited, BASF Chemicals, Bianco Precast and Silka and foam at either end of the canoe for added buoyancy if

the canoe fills with water. "We don't use normal aggregate (the stones and pebbles in concrete) but instead use lightweight fibres which are as strong as steel," Ewers said.

"We also use a sand replacement, or 'e-spheres', which are small balls made of carbon fibre plastic mix to keep the canoe lighter."

For Ewers, the incentive for getting involved in the process is the hands-on practical experience.

"This gives you the chance to learn project management skills and see the teamwork involved in pulling it all together. There are also the industrial contacts you gain when deciding on materials. You form relationships and learn how to relate to industry.

"It's also great fun."

UniSA won two of the four races, in what was a tight battle for the overall winner's shield, judged on design and materials, as well as race placings.

"It was very close and even though we didn't win this year, we were very competitive. The response has been fantastic and everyone enjoyed the day, so we're definitely keen to give it another good try next year."

Author: Linda Hein

Introducing ... UniSA's NEW Engineering programs for 2009 see page 3

New Horizons- Careers counsellors' Information Evening

Wednesday 4 June 2008, 4.00 – 8.30pm

Hawke Building, Level 5, Bradley Forum, City West Campus

RSVP to studentliaison@unisa.edu.au

It's all about the experience!



Lien Truong is in her final year at UniSA studying a Bachelor of Commerce. She was given the opportunity to develop valuable workplace skills by undertaking a Commerce Work practicum with a global organisation " ...I was able to participate in the Commerce Practicum Program where I was placed in a host organisation (Coca Cola Amatil) to work in their finance/accounting team, which was valuable work experience and highly appreciated by employers..."

The Commerce Work Practicum is a non-paid 150-hour project supervised by both a UniSA Academic Supervisor and a host organisation. Participating in a practicum provides students with the opportunity to apply the theories of their discipline in a practical and actual business setting. Lien has really enjoyed her time at UniSA and had this to say about the learning experience, "...Most of the teaching staff have extensive experience in their chosen fields; hence, providing a practical learning experience. Also,

the teaching materials are prepared in close consultation with industry so students will be equipped with skills currently required by employers..."

Another fine example is of International Business graduate Lisa Crannage who completed a work practicum at Price Waterhouse Coopers as part of her final year of studies in 2007. On completion Lisa made a presentation to the senior partners of Price Waterhouse Coopers and a Sydney based partner commented that the quality of Lisa's work was greater than the combined output of four MBA students who had been working on a similar project for him in Sydney.

In addition, the School of Commerce offers the Property Student Mentor Program that exposes students to the practical work environment and facilitates the development of career options.

If you want to find out more about the Commerce Practicum or the Property Student Mentor Program then go to www.unisa.edu.au/commerce



Rhode to success

Inspiring Rhodes Scholar and UniSA alumnus Ryan Manuel recently contacted the School of International Studies to update them about his experience as a student at Oxford.

Ryan previously studied a Bachelor of Management (Marketing)/Bachelor of Arts (International Studies) double degree and completed Honours in International Studies at UniSA.

Here's what Ryan has to say:

"I am currently in my second year of a Master's degree reading Modern Chinese Studies at Merton College, Oxford. I spent half a year last year at Peking University in Beijing, and am also on occasion a visiting scholar at the Australian National University. Studying at Oxford has been great! I've met lots of interesting people and most of the

learning you do here is done outside of the classroom sitting talking to your friends. I am trying to write my dissertation now before taking my exams in June and after will begin work on a doctorate. In the medium term, I hope to finally escape the library and return to working in public policy, although perhaps with a stronger international focus."

There's no better way to find out about UniSA Health Sciences facilities, staff and programs than straight from the people who have experienced them.

"Occupational therapy is still very much in the developing stage in Egypt. As far as I am aware there were only 8 fully qualified, practicing OT's in the country while I was there. It is exciting to think about the potential for development of OT over there and the difference that a few people can make. Even as a student volunteer I felt as though I had a lot to offer. It felt great to be using the set of skills I have been learning over the past three years at UniSA with people who might not be receiving therapy otherwise. My trip has really made me appreciate the set of skills and knowledge that we as OT's have: we are valuable



and we have the potential to make a huge impact on people's quality of life." Renee Caon - (Occupational Therapy student)

"My Honours Degree has set me up with the appropriate research skills such as working with participants and supervisors and learning to administer a research project with appropriate time management. It has

provided me with the invaluable experience of knowing what it takes to work towards a large goal, and achieve it." Rebecca Nolan - (Bachelor of Health Science Honours Graduate)

If your students have questions about UniSA Health Sciences facilities, staff and programs they can find out more by visiting www.unisa.edu.au/health

NEW Engineering programs for 2009

UniSA is introducing seven new Engineering specialisations to meet the needs of industry and students nationally and internationally.

In 2007 UniSA commenced an extensive review of the Bachelor of Engineering programs following consultation with industry, Engineers Australia, recent graduates and current students. The aims of the changes are to develop engineering graduates with the knowledge and skills that industries are seeking from professional engineers, while making programs more attractive and flexible to prospective students.

The first phase of the review resulted in the 2008 introduction of a common first year, an accelerated three-year program of study for high achieving students, a number of pathway options into the Bachelor of Engineering programs and a range of new engineering double degrees with Law.

The review has continued throughout 2008 and has resulted in a second phase of changes which will be introduced in 2009.

Why are the programs changing?

The changes introduced this year, together with the changes in 2009, will have the benefits of:

- Helping meet the challenges of increased skill shortages in business and industry communities
- Allowing resources to be consolidated and applied to improve teaching and learning outcomes and the quality of our engineering programs
- Offering substantial opportunities for experiential learning through new teaching and learning practices and the use of new learning facilities
- Giving students the opportunity to undertake either a standard or accelerated program of study (subject to their academic performance in the first year)
- Providing more flexible entry pathways into our Bachelor of Engineering programs
- Facilitating articulation into Masters degrees in selected specialisations

Changes to be introduced in 2009

UniSA has introduced a wider choice of engineering specialisations

which are strongly aligned with industry demand for professional engineers, particularly in the fields of mining and resources, defence, computer networking and communications, civil infrastructure construction, environmental engineering and niche market advanced manufacturing.

The first common year of study will provide a practice-centred foundation that will expose students to the breadth of engineering, as well as application in servicing the community. Upon first year completion, students will have a solid understanding of the diversity of engineering and will be in a more knowledgeable position to choose a specialised field in the second year of the program.

From 2009 UniSA will be offering the following 12 single degree specialisations (the new specialisations are in bold):

Single degrees:

Bachelor of Engineering (Civil)

Bachelor of Engineering (Civil and Project Management)

Bachelor of Engineering (Civil and Transport)

Bachelor of Engineering (Mechanical)

Bachelor of Engineering (Mechanical and Advanced Manufacturing)

Bachelor of Engineering (Mechanical and Mechatronic)

Bachelor of Engineering (Mechanical and Sustainable Systems)

Bachelor of Engineering (Mechanical and Nanotechnology)

Bachelor of Engineering (Computer Systems)

Bachelor of Engineering (Electrical and Mechatronic)

Bachelor of Engineering (Electronics and Communications)

Bachelor of Engineering (Networking and Communications)

Double degrees:

UniSA will continue to offer a range of engineering double degree options with IT, Management, Marketing and Law. In addition, UniSA will be offering double degrees with the new specialisations listed below:

Bachelor of Engineering (Electronics and Communications), Bachelor of Management or Bachelor of Management (Marketing)

Bachelor of Engineering (Networking and Communications), Bachelor of Management or Bachelor of Management (Marketing)

Bachelor of Laws, Bachelor of Engineering (Electronics and Communications)

Bachelor of Laws, Bachelor of Engineering (Networking and Communications)

New courses and experiential learning

All of the Bachelor of Engineering programs have new course schedules being introduced in 2009. Many of the new and changed courses have increased opportunities for student 'experiential learning' through exposure to research, practical projects, professional experience and projects with industry.

So now, more than ever, a Bachelor of Engineering at UniSA gives students both knowledge and experience.

For the full program listing and further information about engineering at UniSA please visit www.unisa.edu.au/itee



Female engineer for the frontline *Sarah Martin*

Bachelor of Engineering (Mechanical and Manufacturing) (Hons) with Bachelor of Management - Graduated 2007

Just how do you get soldiers with life-threatening injuries out of a battle zone and back to army medics for treatment? In an armoured ambulance is the simple answer. But a 100kg patient being stretchered by fellow soldiers running to avoid gunfire into the back of a low vehicle quickly and safely is actually not that simple.

UniSA mechanical engineering graduate Sarah Martin has been working to solve this problem as part of the Tenix Defence team upgrading the Australian Army's fleet of M113 tracked armoured fighting vehicles.

"The aim of this project was to conduct an ergonomics assessment on the various existing land vehicles listed for possible use as an armoured ambulance, and to design the seating and stretcher restraints," Martin said.

"We've done the background work to set the requirements, to work out roughly what we can achieve and how to go about it. Now it's actually sitting down and nutting out brackets, seating, ergonomics and the like."

This final design phase will take place over coming months, with the first armoured ambulance expected to roll out of Tenix's Wingfield factory by 2010.

Martin's involvement in the project began during a six-month placement at Tenix as an engineering/

management double degree student. The placement smoothed her transition from uni student to professional engineer, and led to a permanent position with the company where she is the only female engineer working as part of the design team.

"At work you realise the impact of your design – that your design is going to be out there where people's lives are going to depend on it – in a way you're not confronted with at university," Martin said.

"The main thing is building confidence and reputation, especially working with tradesmen in a male-dominated industry."

Martin said that as a child she "liked to know how things worked". But she concedes she was more interested in the workings of clocks than tinkering with cars, which may have given her male peers a bit of an advantage.

"It's hard to get the knowledge you pick up just by being a boy," she laughed, urging girls to seriously consider engineering as a career.

"Females don't realise there's a huge amount of design and creativity involved in engineering. It's not always hands-on in grease and nuts and bolts," she said. "It's about being creative, conceptualising and designing and half the time you might be analysing structural integrity or modelling designs. That's what interests me."

For further information about Mechanical Engineering programs visit www.unisa.edu.au/ame

Living away from home and studying at UniSA? What do our students say?



Now is the time to start looking at options. Accommodation will make a huge difference to the university experience, so it pays to do the research early.

"Definitely don't leave it until the last minute as there are many people who are also looking for accommodation at the beginning of the year! Start researching options when you have decided on the degree you wish to take, just so you know what is available, the requirements and the cost of those options; each have their unique advantages and disadvantages." (Kylie Hicks, Bachelor of Commerce/ Bachelor of Business)

"A variety of possibilities exist, including small apartments, and a range of houses, units/flats etc. There is also the option of sharing. Your choice should depend on where you feel comfortable living, how much you are willing to pay, how many people you are happy to live with, what campus you study at, what the transport options are in your area, and what other areas of the city you would need to visit (eg work, sport, etc). Start by doing some research on accommodation online." (Andrew Antenucci, Master of International Studies)

Considering a residential college?

Colleges can be fully booked for the following

year as early as August! Early applications are advisable.

Heard of student hostels and apartments?

Many of these are very popular due to their facilities, location and cost.

Thinking of a share-house?

"Here are key places to look: the UniSA Rental Database, online real estate sites like domain.com.au and realestate.com.au. The Advertiser daily newspaper on Wednesdays and Saturdays, and all the noticeboards around university. Remember that securing a suitable share-house is best done when in Adelaide.

Sharing a house is a great way to learn interpersonal skills and become more independent." (Petria Smith, Bachelor of Arts [Journalism])

What about financial assistance?

A large number of scholarships and grants exist, many of which are not based on academic merit. So it's certainly worth taking a look and applying. Centrelink also has a Rent Assistance scheme.

"It can be a huge step so don't rush, take your time to consider your options and make sure it is what is best for you. Also, make use of the options, advice and resources on the university website." (Kylie Hicks) www.unisa.edu.au/accommodation

Journalism students having a ball!



UniSA students have earned real world industry experience on yet another large-scale international event.

In March 2008, South Australia hosted the first leg of the Swatch FIVB Beach Volleyball World Tour, and Journalism and Media Arts students from the School of Communication were on the frontline capturing all the action and excitement of the event for broadcast television.

After being briefed every morning at Adelaide's Channel 31, students headed down to the beautiful beaches of Glenelg, where a 3000 seat stadium had been constructed for the event.

The students were responsible for all aspects of news production, including writing stories, liaising with media, interviewing players, officials and spectators and of course, filming the event.

After editing their stories, UniSA students hosted a nightly television show filmed and broadcasted from the Channel 31 studio.

This was just one of the international events that UniSA students have had the opportunity to participate in. In 2007, Journalism and Media Arts students produced nightly coverage of the World Police and Fire Games. A group of staff and students are planning to travel to Liverpool for the World Firefighter's Games again later this year.

To view news stories from the World Police and Fire Games and read news articles from UniSA journalism students, visit The Warbler at www.thewarbler.unisa.edu.au

To find out more about Journalism and Media Arts programs at UniSA visit www.unisa.edu.au/com/future/undergraduate.asp

Wanted: future research scientists

Bachelor of Science (Honours)

The four year Honours degree is designed for high achieving and motivated students who have a genuine interest in making a contribution to the scientific studies of fundamental importance in today's society. The Bachelor of Science (Honours) will provide students with advanced learning

opportunities in one of five significant scientific areas:

- Ecology and Biodiversity
- Medical and Health Physics
- Nanotechnology and Biomaterials
- Sustainable Energy
- Water Science

The Bachelor of Science (Honours) students will form

a special group who will work closely with academics and researchers from the University's research centres and institutes who are at the leading edge of scientific knowledge in these areas. Students will select a major, a minor and electives in their areas of interest. In addition, students will undertake

course-related projects in both first year and final year. An alternative to the final year project is involvement in Science Clinics in which groups of students work together on major industry based projects under the supervision of academic advisors.

Graduates from this program will have highly developed analytical and problem solving skills combined with the knowledge and practical

experience developed in their chosen specialisation to enhance their employment prospects. Graduates of sufficient merit will have the opportunity to proceed directly to postgraduate studies, either through Masters programs or PhD studies.

For further information about the program please visit www.unisa.edu.au/maths/programs/LHSH.asp

Increasing demand for alternative engineering pathways



Associate Degree in Engineering Pathway Program

In response to the growing need from industry for more skilled engineers, UniSA has

developed the Associate Degree in Engineering. This unique pathway program has been designed to allow students who do not have the traditional background

of science and maths to start studying towards a Bachelor of Engineering. Students will study introductory engineering courses, as well as core maths and science courses, which are essential to work as an engineer. On completion of eight courses and successful completion of the prerequisite and assumed knowledge courses required, students transfer into the Bachelor of Engineering program of their choice.

By providing alternative pathways into our engineering programs, UniSA has given many more students the opportunity to pursue a

career in engineering. The first intake for 2008 has attracted more than 124 student applications so far, with almost half of these wanting to study at our regional Whyalla campus. Applicants are from a range of backgrounds including year 12 students who just missed out on the engineering TER or who didn't study mathematics at a year 12 level, mature age students with trade qualifications and also those who completed the ATN Engineering Test.

For further information about the Associate Degree in Engineering please visit www.unisa.edu.au/itee

Global Experience.



Global Experience is an innovative new program offered by UniSA. This program is designed to give students an edge in today's competitive world. Employers expect more from graduates and through Global Experience students can truly deliver on these higher expectations by developing:

- **More experience.** Students will gain valuable experience through a variety of extracurricular activities to set them apart from their peers. Tailoring experience in line with goals to get the most out of their time at university.
- **More global knowledge.** Students will expand on global knowledge through networks, workshops and a range of activities including an option of overseas study.
- **More skills.** Students will develop essential skills for careers; including career management and intercultural communication through the course, Global Experience Professional Development (BUSS 1056), which may be counted towards a UniSA degree.

Give degrees a view of the world.

For further information, please visit www.unisa.edu.au/globalexperience

How exactly would you promote Australian Southern Rocklobsters to people on the other side of the world?

Two School of Marketing students, Ryan Jones and Bryony Jardine are finding this out right now as they travel around the United States working on their Marketing Planning Project (MPP).

Each year students of the Bachelor of Management (Marketing) apply to participate in the MPP which is an experiential placement in a local organisation. Students work four days a week for 16 weeks in place of their final four courses.

Ryan and Bryony were fortunate enough to be selected to work for

Southern Rocklobster Limited (SRL) an organisation which represents lobster fishing in South Australia, Victoria and Tasmania.

Their task is to develop a communication plan for SRL as they try to take the local species of rocklobster to the American fine dining market.

To start their project, the pair have interviewed the best chefs in Los Angeles, New York, Washington DC and Atlanta. The challenge so far has been determining how best to communicate with busy chefs and promote awareness of

the Australian Southern Rocklobster in the American market.

In both Los Angeles and New York, Ryan and Bryony have visited the restaurants of famous chef and TV personality Gordon Ramsay, interviewing his top chefs. Staff at the famous Beverly Hills Hotel were also happy to help the pair with their research.

After their tour of the States, Ryan and Bryony will have the task of analysing their findings and presenting a marketing and communication plan to the managers of SRL.

It is likely the pair will come up with some great ideas, as management have said the students are working really hard, showing good commitment and learning a lot. The experience Ryan and Bryony are undertaking is invaluable and will give them adaptable skills for starting their careers after graduation.

If you would like more information on the Marketing Planning Project, please visit www.unisa.edu.au/marketing

Science at the Lakes pre-registration now open

Science at the Lakes, a free day of fun science activities for schools, will be held at Mawson Lakes on Friday August 15. A part of National Science Week, Science at the Lakes last year accommodated approximately 1250 school students from

across metropolitan South Australia who participated in more than 30 hands-on interactive workshops and presentations.

The 2008 event will again offer a range of free science educational activities for South Australian school children in years four to

ten. Schools must book online and to make sure you don't miss out pre-registration is now available at www.unisa.edu.au/scienceatthelakes

By registering your interest you will be notified of the exact date registrations open. In 2007 most

activities booked out within 48 hours so you need to be quick!

For further information visit the above website or contact Penny Reidy on 8302 5341 or email penny.reidy@unisa.edu.au

Major Development

The new sub-major in Counselling & Interpersonal Skills - a first for the School of Psychology - has been a hit with students!

Employers are looking for well-rounded graduates who

have good communication skills. The Counselling and Interpersonal Skills sub-major offers students extra opportunities to gain the "people skills" they require.

The submajor provides practical skills in counselling, community engagement, applied research, and applied psychology so students gain a set of valuable skills which are highly sought after in the industry.

This opportunity is unique to South Australia and psychology students have enthusiastically enrolled in the sub-major since it was introduced this year.

There has also been considerable interest from students in Health Sciences,

Education, and Social Work & Social Policy for whom the courses are also available.

For more information about this sub-major and a list of courses available, please visit www.unisa.edu.au/psychology



Al Gore, Tony Robbins, Jane Goodall, and Bono 'talk' to South Australia's youth

The Bob Hawke Prime Ministerial Centre at UniSA is offering a free program for South Australian schools, Sustaining our Global Future - a world class cinema series presenting some of the most inspiring and informative speakers, such as Al Gore, Bono, Tenzin Pamlo, Jane Goodall, Tony Robbins and Eva Vertes as well as emerging youth leaders and exciting solutions.

The series will highlight areas of ethical social action, raise awareness of United Nations (UN) observances

and present some of the world's most innovative ideas for change.

Director Elizabeth Ho, who recently attended the 2020 Ideas Summit convened by Prime Minister Rudd, believes that the program is a first for South Australia and potentially offers help to students overcome the apathy often involved in feeling that the world's problems are too big to solve.

"The future of our world depends on the quality of ideas that we generate as a

thinking and compassionate society and the action we take," she said.

"There are big issues in front of us - serious environmental remediation, eliminating poverty and feeding the world. Australia is a country that can make a great contribution and the focus of this program is to inspire and energise.

"It also shows how young people in many developed countries are leading the way in helping to solve our biggest global problems - and they can come at this

from any knowledge base - from science, technology or the arts."

"We are delighted to offer this opportunity to schools and underline the commitment of UniSA to social justice and community engagement".

This FREE program will commence on June 5 at the stunning new Hawke Building facilities at the UniSA City West Campus, North Terrace.

To get involved or find out more contact Inspirational Cinema co-ordinator, Susan

Rooney-Harding on 0418 833 304 or visit the Hawke Centre website at www.hawkecentre.unisa.edu.au.

Term 2: Topics and dates

- Thursday June 5 - World Environment Day
- Thursday June 12 - World Day to Combat Desertification and Drought
- Thursday June 19 - World Refugee Day
- Thursday June 26 - International Day Against Drug Abuse Illicit Trafficking

SA Water sponsors new mathematics scholarship

SA Water are the sponsors of the new SA Water Hypatia Scholarship for mathematically talented women. The Scholarship is open to female year 12 students with a TER of 90 or above who are interested in enrolling in the Bachelor of Quantitative Finance offered by the School of Mathematics and Statistics. There is only one SA Water Hypatia Scholarship offered per year and the recipient will enjoy the following advantages offered by the Scholarship:

- Payment of their HECS fees for the first year of study
- Students are given a shared office with their own PC
- The chance of summer vacation employment from the end of second year
- The opportunity to study overseas in either Europe

or the USA in their final year

- The opportunity to be involved in the SA Water graduate program

The recipient should have an interest in the mathematics/finance industry and be willing to become an ambassador and attend Graduate Program functions at SA Water.

UniSA would like to congratulate Sarah Nur who comes to us from Underdale High School as the first recipient winner of the SA Water Hypatia Scholarship. Sarah had this to say about her experience so far at UniSA.

"Receiving the scholarship has made me settle into University life easier and it means that at the end of my second year I will be



provided with vital work experience at SA Water before I graduate. Hopefully, as a recipient of the scholarship and the work experience that I receive will help me find a rewarding job in the future.

SA Water has been very supportive during my study. I will be invited to attend their functions and in-house graduate events. It will be a

great experience for me to meet SA Water employees and find out how my degree is relevant in the work they do."

For more information about the scholarship and how to apply please visit www.unisa.edu.au/maths/programs/scholarships.asp



Bookings

Please contact one of our Student Liaison Officers to schedule your events. To ensure that the service provided to you from our staff is of the highest quality, please allow for a minimum of two weeks notice when making bookings.

Contacts

Student Liaison Officers
Ryan Bailey, Kolynda Maguire, Ann Pocock
P: 8302 7088
F: 8302 9150
studentliaison@unisa.edu.au

Future Student Enquiries Centre

The Future Student Enquiries Centre has information on all UniSA programs. The friendly, professional staff can assist students, parents and teachers with high-quality information about prerequisites and admission processes.
P: 8302 2376
study@unisa.edu.au