

# TEMPLATE OF FACULTY REPORT

## Faculty Planning and Resource Report for 2005

November 2003

### CONTENTS

- PART A** Public Summary of Faculty Planning and Resource Report
- PART B** The Planning Context: Profile, Direction and Action Plans for 2004-5
- PART C** Faculty Planning for Core Business Activities – Progress Against Objectives
- Learning and Teaching / Internationalisation
  - Research / Internationalisation
  - Community Engagement
- PART D** Faculty Planning for Core Business Activities – Forward Planning
- Learning and Teaching / Internationalisation
  - Research / Internationalisation
  - Community Engagement
  - Communication Strategy
- PART E** Resource Planning
- Faculty Budget Allocation
  - Research Budget Allocation
  - Faculty Planning Strategic Development Fund
  - Student Profile
  - Staffing Issues
  - Resource implications for Administrative and Support Units

### Appendices

- 1 Faculty IT Plan
- 2 Faculty Research Plan
- 3 Faculty Project Officer Proposal

*It is recognised that your planning objectives are written based on a number of assumptions, and that if the situation changes (including internal policy changes or issues arising in the external higher education environment), this will impact on your ability to proceed along the lines identified in this report. However, planning at the faculty levels contributes to a number of associated planning and quality assurance activities, including budget and resource allocations, reporting to government, and broad level University strategic planning. Without faculty input through the Faculty Plan and Resource Report, other areas of planning and quality assurance throughout the University is reduced.*

# PART A

## 1 Public Summary: Vision and Direction

Faculties are asked to provide a public statement that engages interest and commitment.

Statements encompass the faculty profile and the direction the faculty is moving in (what makes you distinctive, you want to be known for), and how the Faculty intends to get there (ie faculty objectives and strategies).

*(Length: no more than 1 page)*

### **Faculty Vision**

That the Faculty of Informatics is recognised as a national and international centre of excellence for teaching and research.

### **Faculty Mission**

To provide the highest quality education to produce outstanding graduates in the areas of Information Technology and Computer Science, Electrical, Computer and Telecommunications Engineering, and Mathematics and Applied Statistics.

To conduct innovative research and development in information and communication technologies, electrical engineering and mathematical sciences that is recognised internationally and nationally.

To maintain and expand strong links between the University, community, industry and other universities, both locally and internationally.

### **Intended Faculty Direction:**

After a period of rapid growth, the Faculty is looking to consolidation in its teaching profile, but with a major increase in its research profile.

During this consolidation period, the Faculty will continue with its efforts to enhance its reputation, both nationally and internationally, through continued improvements in the quality of its teaching as well as enhancing its pre-eminent research reputation and output.

In terms of its off shore education partnerships the Faculty will review and consolidate the various programs on offer. It is envisaged that the Faculty will then proceed to explore new niche markets in Asia such as in China with a view to setting up other off shore operations and possibly new programs that may require involvement from all schools in the Faculty.

### **Faculty Profile: *(ie distinctive character)***

The Faculty of Informatics was formed in 1991 and leads the focus in the Information and Communication Technology (ICT) arena with its unique mix of schools and research centres which positions it at the forefront for innovation in its area. Currently, it enjoys an excellent position within the University of Wollongong in terms of research, student numbers overall, and international students specifically.

The Faculty's undergraduate programs are work-place focused and its teaching at postgraduate level is research-driven. These foci result in graduates who are in high demand and attain concomitant high salaries. Recognising its student-centred focus, the Faculty supports initiatives such as the centralised Student Enquiry Centre, the Peer Assisted Student Support program, the Personal Academic Mentoring program, and use of the Centre for Learning Development.

With a balanced mix of established and new disciplines supported by a staffing body with an eclectic mix of theoretical and practical skills and experience, the Faculty is also consulting-active sustaining solid and varied industry links.

The Faculty is the second largest on campus with a total EFTSU in 2003 of 2538.6 as against 2617.6 in 2002. Of the 2003 total, 135.2 were Research EFTSU as compared to 101.0 in 2002.

International students totalled 1291.3 EFTSU in 2003 as against 1281.8 in 2002, of which 504.5 were Off-Shore and 28.33 were Research. The International offshore EFTSU declined by 22% in 2003 due to the restrictions placed on Staff travel in response to the SARS epidemic, however on-shore numbers rose by 25%.

The Faculty has an excellent research reputation both nationally and internationally. This demonstrates that, despite the Faculty's rapid growth and significant increase in student numbers, research income totalled \$3.2m and academics' publication activity numbered 222, an increase in publication output of 48% over the previous year. This represents 199 DEST publications.

Comparative employment outcomes for the Faculty's graduates gaining full-time employment in 2003 totalled 100% for Electrical Engineering as against a national average of 82.1%, 92.2% for Computer Science as against a national average of 65.1%, and 93.8% for Mathematics as against a national average of 68.5%. This places the Faculty nationally at the top of graduate employment when compared to its closest competitors.

Median salaries for Faculty graduates average \$40,000pa which places graduates, in particular Computer Science, towards the top of the median salary range of all Australian Universities.

The Faculty supports strong research links with universities in Manchester, Southampton, Nottingham, and Graz – Austria, as well as the Huazhong University of Science and Technology, Zhengzhou University, Shangdong University, Tianjin University (the oldest in China) and the Zhengzhou Institute for Light Industry, Beijing Normal University and also enjoys Alumni connections with INTI College, Kuching and the Dubai Campus.

Off-Shore partnerships with ABRS in Hong Kong, a Private College in Singapore, and Inti College in Sarawak are complemented by twinning arrangements in countries such as Chile, China and Thailand.

The Faculty also enjoys articulation arrangements with Sweden, China, Thailand, Indonesia, Malaysia, Singapore, Hong Kong and Bangladesh whilst maintaining exchange agreements for research collaboration for students and staff in Norway, France, Germany and Korea.

-----  
Dean, Faculty of Informatics  
/ / .

# PART B

## 2 The Planning Context: Faculty Profile, Direction and Action Plans for 2004-5

### 2.1 The Higher Education Environment

The Higher Education Support Act of December 2003 heralded a number of changes in the profiles of Australian universities.

The changes will include maximum student HECS contributions set at 30 per cent higher than planned for 2005 (except for teaching and nursing where the existing HECS estimates will apply) and extra charges for overseas students including changes to student visas. This additional income will go towards supporting a substantial increase (\$404 million) in base funding for universities; additional scholarships; new loan schemes and equity initiatives. The Australian Government has also signalled, as part of the reform package, that it would like to see more overseas full fee paying students coming to Australia to study. The level of competition between universities, already high, is thus expected to increase further. Students can be expected to discriminate more astutely between universities when faced with increases in fees.

Over the next three years, universities can expect increasing government, community and student (noting their increased financial commitment) demands for:

- A continuing, strong demonstration of quality processes and outcomes.
- Increased accountability for the planning, delivery and quality of courses which have a value for disciplinary status and a monetary value for funding and fee purposes.
- Testing, reporting and recognition of excellent performance.
- Comparisons (benchmarking) against international standards.

The University's ability to plan for and manage changes in external demands will be reflected and rewarded (or otherwise) by the level of government funding. Its commitment to quality will be assessed by the audits conducted by the Australian Universities Quality Agency (AUQA).

### 2.2 The UOW Environment

The University of Wollongong has a strong reputation for student-centred learning; for preparing students for the challenges of both future study and the workplace; for research performance and alliances, and for an enterprising international agenda. It was named Australian University of the Year twice – 1999-2000, for outstanding research and development partnerships and, in 2000-2001, for its expertise in preparing students for an e-world. It has also been ranked the nation's top university for educational experience and graduate outcomes for the last four years.

Over the next three years, the University will build on these strengths and create:

- Opportunities for growth (domestic and international), which address issues of student access and mix, academic, student and physical environments.
- An enhanced focus on quality processes, including documentation, communication and review.
- Enhanced accountability for course planning and delivery, research performance and student support.
- A "high performance" culture with continuous improvements and innovation, rewarded by recognition internally and by support for national award and funding nominations.

- Ongoing internal policy changes aimed at enhancing quality, equity and consistency, similar to the policy reform launched in 2002 by the review of assessment procedures.
- Systems for managing changed student finance issues – HECs, loans, Scholarships, equity.
- Research support directed towards areas of existing and emerging research strength and multidisciplinary research excellence
- A quality research experience for higher degree research students
- Effective research partnerships with international, national and regional organisations and industry;
- Opportunities for optimising “regional” funding.

## 2.3 The Faculty Environment

### 2.3.1 Faculty Planning Context (internal profile, national & international issues in respective field):

A recent report for the Federal Department of Communications, Information Technology and the Arts (entitled: “An overview of the Australian ICT Industry and Innovation base”) stated the following with regards to the current status of the Australian ICT sector:

*“Australia’s ICT industry makes a significant direct contribution to the economy. According to ABS data, the market revenue of domestic production in ICT goods and services in 2000-01 reached \$50.2 billion, which was 7.8% of GDP. To place this in perspective, the financial and insurance services accounted for 6.5% of GDP, automotive 0.7% and the rural sector 2.9% for example.*

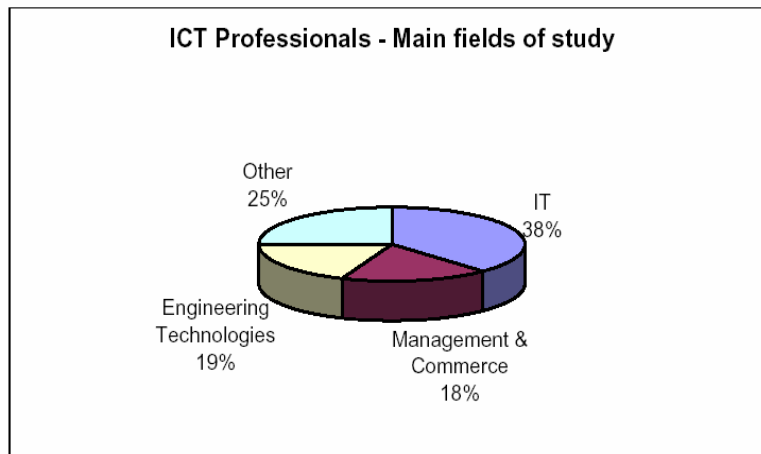
*However, this data is an underestimate of the total Australian production of ICT goods and services, as some ICT is produced in firms which are not classified as part of the ICT sector.”*

In total, the sector has over 22,000 ICT businesses which reportedly employ a quarter of a million people. In the Illawarra region alone there some 250 businesses most of which are quite small employing 2–5 employees (with the exception of a number of quite large businesses such as CSC, Nortel networks etc). The general consensus is that, whilst the sector is going through a down turn at present, the medium to long term outlook is strong. Indeed, the recent Federal Government report (entitled “Enabling our Future – A framework for the ICT Industry”, April 2003) concluded that:

*“The transformative role of ICT in society will continue, and accelerate over the next ten years”*

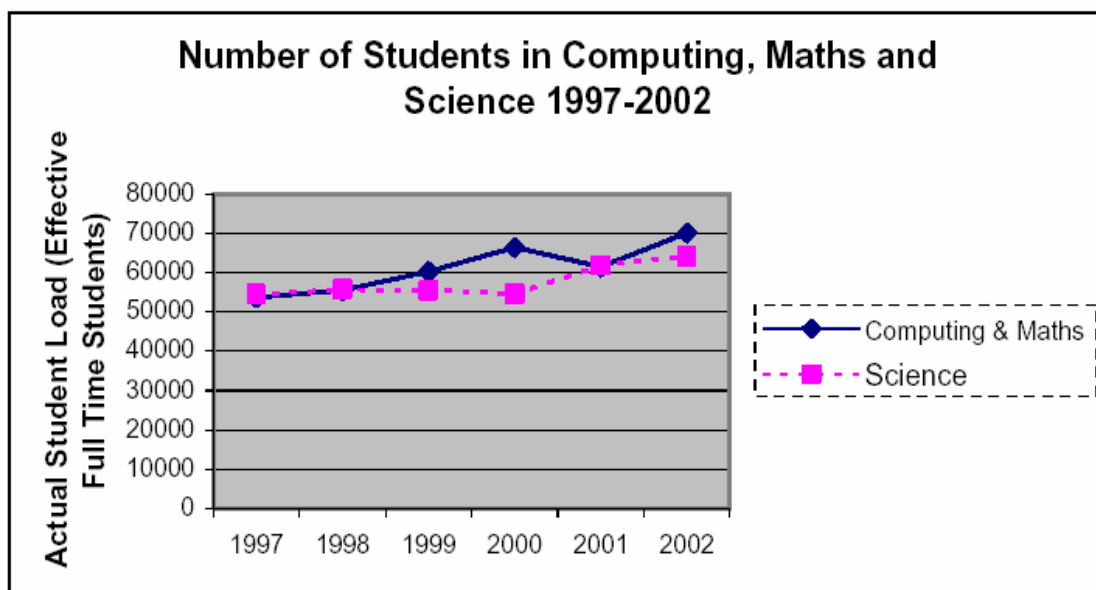
It must be noted, however, that not all Informatics graduates move into careers solely within ICT sector. Informatics graduates are located in a multitude of employment sectors, Finance and Service to mention but two.

The situation in Australia is such that most ICT qualifications are obtained via the higher education system. The following pie chart indicates the main fields of study:



Source: *An overview of the Australian ICT Industry and Innovation base*

There were some 70,000 students enrolled in ICT-related University courses in Australia during 2002 (source: *DEST data*). Overall there has been a combined increase of approximately 30% in the number of computing and mathematics degrees largely in the computing/IT fields. The Faculty of Informatics accounted for 3.61% of the total number of student enrolments in Australia during 2002. A more reliable measure is the Faculty's position in the Information and Engineering Technologies sectors which nationally amounts for 6.56%.



Source: *An overview of the Australian ICT Industry and Innovation base*

The industry sector has experienced a recent downturn as a result of unrealistic expectations of ICT technology in the stock market. The latter was predominantly associated with the dot.com boom. The sector is in the process of recovery after a significant correction factor. This has created a clear sense of negative sentiment, or rather uncertainty in the community (including the investment community). As a result there has been a general downturn in domestic first preferences for predominately IT-related tertiary degrees across in Australia.

The most recent national figures are not available until April 2004, but for NSW the downturn is 14.9% as against 23.6% for our Faculty. Whilst this may seem a significant downturn compared to the state average, the faculty fared better than its competitors who suffered an average downturn of 25.45%

The Faculty produces quality graduates with employability exceeding the national average as the following table of Informatics under 25 graduate first degree full-time employment demonstrates:

Degree	Informatics	National
Electrical Engineering	100%	82.1%
Computer Science	92.2%	65.1%
Mathematics	93.8%	68.5%

### 2.3.2 Intended Faculty Direction:

To be summarised after objectives revised.

- Teaching excellence – looking at student performance, retention rates, pass rates, attract quality students
- Review and expand international partnerships
- Expand national and industrial partnerships
- Drive research in a vigorous way – increase research and research grants
- Early career researchers – ability to grow research significant as a result through growing these early career researchers
- Research strength – will actively improve the Faculty's internal profile within the University of Wollongong
- Increase domestic PG and HDR students
- More generic/foundation courses as opposed to market reactive

### 2.3.3 Summary of action planned for 2004–2005 (*ranked*)

1. Reduce failure rates across the faculty in first and second years
2. Restructure Faculty Research management system
3. Establish one new Institute
4. Review teaching allocation for first year across the faculty
5. Facilitate staff participation in strategic personal development programs
6. Involve research-only staff in teaching programs
7. Host annual Dean's Research Student Dinner
8. Increase level of external research funding by 15%
9. Participate in one successful new CRC as a core partner
10. Evaluate assessment practices
11. Update teaching skills on web authoring and on-line tools through UoW-delivered workshops and training, mentoring and peer support
12. Review objective of ensuring workloads allow for 30% research time
13. Establish core graduate attributes within each school/discipline
14. Update and integrate course offerings
15. Increase student-based quality publications
16. Increase number of pg Research student completions
17. Develop generalist Maths and Stats subjects across campus
18. Increase computing in Maths and Stats subjects
19. Improve median UAI (plan states to maintain as longer term target).
20. Establish a Dean's Scholar's program
21. Increased Faculty networking activities
22. Develop collaborative tools to facilitate interaction between campuses and other partners
23. Develop new Software Engineering Degree
24. Participate in one ARC centre of excellence
25. Establish effective study leave criteria
26. Run a workshop to identify any EEO issues

### 2.4 Summary of action planned for beyond 2005 (*ranked*)

1. Develop an inclusive culture for research only staff
2. Increase percentage of research-active academic staff

3. Establish a career development mentoring program for junior academic staff
4. Develop and participate in high-profile external collaborative R&D partnerships
5. Establish quarterly research seminars for local industry
6. Increase level of competitive funding from all available sources
7. Establish a leading role in the development of the Innovation Campus
8. Implement an R&D incubation commercialisation plan within the Innovation Campus
9. Accredite all eligible course offerings

**NB Please rank each of your objectives (this can be within each section, or overall, as appropriate for your faculty)**

# PART C

## 3 Faculty Planning for Core Business Activities – Progress Against Objectives

### 3.1 Learning and Teaching / Internationalisation

#### 3.1.1 Review of 2003 Activities and Objectives

Learning and Teaching Objective/s for 2003	Outcomes and Progress Against Objectives*	Is revision of the strategies to achieve these objectives, or improve the outcomes, required?
<b>Program Development: design quality teaching programs with appropriate levels of support; internationalisation</b>		
<b>Improve first year outcomes:</b>		
<ul style="list-style-type: none"> <li>▪ Improve pass rates</li> </ul>	<p>Pass rates have improved in some subjects but not in others.</p> <p>An ESDF Grant application to assist with improving first-year outcomes was not successful.</p> <p>New CompSci curriculum in 2004 is spreading the work load of subjects with historically high failure rates (CSCI111 and CSCI121) over three subjects with additional Maths to provide a sounder grounding for students to achieve better results.</p>	<p>A faculty-wide team to examine the issues, and propose and implement solutions is required.</p>
<ul style="list-style-type: none"> <li>▪ Implement pre-tests early in session to identify students requiring extra assistance</li> </ul>	<p>No progress to report.</p>	<p>A more holistic faculty wide approach is required</p>
<ul style="list-style-type: none"> <li>▪ Utilise PASS program</li> </ul>	<p>PASS program is utilised throughout the Faculty for identified students.</p> <p>Statistics (available on request) show that students who regularly attended PASS sessions scored significantly better in their final mark, eg those who attended more than 10 sessions scored an average of 20 marks higher.</p>	<p>Integration of PASS program with main subject teaching is desired.</p>
<ul style="list-style-type: none"> <li>▪ Evaluate assessment practices</li> </ul>	<p>No progress to report.</p>	
<b>Increase the number of students going on exchange:</b>		
<ul style="list-style-type: none"> <li>▪ Set up scholarship program to Europe.</li> </ul>	<p>No progress to report.</p>	<p>This item should be deleted as only worthwhile for recruitment</p>

		purposes.
<b>Increase contribution to cross-Faculty subjects:</b>		
<ul style="list-style-type: none"> <li>▪ Develop generalist Maths and Stats subjects across campus.</li> </ul>	Currently in discussion with Commerce Faculty.	Current. MATH122 replaced by MATH121 and STAT131.
<b>Maintain or improve quality and relevance of the Faculty's degrees:</b>		
<ul style="list-style-type: none"> <li>▪ Review degrees regularly</li> </ul>	<p>SECTE commenced a major review of all degrees in 2003 to continue into 2004 scheduled for 2005 delivery. A working party established to ensure Quality in Teaching and Learning in SECTE (to report 2004)</p> <p>Bachelor of Engineering courses reviewed by an Accreditation Panel from the Institution of Engineers Australia and given accreditation.</p>	No further action required.
<ul style="list-style-type: none"> <li>▪ Review labs.</li> </ul>	<p>Labs reviewed in SITACS and SECTE and new Faculty labs brought online in Building 39.</p> <p>SMAS Horner Lab integrated into Faculty Lab structure.</p> <p>Faculty holds to its three-year rollover policy.</p>	Complete.
<ul style="list-style-type: none"> <li>▪ Develop new, more up-to-date experiments.</li> </ul>	Experiments are updated relative to changes in subject curricula, eg ECTE101 was updated in 2003.	Strategy no longer relevant.
<ul style="list-style-type: none"> <li>▪ Increase computing in Maths and Stats subjects.</li> </ul>	Horner Lab installed in SMAS to facilitate this strategy.	Currently on target.
<b>Ensure consistency of quality delivery at all sites.</b>		
<ul style="list-style-type: none"> <li>▪ Review current procedure; and ensure quality assurance policies in place for remote campuses</li> </ul>	<p><b>For international sites:</b> Current procedures reviewed resulting in:</p> <ul style="list-style-type: none"> <li>▪ Development of Quality Assurance documentation for all offshore partners and programs undertaken at each Faculty site.</li> <li>▪ Templates created for Annual Review of Collaborators (Private College Singapore, INTI Kuching, ABRS Hong Kong, UoW Dubai) that includes: <ul style="list-style-type: none"> <li>▪ Overall quality</li> <li>▪ Accreditation and entry level</li> <li>▪ Student results</li> <li>▪ Student feedback</li> <li>▪ Staff</li> <li>▪ Site audit</li> <li>▪ External program validation and government approval maintained.</li> </ul> </li> </ul>	<p>Process has commenced and will be completed in 2005 at the time of AUQA audit.</p> <p>No further action required on this strategy.</p>

	<ul style="list-style-type: none"> <li>▪ Entry requirements for new students maintained at onshore and pass rates equivalent to onshore.</li> <li>▪ Professional accreditation by Australian Computer Society (ACS) for offshore programs (Private College, ABRS, INTI, Dubai) being sought to be completed by October, 2004.</li> <li>▪ Site audit assessment in progress (Private College, ABRS, INTI, DUBAI) to be completed by June 2004.</li> </ul> <p><b>For domestic sites:</b> A coordinator has been appointed for satellite campuses.</p>	
<b>Improve quality of student intake:</b>		
<ul style="list-style-type: none"> <li>▪ Improve median UAI.</li> </ul>	<p>The downturn in IT first preferences this year (23.6% over 2003) has not realised any positive movement to achieve this strategy in the short-term.</p> <p>However, an analysis of Early Entry program students shows that these students achieve a higher UAI than non-EE students. Growing this program should see improvements in the median UAI.</p>	Maintain as a longer term target now incorporated into 4.1.1 Part D.
<ul style="list-style-type: none"> <li>▪ Establish a Dean's scholars program.</li> </ul>	Current University guidelines are under consideration by School SECs and the FEC.	Current and incorporated into 4.1.1 Part D
<ul style="list-style-type: none"> <li>▪ Review TAFE articulation arrangements.</li> </ul>	No progress to report.	Current and incorporated into 4.1.1 Part D
<b>Teaching: support quality teaching and professionalism; internationalisation</b>		
<b>Foster integration and cooperation between the Faculty's three schools:</b>		
<ul style="list-style-type: none"> <li>▪ Cross-school teaching and co-supervision</li> </ul>	INFO411/911 and INFO412/912 development continuing. CSCI112 cross-taught by Maths and INFO413 introduced. Five PG students co-supervised between SECTE and SITACS.	Complete.
<ul style="list-style-type: none"> <li>▪ Cross-school representatives at School meetings</li> </ul>	Cross-school representatives have been appointed to all Schools' meetings with allocated items on respective School meeting agendas.	Complete.
<ul style="list-style-type: none"> <li>▪ Increased Faculty networking activities</li> </ul>	Enrichment Day run again with Faculty-wide involvement. Early Entry program successfully run again in 2003. Regular Dean meetings held with Heads of Schools. Administrative Assistants morning	Ongoing.

	tea held for the first time. Senior Administrative Staff luncheon held. Student Enquiry Centre staff attendance at SITACS weekly Admin meetings.	
<b>Provide staff development for remote and off-shore teaching delivery:</b>		
<ul style="list-style-type: none"> <li>▪ Develop collaborative tools to facilitate interaction between campuses and other partners</li> </ul>	<p>CDs created for South Coast campus delivery. Permanent appointment of Associate Lecturer to co-ordinate SITACS subjects in 2004. This will involve lecturers and tutors, both on and off campus.</p> <p>Web-CT based materials proffered for domestic satellite campuses, eg ECTE282 and ECTE198.</p> <p>SMAS tutor hired for Loftus overseen by Faculty staff.</p> <p>Caringbah subject offering quality controlled by Faculty staff.</p>	Complete.
<ul style="list-style-type: none"> <li>▪ Update teaching skills on web authoring and on-line tools through UoW-delivered workshops and training, mentoring and peer support</li> </ul>	Dedicated staff member maintains SITACS online learning subjects (95 WebCT sites in use during 2003).	Maintain as an ongoing strategy now incorporated into 4.1.3 Part D.
<ul style="list-style-type: none"> <li>▪ Identify easy-to-use technologies and tools</li> </ul>	<p>Dynamic Web Server established in SITACS to provide reliable onshore and offshore access with potential to support user-driven processes such as remote read-write database access.</p> <p>Satellite lecture recording for both video and audio to CDs facility on laptops for remote distribution.</p> <p>TWIKI (user-driven web site collaborative tool) commissioned which allows authorised read-write for documentation and web content creation.</p>	Complete; no further action required.
<b>Better quality teaching:</b>		
<ul style="list-style-type: none"> <li>▪ Speech modifications for identified staff</li> </ul>	<p>Pronunciation Improvement/Accent Modification material provided to identified staff. Expressions of interest received.</p> <p>Staff attendance in the ITT program.</p>	Maintain as an ongoing strategy now incorporated into 4.1.2 in Part D.
<ul style="list-style-type: none"> <li>▪ Encourage and support OCTAL and ESDF nominations (plus Dean)</li> </ul>	<p>Two nominations for OCTAL Award for general teaching.</p> <p>Two ESDF grant successful to the value of \$47,000.</p> <p>Other unsuccessful applications submitted.</p>	Maintain as an ongoing strategy now incorporated into 4.1.3 in Part D.
<b>Any other objective regarding learning and teaching</b>		

<p><b>Diversify international onshore student population:</b></p>		
<ul style="list-style-type: none"> <li>▪ Develop new international students markets, with a particular focus on parts of Asia previously neglected</li> </ul>	<ul style="list-style-type: none"> <li>▪ Student targets set for India and Bangladesh markets at 30% increase in Semester 2 over Semester 1, 2003 <ul style="list-style-type: none"> <li>➢ India increased by over 100% (15 to 39)</li> <li>➢ Bangladesh increased by 70% (20 to 35)</li> </ul> </li> </ul>	<p>Currently on target.</p>
<ul style="list-style-type: none"> <li>▪ Retain market share and quality of students in traditional markets with comprehensive, integrated campaigns that include interview programs, seminars and institutional visits</li> </ul>	<p>Agent visits to all traditional markets (Chian x 3, Singapore x 4, Malaysia x 4, Hong Kong x 2, Thailand x 1) by Faculty International Office and Alumni.</p> <p>Institutional visits to Singaporean Polytechnics x 3, Malaysian Colleges x 2, Hong Kong Colleges x 2, Thai Universities x 1.</p> <p>Development of Twinning relations with Beijing Normal University, Huazhong University of Science and Technology and Fudan University at both ug and pg levels.</p> <p>International student recruiting targets stable from China, Singapore, Malaysia and Hong Kong. However, HDR Semester 2 increases over Semester 1 2003:</p> <ul style="list-style-type: none"> <li>➢ 20% increase from China</li> <li>➢ 10% from Singapore and Malaysia</li> <li>➢ Steady from Hong Kong and Thailand</li> </ul>	<p>Currently on target.</p>
<ul style="list-style-type: none"> <li>▪ Targeting of high-quality research students to increase UoW standing abroad</li> </ul>	<p>See achievements above. Also extending relations with high quality institutions from India such as Indian Institution of Technology (New Delhi and Mumbai), Anna University (Chennai) and VTU (Bangalore).</p>	<p>Currently on target.</p>
<ul style="list-style-type: none"> <li>▪ Increased in-country marketing liaison and support for agents in non-traditional markets</li> </ul>	<p>20% increase in communication and visits to agents in non-traditional regions.</p> <p>50% increase in communication and visits to agents in the target non-traditional markets (India and Bangladesh); 30% increase in visits to Indonesia in semester 2 over semester 1.</p>	<p>Currently on target.</p>
<ul style="list-style-type: none"> <li>▪ Setting competitive entry levels (academic and English language) in line with institutions that are strong competitors in key markets</li> </ul>	<p>New entry levels developed for students from India and Bangladesh.</p> <p>Slight adjustments made to entry levels for students coming from institutions with articulation arrangements to the Faculty</p>	<p>Currently on target.</p>

	(Singaporean Polytechnics, Malaysian and Hong Kong Colleges, and Thai Universities. Benchmarking with similar universities. Entry levels of Faculty in line with <b>quality</b> Australian Universities in NSW and Victoria.	
<ul style="list-style-type: none"> <li>Increase study abroad-exchange agreements in non-traditional markets</li> </ul>	Agreements increased by 30% in semester 2 over semester 1.	Currently on target.
<b>Increase student quality and numbers at remote and offshore campuses:</b>		
<ul style="list-style-type: none"> <li>Targeted marketing campaign.</li> </ul>	<p><b>For International:</b> Student quality addressed above. Dubai campus student numbers increased by over 30% between Semesters 1 and 2, eg BIST from 160 to 225; BCompSc from 175 to 262.</p> <p><b>For Remote Campuses:</b> Remote campus print media advertisements and attendances at careers markets.</p>	Currently on target.
<b>Redistribute student load within the Faculty:</b>		
<ul style="list-style-type: none"> <li>Targeted marketing</li> </ul>	Problematic Responsibility assignment.	Review responsibility assignment
<ul style="list-style-type: none"> <li>Development of new Maths and Finance Masters Degree</li> </ul>	Approval obtained to commence in 2005.	Complete
<ul style="list-style-type: none"> <li>Increase number of 1+1 contracts for MIT</li> </ul>	Contract signed with Beijing Normal University (China). Discussions underway with Assumption University (Thailand) and Indian Institute of Technology (Chennai).	Complete
<b>Improve quality of student experience:</b>		
<ul style="list-style-type: none"> <li>Increase student retention rates through continuous improvement processes</li> </ul>	<p>SITACS BCompSci (Honours) increase to 7.5 students which represents a 25% increase over 2002.</p> <p>Personal Academic Mentoring (PAM) program continued with three PG students.</p>	Complete
<ul style="list-style-type: none"> <li>Improve student satisfaction levels</li> </ul>	SITACS Help Desk installed in Student Enquiry Centre to provide technical assistance and equipment allocation	Maintain as ongoing strategy now incorporated into 4.1.1 in Part D.
<ul style="list-style-type: none"> <li>Joint initiative with Commerce Faculty to implement a quality assurance process at the Dubai campus focused on</li> </ul>	Overall review of operations and quality of delivery currently in progress. Visit by Dean and International Manager in February 2004 to ascertain level of action	No further action required

improving the interaction between Dubai and UoW teaching staff	required.	
--	-----------	--

### 3.1.2 Milestones, Key Results and Awards for the Year: (max. 200 words, dot points)

- Statistical analysis conducted on 2001 Early Entry program showed that Early Entry applicants obtained a significantly greater UAI in their HSC exams and that, once at Uni, Early Entry students had a significantly greater mark (averaged over all subjects) than non Early Entry students
- New space in building 39 commissioned, including dedicated Honours and PG Coursework labs, however the faculty is still experiencing a severe space shortage.
- Bachelor of Engineering (computer, electrical, and telecommunications engineering) programs, and associated double degree programs, received continuing full accreditation up to, and including the intake of students for the first semester of 2009 from the Institution of Engineers Australia (IEAust).
- Hosting of ACISP 2003, the eighth Australian Conference on Information Security and Privacy during July.
- Bachelor of Mathematical Education commenced at Loftus with 10 students, eight of which successfully completed.
- Bachelor of Mathematics Advanced (Honours) approved to be offered in 2004.
- INFO101 offered at Caringbah High School for first time with two students completing the subject. Ten students expected to enrol in 2004.
- New SECTE Projects Lab for UG students and new PG coursework Projects Lab.
- One-day workshop held by SECTE with 20 High School teachers being introduced to Telecommunications Systems and Engineering, and to Electrical Engineering principles.
- Third Annual Final Year Thesis Presentation Competition (sponsored by the IEE) held at University of Sydney with a SECTE student winning equal third prize.
- Significant publicity gained through the year with several articles appearing in the Illawarra Mercury, eg new Informatics Dean, CompSc graduate in employment, robotic lifesaver project, community web portal project, MDigital Multimedia course, new computers for kids project, and restored computer donation to the Smith Family.
- Informatics courses supplied through Sydney campus promoted at Post Graduate Expo, including developing Sydney Business School-branded materials.
- Informatics courses now promoted on Sydney Business School web page.
- Installation of a SITACS Help Desk in the Student Enquiry Centre to assist with technical support and equipment allocation.
- SITACS offered 21 summer vacation research scholarships.
- Power Engineering 1 students taken on excursions to Integral Energy Substations in Wollongong.
- Re-instatement of the SECTE Annual Sports Day seeing joint Staff and PG Research students opposing UG students in sporting activities followed by a social bbq.
- Faculty web site redeveloped to comply with new UoW template. First faculty to launch new look.
- Faculty workloads completed and published to web in compliance with requirement.
- Early Entry program increased Southern Sydney registrations by 3% in 2003 over 2002.

## 3.2 Research / Internationalisation

### 3.2.1 Review of 2003 Activities and Objectives

Research Objective/s for 2003	Outcomes and Progress Against Objectives*	Is revision of the strategies to achieve these objectives, or improve the outcomes, required?
Research Training		
To increase the number of quality research students, especially domestic students		
<ul style="list-style-type: none"> <li>▪ Create innovative and interesting research marketing material, and targeted advertisements</li> </ul>	Not achieved. <ul style="list-style-type: none"> <li>➢ In 2002, 140 students enrolled (117 Domestic, 23 International)</li> <li>➢ In 2003, 138 students enrolled (115 Domestic, 23 International)</li> </ul>	Faculty will compile a biennial research report.
<ul style="list-style-type: none"> <li>▪ Implement internal advertising campaign and/or mentoring system to target current high-achieving undergraduate and postgraduate coursework students who have the potential for research study</li> </ul>		Remove strategy. Number of honours completions does not correlate significantly with increases in number and quality of research students.
To provide a quality research training experience for current research students	SECTE School Postgraduate Research Committee conducted a survey of facilities available to research students within that school with results to be evaluated in 2004.	
<ul style="list-style-type: none"> <li>▪ Continue to host a lunch for incoming postgraduate research students as part of University Orientation Program for the purpose of providing appropriate research information and an introduction to relevant staff</li> </ul>	Postgraduate orientation session held in conjunction with the Office of Research (OoR) Welcome lunch held for 23 students as part of the orientation session where students were introduced to the Dean Heads of Schools, Sub-Dean, Faculty Librarian, WAC Chair, and respective PG Coordinators. Honours luncheon held by SECTE for potential first-class Honours students with followup emails on availability of scholarships.	Ongoing and incorporated into OoR's orientation sessions.
<ul style="list-style-type: none"> <li>▪ Host annual or biannual Dean's Research Student Dinner to provide a forum for spontaneous feedback and suggestions about the research training experience in the Faculty</li> </ul>	No dinner(s) held thus far due to impending and subsequent departure of incumbent Dean. However, strategy will continue with a dinner planned for end April 2004.	Currently on target.
<ul style="list-style-type: none"> <li>▪ Review and improve online information for research students</li> </ul>	Online information for research students is being continually updated on an ongoing basis.	No further action required

<b>To reduce the number of over-time students and improve completion rates without compromising quality research output</b>		
<ul style="list-style-type: none"> <li>Mentoring of student re efficient work habits, with particular attention to be paid to over-time or 'at risk' students</li> </ul>	SECTE Postgraduate Committee assists supervisors to monitor and identify 'at risk' students with their progress being reviewed.	Policies relating to "Higher Degree Research-Review Guidelines" are before Senate for ratification.
<ul style="list-style-type: none"> <li>Identify over-time or 'at risk' students and appoint a second supervisor (if there is not one currently) to be responsible for initiating corrective action, providing counselling/mentoring and monitoring the student's progress</li> </ul>	All new students are required to have two supervisors. 2004 Postgraduate Research scholarship form changed by OoR to reflect this requirement.	UoW policies now in place to support this strategy.
<b>To ensure that the University Research Graduate Attributes are incorporated into the training of research students</b>		
<ul style="list-style-type: none"> <li>Encourage research students to undertake ILIP900</li> </ul>	No progress to report	Will be incorporated into draft Faculty Research Plan Section 4.2.5 part D
<ul style="list-style-type: none"> <li>Review current research training methods to identify incorporated research graduate attributes, and implement changes if required</li> </ul>	Progress on this strategy is ongoing. For example, TITR is holding a PG training and information day.	Ongoing and now incorporated into 4.1.1 in Part D
<b>To increase the number of quality supervisors</b>		
<ul style="list-style-type: none"> <li>Encourage relevant staff to undertake a PhD and provide support to those currently undertaking a PhD to ensure completion in minimum time</li> </ul>	Recruitment of staff that are research active and have research interests in areas recognised by the Faculty as being strategically important Four staff in SECTE and 12 in SITACS are currently completing PhD qualifications. All SMAS staff have PhDs	Ongoing and incorporated into 4.1.3 Part D
<ul style="list-style-type: none"> <li>Encourage experienced supervisors to engage new and/or inexperienced staff to co-supervise research students</li> </ul>	Junior staff provide support to senior staff in the supervision of students thereby gaining essential experience in the supervision of students.	No revision of strategy necessary. Data needs to be supplied by schools on supervision by Early Career Researchers.
<ul style="list-style-type: none"> <li>Encourage the appointment of a second supervisor from a different or related discipline</li> </ul>	SMAS staff are co-supervising IACT PGR student.	This is rarely possible in the other schools, thus strategy requires revision.

where a supervisor is overloaded		
<b>External Grants and Contracts</b>		
To increase the number of successful quality grant applications (eg ARCs, CRCs, etc)	ARC 2002, 8 successful totalling \$1.05m ARC 2003, 5 successful totalling \$1.96m Dedicated research week(s) to be proclaimed within the Faculty in 2004.	Improved performance noted.
<ul style="list-style-type: none"> <li>Conduct biannual application workshops.</li> </ul>	This is being done centrally. FRC Chair actively encourages Early Career Researchers to attend.	Complete
<ul style="list-style-type: none"> <li>Programs and Institutes to provide assistance with grant applications</li> </ul>		Strategy to be revised to the number of grant applications, not the number of successful ones.
<ul style="list-style-type: none"> <li>Creation of Research timetable or calendar specifying important dates such as when particular grant schemes fall due</li> </ul>	Creation of an online research timetable is ongoing. Creation of a Faculty Research Office, which was designated responsibility for this strategy in the original plan, was placed on hold during the changeover of Deans. An editor will be funded centrally to provide feedback on the additional text section of grant applications. FRC Chair and SCS provide feedback on grant applications at present.	This is considered a low priority but one which should be pursued. To be incorporated into 4.2.5 Part D.
<b>Collaboration and Strategic Alliances</b>		
Facilitation of international and/or inter-institutional research		
<ul style="list-style-type: none"> <li>Invite more visiting international academics</li> </ul>	One successful ARC Linkage-International application. SECTE (TITR) hosted six international visiting fellows.	Revise strategy. Focus should be on creating opportunities for research collaboration rather than just inviting academics.
Increase CRC-based research, especially with new CRCs		
<ul style="list-style-type: none"> <li>By encouragement</li> </ul>	Five new CRC contracts totalling \$0.92m	Ongoing and incorporated into 4.1.3 in Part D
<b>Recruitment, Career Development and Mentoring of Research-active Staff</b>		
To increase the number of research-active staff		
<ul style="list-style-type: none"> <li>Provide assistance with grant applications</li> </ul>	FRC Chair attendance at CDU grant writing workshops. Six out of eight (75%) attendees who applied for UOW-small grants were successful.	Ongoing
<ul style="list-style-type: none"> <li>Provide workshops covering topics such as preparation of journal publications, research techniques, and statistics of research data etc</li> </ul>		Revise strategy to encourage attendance at centrally provided courses.
<ul style="list-style-type: none"> <li>Participation in new staff</li> </ul>	Participation of FRC Chair in new staff	Ongoing

orientation and information sessions	orientation and information sessions. Mentoring and grant-writing assistance provided.	
<b>Support research-active staff</b>	SECTE administrative staff interviewed all academic staff. Areas have been identified where admin staff can assist with academic staff work.	
<ul style="list-style-type: none"> <li>▪ To ensure workloads allow for 30% research time</li> </ul>	Target not achieved due to heavy teaching loads.	To be reviewed in 2004.
<ul style="list-style-type: none"> <li>▪ Implement programs such as teaching buy-outs</li> </ul>		Delete strategy as it is not supported by URC nor the PVC(R).
<b>Research Informing Teaching (the "Research – Teaching Nexus")</b>		
<b>Enhance relationship between teaching and research</b>		
<ul style="list-style-type: none"> <li>▪ Staff to use their own research as integral part of their teaching. Students to be made aware of research activities and the subsequent relationship with their subject/course directions.</li> </ul>		Revise strategy. Need to focus on final year student projects. This is more measurable.
<b>Any other objectives regarding research</b>		
<b>Provide infrastructure support for Research within the Faculty.</b>		
<ul style="list-style-type: none"> <li>▪ Create a Faculty Research Office</li> </ul>	Creation of a Faculty Research Office and appointment of a Research Project Officer was placed on hold during the changeover of Deans. Ongoing. New staff are encouraged to meet with FRC Chair to discuss research in the Faculty.	No action taken as a result of new Research management system instituted by P-VC(R)
<b>Develop a Faculty research culture</b>		
<ul style="list-style-type: none"> <li>▪ Restructure Faculty Research Committee</li> </ul>	Discussions held and strategy is ongoing	See Faculty Research Plan (attachment 2)
<ul style="list-style-type: none"> <li>▪ Develop five-year Strategic Research Plan</li> </ul>	Discussions held and strategy is ongoing.	See Faculty Research Plan (attachment 2)
<b>Raise profile and quality of Faculty's research output.</b>		
<ul style="list-style-type: none"> <li>▪ Creation of a new Faculty Research Web site</li> </ul>	Faculty's web site was redesigned to align with the new UoW guidelines incorporating a new Research web site. Additionally, Faculty profile raised both nationally and internationally through articles in two prestigious publications: <i>American Australia Business</i> (an American Chamber of Commerce publication support by the Australian Federal Government) and <i>EDGE: Directions in ICT 2003–2004</i> , an inaugural publication which is the authoritative annual outlook publication for Australia's ICT	Complete

	industry, supported and launched by Senator Richard Alston (Minister for Communications) and the AIIA. Strategy is ongoing.	
<ul style="list-style-type: none"> <li>▪ Establishment of a web-based Faculty Research Database</li> </ul>	Creation of a web-based research database is ongoing	Funding needs to be secured
<ul style="list-style-type: none"> <li>▪ Review development and implementation of research policies and procedures within the Faculty</li> </ul>	Review of research policies and procedures within the Faculty is ongoing	See Faculty Research Plan (attachment 2)
<ul style="list-style-type: none"> <li>▪ Incorporation of Research Report into Faculty's Annual Report</li> </ul>	Faculty research publication planned. Permission needs to be sought from PVC(R).	Revised to production of bi-ennial Research Report (see 4.2.5 Part D)
<ul style="list-style-type: none"> <li>▪ Benchmark research performance against other high-calibre tertiary institutions</li> </ul>	Discussions held and strategy is ongoing.	Current and will be performed every 3–5 years.

### 3.2.2 Milestones, Key Results and Awards for the Year: *(max. 200 words, dot points)*

- Informatics Faculty becomes the number one faculty in terms of publication output – 199 DEST publications.
- Fifteen HDR student completions (9 PhD and 6 Masters).
- Five Competitive grant applications totalling \$1.96M. Double the 2002 \$ value.
- Prestigious ARC Australian Professorial Fellow awarded to Prof Hill totalling \$1.13M over 5 years.
- Five successful CRC research applications.
- Faculty successfully recruited two significant research groups as a result of the closure of Motorola Australia Research Centre (MARC). One group (composed of 5 staff) is in the area of ultra wideband wireless and mesh networking and the other. The other group (composed of 4 staff) is in the area of multimedia content management
- One hundred and thirty-eight HDR students enrolled (115 Domestic, 23 International).
- Additionally, Faculty profile raised both nationally and internationally through articles in two prestigious publications: American Australia Business (an American Chamber of Commerce publication support by the Australian Federal Government) and EDGE: Directions in ICT 2003–2004, an inaugural publication which is the authoritative annual outlook publication for Australia's ICT industry, supported and launched by Senator Richard Alston (Minister for Communications) and the AIIA.
- MPEG – ISOSC29WG11 meeting held on the Gold Coast in October with over 240 delegates attending.
- Faculty provided infrastructure support for two workshops in The Internet, Telecommunications and Signal Processing held.
- Power Quality Centre gained First Prize Paper at the Annual ESAA Conference.
- Faculty received a donation worth some \$5 million of photonics equipment to set up a state of the art laboratory in this area.
- One spin-off technology company based on MPEG-21 research (enikos).

## 3.3 Community Engagement

### 3.3.1 Review of 2003 Activities and Objectives

Community Engagement Objective/s for 2002	Outcomes and Progress Against Objectives*	Is revision of the strategies to achieve these objectives, or improve the outcomes, required?
<i>Briefly, what were your objectives as stated in your last plan.</i>	<i>Can you demonstrate progress towards your objectives? Please give brief details.</i>	<i>(It is also possible that an objective is not long appropriate or has been achieved)</i>
This section is an addition to this year's plan consequently no specific objective was set.		Faculty continued to interact at all levels of the community.

\*In addition to **identifying** outcomes, include how you assessed the **quality of the outcomes** against your objectives; Quality of outcomes will inform your decision to continue, revise or remove strategies in order to meet your objectives).

### 3.3.2 Milestones, Key Results and Awards for the Year: (max. 200 words, dot points)

- Maintenance and growth of the Early Entry program.
- Faculty an Associate Member of the Australian Mathematical Sciences Institute.
- Workshop held for High School teachers who teach Industrial Arts for the HSC to orient them to Telecommunications in relation to the strand offered in Industrial Arts.
- Faculty High School Enrichment program conducted.
- Year 10 Maths Prize awarded with staff attending all High School presentation ceremonies.
- Faculty staff actively participate in the High School visiting academics program run by UniAdvice.
- Faculty staff actively participate in the annual High School Career Advisors' luncheon.
- Faculty a member of The Illawarra Connection with staff attendance at every function.
- E-health links with local health care providers, the Illawarra Health Service, the Illawarra Division of General Practice, and State and Federal Health portfolios. International links also initiated, in conjunction with INTI Sarawak, through research under the auspices of Malaysia's multi-media super corridor (MSC) initiative.
- Statistical advice provided to Illawarra Health Service.
- Faculty manages the University's membership of the ac3 High Performance Computing Consortium.

# PART D

## 4 Faculty Planning for Core Business Activities – Forward Planning

### 4.1 Learning and Teaching

*The following areas correspond to the Learning and Teaching Strategic Plan and Draft Internationalisation Strategic Plan.*

*Please refer to the Reporting Guide for clarification of each section*

<b>Objective/s*</b> <i>(What do you intend to do?)</i>	<b>Strategy/ies</b> <i>(How do you intend to achieve this?)</i>	<b>How do you intend to measure / review progress</b>	<b>Identify and Constraints / "Roadblocks"</b>
<b>4.1.1 Student Learning</b>			
Provide an effective educational experience for all of our students that will produce high quality graduates	<ul style="list-style-type: none"> <li>Identify and implement teaching mechanisms to motivate and enthuse students towards higher performance</li> <li>Identify and analyse incoming student strengths and weaknesses with a view to developing mechanisms and strategies to leverage on strengths and developing weaknesses</li> <li>Explore the benefits of first year being more foundation-based subjects</li> <li>Identify minimum core competencies at the completion of each subject to ensure adequate progression to the next level</li> <li>Develop more effective student progress monitoring and support</li> </ul>	<ul style="list-style-type: none"> <li>Reduce current levels of failure rates across the faculty in 1<sup>st</sup> and 2<sup>nd</sup> year by 25% whilst maintaining defined standards (measure: no. of students only failing one or two subjects through the course of their study)</li> </ul> <p><b>Responsibility:</b> FEC and SECs</p>	<ul style="list-style-type: none"> <li>Staff to student ratios</li> <li>Cross faculty information systems need to support monitoring system</li> <li>Targeting resources to get better results</li> </ul>

	<p>systems (including early warning system to activate remedial action)</p> <ul style="list-style-type: none"> <li>• Develop accurate failure rate baseline data</li> </ul>		
Establish, within each School/discipline, core graduate attributes in addition to UoW level core attributes	<ul style="list-style-type: none"> <li>• Identify essential discipline-based core graduate attributes</li> <li>• Integrate these in an holistic manner into educational outcomes</li> </ul>	<p>Articulated graduate attributes for each discipline within the faculty</p> <p><b>Responsibility:</b> Heads of School (HoS)</p>	Lack of consensus
Improve quality of student intake	<ul style="list-style-type: none"> <li>• Establish a faculty-wide Dean's Scholars Program</li> <li>• Review TAFE articulation arrangements</li> </ul>	<ul style="list-style-type: none"> <li>• Dean's Scholars program developed and implemented</li> </ul> <p><b>Responsibility:</b> Dean, Sub-Dean, FEC, and HoS</p>	Lack of consensus
<b>4.1.2 Program Development</b>			
Update and integrate course offerings to reflect the state of the art, in terms of the discipline/s, with a clear focus on key national and (where appropriate) international industry and social sector needs	<ul style="list-style-type: none"> <li>• Review existing offerings every 4 to 5 years depending on the discipline</li> <li>• Monitor trends and changes in industry and society needs</li> <li>• Develop and implement a master plan for changing each course offering</li> <li>• Develop curriculum into modules that can be taught in a variety of levels and settings</li> </ul>	<ul style="list-style-type: none"> <li>• Independent external review and endorsement of proposed changes to major course offerings</li> <li>• Successful implementation and delivery</li> </ul> <p><b>Responsibility:</b> FEC, SEC and International Office</p>	Staff time constraints; need to be identified in workloads model and be included in probation and promotion criteria
Develop new software Engineering Degree	<ul style="list-style-type: none"> <li>• Develop new syllabus for a Software Engineering degree in SITACS</li> <li>• Bench mark with top international institutional offerings</li> </ul>	<ul style="list-style-type: none"> <li>• Independent external review and endorsement of proposed changes to major course offerings</li> <li>• Successful implementation and delivery</li> </ul> <p><b>Responsibility:</b> HoS SITACS</p>	
<b>4.1.3 Staff</b>			
Encourage and facilitate staff participation in strategic personal development programs to	<ul style="list-style-type: none"> <li>• Identify staff needs during annual performance reviews</li> <li>• Give credit for actions</li> </ul>	<ul style="list-style-type: none"> <li>• Student satisfaction assessment</li> <li>• Number of staff peer reviewed</li> </ul>	Faculty will need to set up a competitive staff development fund

improve communication/teaching skills	undertaken to improve performance/self <ul style="list-style-type: none"> <li>Identify appropriate development programs for specific individuals</li> <li>Establish active career development program/s for staff</li> <li>Establish peer mentoring network</li> <li>Peer review</li> </ul>	Responsibility: HoS	
<b>4.1.4 Any other objectives regarding learning and teaching</b>			
Ensure that all eligible course offerings within the Faculty are accredited by relevant accreditation body including possibly international accreditation	<ul style="list-style-type: none"> <li>Identify which courses need to be accredited</li> <li>Initiate accreditation process plan</li> </ul>	<ul style="list-style-type: none"> <li>Successful accreditation outcome</li> </ul> Responsibility: HoS	

## 4.2 RESEARCH

THIS SECTION IS UNDER REVIEW BY PVC(R); TO BE CONFIRMED

*The following areas correspond to the Draft Research Management Strategic Plan and Draft Internationalisation Strategic Plan.*

*Please refer to the Reporting Guide for clarification of each section*

<b>Objective/s*</b> <i>(What do you intend to do?)</i>	<b>Strategy/ies</b> <i>(How do you intend to achieve this?)</i>	<b>How do you intend to measure / review progress</b>	<b>Identify and Constraints / "Roadblocks"</b>
<b>4.2.1 Research Student Training</b>			
Attract high calibre P/G students and improve their research productivity, and performance and completion rates	<ul style="list-style-type: none"> <li>Proactively identify and attract quality students both internal and external</li> <li>Create a strong high performance research culture amongst the research student body</li> <li>Identify appropriate skillset required by student to undertake</li> </ul>	<ul style="list-style-type: none"> <li>Increase rate of student based quality publications by 10%</li> <li>70% of all P/G research students to complete in prescribed time</li> </ul> Responsibility: FRC and Academic supervisors	<ul style="list-style-type: none"> <li>Scholarships</li> <li>Facilities for PG students</li> <li>Space</li> </ul>

	<p>research and provide appropriate training</p> <ul style="list-style-type: none"> <li>• Reward high achievers and profile them as role models</li> <li>• Develop more ambitious yearly student research goals and milestones – and stick to them</li> <li>• Develop more thorough due diligence in terms of enrolment and review procedures</li> <li>• Ensure good level of supervision – each student should have two supervisors</li> </ul>		
<b>4.2.2 Grants, Contracts, Collaboration and Strategic Alliances</b>			
Increase dollar-level of competitive funding from ARC, CRC, other funding agencies, and industry sources	<ul style="list-style-type: none"> <li>• Develop an early strategy for developing ARC grant proposals (set aside two research only weeks per annum during session breaks)</li> <li>• Senior Staff to mentor and assist junior staff in developing competitive research grant proposals</li> <li>• Develop a faculty wide plan to identify and explore deeper industry linkages for the purpose of attracting funding</li> </ul>	<ul style="list-style-type: none"> <li>• Increase level of external research funding by 15%</li> </ul> <p><b>Responsibility:</b> Associate Dean (Research)</p>	Increasing competitive environment.
Develop and take part in high profile external collaborative R&D partnerships	<ul style="list-style-type: none"> <li>• Participate in current round of CRC bidding</li> <li>• Explore participation in an ARC funded centre of excellence and research networks</li> </ul>	<ul style="list-style-type: none"> <li>• Participate in at least one successful new CRC as a core partner</li> <li>• Participate in one ARC centre of excellence</li> </ul> <p><b>Responsibility:</b> Institute Director, Associate Dean (Research)</p>	<ul style="list-style-type: none"> <li>• Identifying external partners and gaining commitment</li> <li>• Having the capacity to participate</li> </ul>
<b>4.2.3 Research strengths and multidisciplinary research excellence</b>			
Develop a long term research strength strategy for the Faculty	<ul style="list-style-type: none"> <li>• Identify key staff and groups within the Faculty and in other groups in the University</li> </ul>	<ul style="list-style-type: none"> <li>• Establish at least one new Institute in the Faculty during 2005</li> </ul>	<ul style="list-style-type: none"> <li>• Gaining consensus within Faculty</li> <li>• URC acceptance</li> </ul>

	<ul style="list-style-type: none"> <li>Recruit where possible into the identified future strength</li> <li>Establish the essential criteria for evolving into a research strength in concert with PVC (R)</li> <li>Ensure that each School participates in at least one research strength</li> </ul>	<b>Responsibility:</b> Dean and Associate Dean (Research)	
<b>4.2.4 Research Informing Teaching (the “Research – Teaching Nexus”)</b>			
Research-only staff to be strategically involved with honours teaching program	Review opportunities for such teaching, such as research-only staff identified to thesis subject coordinator for inclusion into supervision list	Number of research-only staff teaching such programs <b>Responsibility:</b> HoS, and Research Supervisors	Cooperation between HoS and Research supervisors
Ensure that 85% of Academic staff are research active	Ensure priority allocated in career development interview/plan	Percentile achieved <b>Responsibility:</b> HoS, and Research Directors	Workloads, level of research skills
<b>4.2.5 Any other objectives regarding research</b>			
Develop an effective faculty-wide research management and funding plan in collaboration with URC	Draft Plan	Plan developed and implemented <b>Responsibility:</b> Chair FRC, Associate Dean (Research)	Aligning plan with URC
Develop and implement an R&D incubation commercialisation plan within the Innovation campus	Research and draft plan	Plan researched and developed <b>Responsibility:</b> Associate Dean (Research), Research Directors and FRC Chair	Resource support, research partner identification and commitment
Establish criteria to ensure study leave is effective (undertaken as prescribed)	Improve study leave planning	<ul style="list-style-type: none"> <li>Number of staff taking study leave as scheduled and as identified in workload documents</li> <li>Study leave output</li> </ul> <b>Responsibility:</b> HoS	Availability of Study Leave Assistance Grant (SLAG)
Produce bi-ennial Faculty Research Report	<ul style="list-style-type: none"> <li>Identify and collate data on research activities</li> <li>Compile and edit into report</li> </ul>	<ul style="list-style-type: none"> <li>Databases constructed</li> <li>Faculty Research Report produced</li> </ul> <b>Responsibility:</b> Associate Dean (Research), Chair FRC	Resources

## 5 Fostering Community Engagement

Do you have any community engagement objectives?

<b>Objective/s*</b> <i>(What do you intend to do?)</i>	<b>Strategy/ies</b> <i>(How do you intend to achieve this?)</i>	<b>How do you intend to measure /review progress</b>	<b>Identify and Constraints / "Roadblocks"</b>
Quarterly research seminar for local industry	Faculty to explore local events to provide an opportunity to profile Faculty research activities	Seminar series established and number of seminars held <b>Responsibility:</b> Associate Dean (Research), Chair FRC, Research Directors	Resources, industry involvement
Establish a leading role in the development of the Innovation Campus	Identify suitable industry partners Develop relationships. Establish collaborative research endeavours	List of potential participants in Innovation Campus <b>Responsibility:</b> Dean, Research Directors, Association Dean (Research), Chair FRC, HoS	Resources, industry involvement

## 6 Communication Strategy

*It is important that staff within the faculty are aware of the Faculty Planning and Resource Report, and particularly the Faculty's direction, objectives and strategies for achieving them.*

**a) Briefly outline the consultation process undertaken in the development of this Plan (ie encouraging staff involvement and input)**

1. Review of previous plan objectives by all stake holders.
2. A working group (including, HoS's, Chairs of FEC and FRC, Sub Dean, Faculty Executive Officer International Manager and Dean) was formed to carry out a SWOT analysis of each School as well as the international off shore programs.
3. The SWOT analysis was used to identify a series of key objectives and priorities within the Faculty culminating in the development of a draft planning and resource report.

**b) Briefly outline how you intend to communicate this Plan (particularly Faculty objectives) to staff and students**

1. Draft Resource and planning document was presented to the Faculty staff and student representative group for comment and input before final version completed.
2. Plan to be incorporated onto Faculty web page with hyperlink emailed to all staff and students.
3. Plan to be overviewed during Faculty student representatives orientation.

## 10 Student Profile: Actual and Projected

- Please indicate projected targets for 2007, and if possible, 2008. Note any alterations to existing projections.
- NB. In determining the University-wide student profile, some minor changes have been made to individual faculty projections for domestic undergraduate load.

### Student Profile as a % of Total Faculty Load

	2000 (%)	2001 (%)	2002 (%)	2003 (%)	2004 (%)	2005 (%)	2006 (%)	2007 (%)	2008 (%)
Domestic	67	59	51	49%	54	53	52		
International	33	41	49	51%	46*	47*	48*		
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>		
<b>Domestic:</b>									
Undergraduate	93	92	90	90%	91	90	90		
Research	5	5	7	7%	7	8	8		
Coursework HECS	1	1	1	0%	1	1	1		
Coursework Full-Fee	0.8	2	2	2%	1	1	1		
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>		
<b>International On-shore</b>									
Undergraduate	59	40	48	52%	56	57	58		
Research	5	6	3	4%	4	4	4		
Coursework	37	49	49	44%	39	38	37		
NA			3	0%	1	1	1		
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>		
<b>International Off-shore</b>									
Undergraduate		95	85	82%	84	84	84		
Research		0	0	0%	1	1	1		
Coursework		5	15	18%	15	15	15		
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>		

(\* Percentage increase in international numbers is predicted only for off-shore international students. Faculty intends to maintain the current on-shore split of domestic to international constant at 64:36%)

### Student Profile in Terms of Faculty EFTSU

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Domestic	1061	1187	1293	1247	1389	1390	1390	1400	1410
International	519	818	1262	1291	1175	1225	1275	1372	1469
<b>TOTAL</b>	<b>1580</b>	<b>2005</b>	<b>2555</b>	<b>2538</b>	<b>2564</b>	<b>2615</b>	<b>2665</b>	<b>2772</b>	<b>2879</b>
<b>Domestic</b>									
Undergraduate	989	1088	1165.4	1126	1265	1252	1252	1254	1256
Research	51	58	89	92	96.3	110	110	117	125
Coursework HECS	12	12	10.9	5	13.7	13.8	13.8	8	5
Coursework Full-Fee	8.6	29	27.8	24	13.7	13.7	13.7	19	24
<b>TOTAL</b>	<b>1061</b>	<b>1187</b>	<b>1293.1</b>	<b>1247</b>	<b>1389</b>	<b>1390</b>	<b>1390</b>	<b>1398</b>	<b>1410</b>
<b>International On-shore</b>									
Undergraduate		237	386.5	402	434	441.75	449.5	455	480
Research		33	28.4	28	31	31	31	36	41
Coursework		330	413.6	347	302.25	294.5	286.75	333	380
NA			14.9	0	7.75	7.75	7.75	8.25	9
<b>TOTAL</b>		<b>600</b>	<b>843.4</b>	<b>777</b>	<b>775</b>	<b>775</b>	<b>775</b>	<b>832.25</b>	<b>910</b>
<b>International Off-shore</b>									
Undergraduate		207	354.4	412	336	378	420	435	450
Research		0	0	1	4	4.5	5	7	9
Coursework		11	64.3	92	60	67.5	75	87.5	100
<b>TOTAL</b>		<b>218</b>	<b>418.7</b>	<b>505</b>	<b>440</b>	<b>460</b>	<b>500</b>	<b>529.5</b>	<b>559</b>

Taking into account your vision and direction, review the tables above and consider how you are going against the projections.

- Do your projections need to be changed, or do you need to develop (marketing) strategies for reducing / maintaining / increasing components of the student profile?
- If you change your projections, what are the implications for resourcing?
- Have you identified specific objectives relating to your projected student profile? (*complete the table provided below*)

<b>Objective/s*</b> <i>(What do you intend to do?)</i>	<b>Strategy/ies</b> <i>(How do you intend to achieve this?)</i>	<b>How do you intend to measure / review progress</b>	<b>Identify and Constraints / "Roadblocks"</b>
Increase number of domestic research students	As per strategies identified in 4.2.1	See 4.2.1	See 4.2.1
Increase number of onshore international postgraduate students	Identifying specific postgraduate programs to target Targeted marketing programs in identified locations Increased strategic alliances Product graduate testimonials	Increased numbers of students enrolled within specified degrees	<ul style="list-style-type: none"> <li>• Government changes to education policies and skilled migration criteria</li> <li>• Competition from other Universities, both national and international</li> <li>• Disease and political unrest in target markets</li> </ul>

## 11 Staffing Issues: Human Resource Management; Staff Development (excluding academic training); OH&S; EEO

<b>Objective/s*</b> <i>(What do you intend to do?)</i>	<b>Strategy/ies</b> <i>(How do you intend to achieve this?)</i>	<b>How do you intend to measure progress</b>	<b>Identify and Constraints / "Roadblocks"</b>
Establish career development mentoring for junior academic staff	Identify mentoring requirements during career development interview	Number of junior academic staff with designated mentor <b>Responsibility:</b> HoS	
Develop an inclusive culture for research only staff	Consultation with research-only staff Clarify roles and opportunities for greater involvement of research-only staff Review progress	Feedback from research-only staff as identified through review process <b>Responsibility:</b> Associate Dean (Research) / HoS	Existing culture Enterprise Agreement
Review teaching allocation for 1 <sup>st</sup> year across the	Formation of a working party to assess association	Findings of the working party	Resources

faculty to ensure that junior or inexperienced staff are not used inappropriately	between seniority and level of subjects taught	<b>Responsibility:</b> FEC and SECs	
	Run a yearly workshop to identify any EEO issue within the Faculty	Workshop implemented	Resources
Maintain and effective Workplace Advisory Committee (WAC)	Ensure faculty-wide representation academic, general and technical staff	Six quorate meetings held during year	Resources
Institute procedures for the safe design and use of in-house Designed Student Projects	Safety Inspection and Responsibility of In-house Designed Student Projects and Equipment be created as an addendum to the Safety Induction Checklist	Procedures created and implemented	Resources

### 11.1 Milestones for 2003

Objective to raise awareness of OH&S policies and practices through the development of communication mechanisms achieved:

- OH&S Checklist generated and implemented for new staff to be completed as part of Faculty orientation process. (Also applied to existing staff.)
- OH&S noticeboards installed in all Faculty buildings containing WAC minutes and other OH&S material.
- First Aid Officer and Fire Warden lists constructed and displayed in all Faculty buildings.
- First Aid Officers' doors affixed with First Aid symbols.

## 12 Resource Planning: Implications for Administrative and Support Units

Based on the objectives identified throughout this report (ie action plans for 2004 and beyond), what are the implications (if any) for:

- **Library requirements**  
Ongoing discussions with the Library through the medium of the Faculty Librarian and the Faculty's Library Committee, forecasting requirements in an appropriate timeframe.  
Faculty Librarian also attends the Faculty weekly as part of an outreach program to ensure greater accessibility to staff and students.
- **IT requirements**  
As the Faculty is looking at consolidating student numbers, the Faculty's IT requirements are forecast and met by ensuring currency of existing systems through the established four-year rolling plan. This plan ensures that most IT equipment is less than three years of age.
- **CEDIR (eg support required)**  
As the Faculty expands its off-shore student numbers, there will be a greater reliance on CEDIR to provide resources to support flexible delivery modes.

- **Administrative units**  
Well co-ordinated enrolment and administrative services to ensure off-shore students received the same quality of service as on-shore students.

To achieve our objectives, the Faculty requires greater assistance from UniAdvice, to instance with targeted marketing campaigns which rely on relevant, specific and timely data.

The Faculty's International Office structure will be examined as it adopts a larger management role of off-shore partnerships.

- **Other capital and equipment**  
Space is a critical issue for the Faculty.