

INFORMATICS FACULTY PLAN (2008–2009)

THIRD PROGRESS REPORT

SUMMARY OF PROGRESS AGAINST OBJECTIVES

HIGHLIGHTS

- SECTE successfully held its second annual High School Challenge and established the Women in Engineering Summit.
- SCSSE Computing Club began this year. It has been successful with 4 events held to date.
- SCSSE students attended and participated in a Game Development competition in Brisbane; airfares and accommodation were sponsored by the School. The students enjoyed the experience.
- Various new scholarships established within the Faculty, notably the Tibra Capital undergraduate scholarships in SMAS.
- 45 offers made during the IDP Roadshow in India.
- MOU for Study Abroad signed with Nanyang Technical University in June 2008 and 1 application received for B Eng (Computer Eng). Articulation agreement of 3+1 into Bachelor of Engineering (Electrical) signed with UniKL.
- In 2008, Faculty staff were awarded 3 ARC linkage grants, 4 Discovery grants, and a number of research contracts.

PART 2: PLANNING AND REVIEW – CORE ACTIVITIES

2.1 Student Profile

2.1.2 Faculty Strategies addressing UOW Objectives

Recruitment – domestic

1. Develop a strategic multi-faceted Faculty marketing plan to increase market share of HSC first preferences.
2. Attract undergraduate and postgraduate students by establishing school-based Marketing Committees to complement the work of the Faculty Marketing Committee.
3. Other strategies include:
 - Developing a Dean's Scholars Program
 - Restructure the BIST course
 - Initiating competition for Yrs.9 and 10 High School students focused on Electrical Engineering
 - Establishing new high-level and work-integrated scholarships to attract high-calibre students
 - Enhance the effectiveness and quality of School websites
 - Review and broaden u/g and p/g offerings in new School (SISAT)
 - Exploring delivery of p/g coursework subjects as short courses

Progress:

- Information evenings were attended by staff during August and September.
- The Honeywell Engineering Summer School hosted by Engineers Australia is scheduled for 10 December 2008. This event is coordinated in cooperation with the Faculty of Engineering and it is expected approximately 100 students will attend on the day.
- Staff from SECTE visited 10 of the 13 schools that participated in the High School Challenge. During these visits staff distributed certificates of participation to those students that were involved in the High School Challenge during assemblies (most of which had the full school in attendance).

Staff used the opportunity to promote involvement in the 2009 Challenge and other SECTE activities including Early Entry, Women in Engineering Summit etc.

- SECTE Work Integrated scholarships funded by the following organisations: CSC, Joy Mining Machinery, Australia Power Institute, Telstra, Tyree Industries and Defence Materiel Organisation have been offered. The Scholarships website continues to publicise scholarship details as they become available.
- A reduced core for the BIS/BIT was identified to allow double majors in the BIT. The School is exploring the possibility of adding two majors to the BIS (still in the early stages of discussion).
- A review of existing postgraduate SISAT degrees was conducted with a view to significantly reducing the number of degrees. This is still under consideration.
- Amendments to Masters courses offered by the Faculty are being developed to address changes to rules for full time study.
- The Deputy Head of SMAS, Associate Professor Jacqui Ramagge, has provided a strong role model for high-school students on her recent school visits.

Recruitment – international

1. Produce marketing materials for Planet India road show and promoting Faculty in targeted Indian cities with greatest potential for IT students
2. Attend Beijing CIEET road show and conduct agent training
3. Translate targeted marketing materials into Mandarin and development and launch of multilingual web pages
4. Consolidate high level offshore partnerships in China
5. Develop strategies for expansion into Vietnam and South Korea
6. Explore opportunities with identified institutes and high schools in China to create pathways for undergraduate programs.
7. Diversify into other International markets

Progress:

- 45 offers made during IDP Roadshow in India. Two agencies visited in Bangalore, one in Hyderabad, one agency (Edwise) visited in Mumbai and presentation to KC College on IT and Engineering.
- Master of Computer Science & MICT have experienced drop in Chinese student numbers; these are mostly online applicants and not students who apply through agents.
- All Faculty degree brochures updated and a new, easily identifiable format created - awaiting decision on 2-year fulltime 96 credit point issue before finalisation.
- Individual PowerPoint presentations on all four Schools have been created. The SECTE presentation was given to UniAdvice to advise staff of new PG degree offerings (Master of Technology Engineering and new majors in M Eng studies). PG degrees to be revised in light of 96 credit point ruling.
- Graduate Diploma in Computer Science (Digital Systems Security) introduced in 4th Session 2008, at SIM; currently 7 students have applied.
- Progression of online enrolment at SIM is planned to take place 18-20 December in conjunction with the presentation given by the newly appointed Transnational Library Support Officer for offshore partners.
- MOU for Study Abroad signed with Nanyang Technical University in June 2008 and 1 application received for B Eng (Computer Eng).
- Trip to China postponed on UniAdvice's recommendation due to its new staff and training requirements.
- Visit of UniKL, Malaysian Consulate representatives and Cyberlynx student agent to UOW. Articulation agreement of 3+1 into Bachelor of Engineering (Electrical) signed with UniKL.
- Sept IDP Roadshow Singapore: 4 offers made; 1 PhD in Johor Bahru, Malaysia, 2 agents visited in Johor B (IDP & Edwise).

- Agent briefing to visiting Malaysian agent Mabel Tan from E& M Education Counselling Centre, KL.
- Indonesia: Binus responded that revised advanced standing would not be attractive to articulating students. Head of School to advise whether Binus students can offer more specified credit or allow students to study pre- as co-requisite subjects to solve issue.
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Access by equity groups

- In non-traditional areas, increase female students by:
 - reviewing course structures to make them more inviting to females
 - developing marketing materials targeted at females
- Improve access, participation, retention and completion rates among student equity groups

Progress:

- The Engineering Summit for Young Women is well underway. Sponsorship of this event has come largely from the RTA as well as RailCorp, BlueScope Steel and a number of significant others. Advertising and expressions of interest to participate in this event are currently open and due to close at the end of October.
- Dr Montse Ros was invited to a career day at one of the Local Girls High Schools in September.

2.1.3 Additional Faculty Objectives

Attract and retain undergraduate and postgraduate students, both domestically and internationally

Increase quality of postgraduate supervision in SCSSE

Progress:

No further action required.

2.2 Learning and Teaching

2.2.2 Faculty Strategies addressing UOW Objectives

Development of graduate attributes (note this item now renamed by UOW to graduate qualities)

1. Review all SISAT current and proposed courses to satisfy graduate attributes and accreditation requirements
2. Improve learning outcomes and pass rates in subjects with high failure rates through QUALITY101
3. Integrate academic and information literacy, language and learning support into curricula

Progress:

- SISAT have completed the mapping of new graduate qualities to subjects and have abandoned the use of Equella as a meta-data repository because a) equella is no longer supported and b) its functionality was too limited. Instead the School has developed its own Total Curriculum Management System (TCMS). This was used successfully to complete the ACS accreditation application. The next module in the TCMS is being built and will be used in 2009 to manage graduate qualities.

Quality teaching programs including course development and review

1. Review structure and effectiveness of SECTE p/g courses by:
 - internally reviewing the structure and content of the MIT
 - reviewing the effectiveness of the new Master of Engineering Studies introduced in 2006
2. Review subject delivery in each session and address abnormalities in student achievement and satisfaction by:
 - ensuring Subject Review form completed for each subject in every session
 - examining delivery of subjects with low student satisfaction rates
3. Review all SCSSE subject offerings (both u/g and p/g) with a view to rationalisation

4. Develop new syllabus for Master of Software Engineering and benchmark with top international offerings
5. Review all u/g SISAT degree structures including:
 - conducting surveys of graduate satisfaction
 - identifying strengths and weaknesses in existing courses from both IS and IT
 - removing non-viable courses
 - redesigning existing courses to provide a high quality learning outcome
6. Conduct reviews of all SMAS courses over the next five years
7. Ensure Faculty compliance with the University's new Quality Review Framework
8. Develop a Dean's Scholars Program across Faculty courses

Progress:

- The MIT has been approved for deletion from 2009. Subjects will continue to be offered for those students that are currently enrolled in this program. The Graduate Diploma and Master of Technology Engineering have been approved and included in the University's 2009 Handbook. The revisions of the MEng Studies and MEngStudies (Double Major) have also been approved and the Handbook entries for 2009 subsequently updated.
- The review of ECTE457 is continuing and it is anticipated that this will be resolved by the year's end. Reviews of ECTE363/364 and 365 have been completed and the sessions of offer for ECTE363 and ECTE364 have been adjusted. The revisions to ECTE906 and ECTE955 have been completed. ECTE906 changes have been approved by FEC and a major course change proposal is due to be submitted to the next FEC meeting.
- SCSSE subject offerings review complete.
- Investigation into the Master of Software Engineering complete.
- The Faculty developed a 5-year schedule for subject evaluations. Subjects which scored poorly on the evaluation this year are being targeted for redesign.
- The programming/development theme in SISAT undergraduate offerings has been identified as a possible area for improvement. Details of possible changes will be developed within three months.
- BMathFin review and changes now completed; BMathEcon deleted from 2009. Major changes to SMAS Masters degrees proposed for 2009.
- Concept proposals under discussion (for introduction in 2010) to review of each Schools' Masters offerings in line with the 96 credit point ruling by DIAC, affecting course registrations on CRICOS.

Student support

1. Reinstate SCSSE mentoring scheme for "at risk" first-year undergraduate students
2. Review the transition in and through first year Mathematics subjects by:
 - developing procedures to identify and help weak students as early as possible
 - developing strategies to engage students at all levels of ability
 - conducting reviews of first year subjects concentrating on assessment as well as curriculum
3. Develop repositories of SMAS subject materials accessible by web interface

Progress:

- Year forums have successfully been conducted for Years 1, 2, 3, Mechatronics and Postgraduate Coursework students. The forums have continued to be a useful tool for identify issues both positive and negative that have been encountered by SECTE students. The forum responses are reviewed by the School Education Committee and improvement recommendations are currently under development and in some instances implementation. The appointment of School Academic Advisers has been positively received by the students and will continue to be used throughout the 2009 Academic Year.
- Major changes are being implemented for 2009, involving first year engineering mathematics. Second year engineering mathematics to be reviewed in 2009.
- Web repositories of subject materials becoming standard practice in SMAS.

Support for quality teaching

Develop processes to encourage and assist academic staff to apply for competitive grants in the area of quality teaching and learning

Progress:

No change to first Progress Report

INTERNATIONAL LINKAGES AND ACTIVITIES***Offshore teaching programs***

Evaluate offering proposed Dean's Scholars Program to offshore courses

Progress:

Evaluating complete and recommendation submitted to Faculty for approval.

2.2.3 Additional Faculty Objectives***Seek accreditation of SMAS courses where appropriate***

1. Determine appropriate financial bodies to provide accreditation for the Finance courses
2. Investigate articulation into p/g Actuarial courses offered at other Universities

Progress:

Accreditation of SMAS courses by the Statistical Society of Australia is an objective for 2010.

2.3 Research**2.3.2 Faculty Strategies addressing UOW Objectives*****Research income***

Increase the level of external funding from national competitive grants, industry and other funding sources by:

- developing an early strategy for developing ARC grant proposals
- identifying funding opportunities and disseminating information
- senior staff assisting junior staff with developing competitive research grant proposals

Progress:

- Prof. Jim Hill and Dr. Barry Cox Awarded \$610,000 ARC Discovery Grant.
- Dr. Aidan Sims awarded a \$186,000 ARC Discovery Grant
- Prof. Salim Bouzardoum awarded a \$43,000 ARC Linkage International Fellowship.
- Dr. Aidan Sims and Assoc. Prof. Jacqui Ramagge both received an ARC discovery grant with other institutions.
- In 2008, Faculty staff were awarded 3 ARC linkage grants, 4 Discovery grants, and a number of research contracts..

Develop and take part in high profile external collaborative R&D partnerships

Explore participation in an ARC-funded centre of excellence and research network

Progress:

- This is on-going.

Research student training

Enhance the quality of higher degree research student scholarship and training by:

- actively identifying and attracting quality students both internally and externally
- creating strong high-performance research culture
- rewarding high achievers and profiling them as role models

Progress:

- Five new PhD scholarships have been established by Smart Services CRC.

Quality of outcomes

Produce a substantial amount of high quality and high impact research by:

- developing measures of research quality and impact
- identifying mechanisms to support and promote high quality research and ways of making an impact
- reviewing the elements that contribute to groups in other institutions being acknowledged as high impact

Progress:

- In 2007 and 2008, the Faculty produced the highest number of peer reviewed (DEST category) publications in the University.

Partnerships and commercialisation

1. Develop and take part in high profile external collaborative R&D partnerships
2. Establish and/or improve relationships with key domestic organisations by:
 - reviewing existing contacts and deciding on priorities
 - identifying key elements of a productive relationship for the Faculty and the identified partner

Progress:

- Between January and September 2008 Faculty staff received 12 consultancy and research contracts totalling \$453,307.

International linkages and reputation

1. Develop and implement an R&D incubation commercialisation plan within the Innovation Campus
2. Establish and/or improve relationship with some key international research universities or other organisations
3. Have a strong international reputation for research through high level of activity on international bodies

Progress:

- On-going
- A new MIC has been appointed and commenced duties in October. Initial meetings were held with the Dean and Associate Dean (Research), where the Faculty priorities were discussed with the MIC.
- In 2008, Faculty staff received 5 out of 15 UIC grants to establish and strengthen collaborations with international institutions.

Researcher environment and recognition

1. Hold quarterly topical ICT presentations for campus community by identifying and compiling a list of high-profile ICT guest speakers and inviting them to address the campus community.
2. Develop another long-term research strength for the Faculty by:
 - identifying key staff and groups
 - recruiting where possible into the identified future strength
 - establishing the essential criteria for evolving into a research strength in concert with PVC(R)
 - ensuring that each School participates in at least one research strength
3. Develop an effective Faculty-wide research management and funding plan in collaboration with the URC by reviewing current funding arrangement and developing a performance-driven funding formula aligned with the RQF

Progress:

- A public lecture organised jointly by ICT Research Institute and the Faculty of Education is to be delivered in November 2008.

- There has been no call for applications to establish new research strengths, but the faculty research structure is well positioned for a new research strength; this is an on-going objective.
- The allocation of funding to research groups was made based on performance and quality of publications. Faculty Research Centres were encouraged to improve the quality of their publications, and to target highly ranked journals.

Additional Faculty Objectives

Research only staff to be strategically involved with honours teaching program

Review opportunities for such teaching, such as research-only staff identified to subject coordinator for inclusion into supervision list.

Progress:

Some research fellows are involved in teaching, but in a limited way. This has to be balanced with their responsibility for their research project.

Ensure that 85% of Academic staff are research active

Ensure priority allocated in career development interview/plan.

Progress:

On-going.

Produce bi-annual Faculty Research Report

1. Collating data on research activities
2. Compile and edit into report.

Progress:

On-going.

Leverage Faculty's data mining expertise to position the Faculty at the forefront of this emerging discipline

Conduct audit of Faculty's current expertise levels

Progress:

Yet to be investigated

Review SMAS research structure

1. Determine structure to manage research within School
2. Each current research group to go up another level
3. Manage impact of new RQF and new staff appointment into School

Progress:

- Key objective for 2009 is to achieve research strength status for maths. Future of nanomechanics research group is now assured with continuing positions created for Cox and Thamwattana.

2.4 Community Engagement

2.4.2 Faculty Strategies addressing UOW Objectives

Sharing knowledge

Conduct research seminars and/or mini-workshops on a quarterly basis targeted at local industry with a view to fostering engagement

Progress:

- ICT Research Institute will be launched on 24 November 2008. Industry and government organisations will be attending.

Educational growth and development

Review and consolidate the Faculty Enrichment Program ensuring appropriate evaluation criteria implemented

Progress:

No progress to date.

PART 3: RESOURCES**Staff****Faculty Strategies addressing UOW Objectives*****Training and career development***

1. Provide access to targeted development opportunities and/or bridging programs for EEO eligible staff
2. Leverage opportunities afforded by AMSI, AGR and MISG

Progress:

- All SECTE staff are required to complete career development planning and workload documentation. This activity has been brought forward to November-December and all academic staff are required to have a one-on-one interview with the Head of School to discuss their annual professional development plan.
- Strong Synergy between Maths Summer School and MISG, with an Industrial Mathematics course on offer in the Summer School.
- AGR and Video conferencing to become much more prominent in 2009 with Loftus, Honours and ASEARC courses to be taught using this technology.

Employment equity and diversity

1. Ensure work practices are non-discriminatory
2. Monitor and develop new staff

Progress:

- 2009 teaching loads are balanced and fair.
- Strong support of research-only staff through casual lecturing opportunities and support for continuing positions. Three post-docs have started level-B lecturing positions at UOW and elsewhere this year.

Occupational health and safety

1. Implement identified strategic KPIs and establish SECTE OH&S sub-committee to develop and review SECTE OH&S policies
2. Implement the OH&S Strategic Plan set for Informatics

Progress:

- New members commenced in office following expiry of previous terms.
- Module One Training completed by two new members - Module 2 will not be running until early 2009.

Additional Faculty Objectives***Create a more inclusive and mentoring Faculty culture for equity group members***

1. In cooperation with CEDIR, develop best practice case studies for cultural exclusivity with particular reference to work groups
2. Develop appropriate mentoring linkages for new staff and for staff preparing for probation and promotion

Progress:

- Recruitment is underway for 2 new positions in SECTE that will require the mentoring regime to be implemented for the new successful incumbents. Staff are continuing to be involved in the School's governance structure and academic advisory roles. Joint supervision will continue particularly for those staff involved in HDR supervision and ECTE457 Thesis supervision activities.
- All new SMAS staff now complete an annual CDI.

Improve staff morale in SCSSE

Increase public appreciation of efforts

Progress:

- This is on-going.

Form the new School of Information Systems and Technology comprising staff from Informatics and Commerce

1. Develop a shared vision by:
 - exploring staff attitudes to the new School
 - naming the new School
 - identifying areas of teaching expertise
 - designing short and long term goals for the new School
 - assisting staff to articulate their career goals and to develop strategies for realising them
2. Develop a sense of belonging by:
 - providing opportunities for staff to socialise
 - installing noticeboards in the building and purchasing business cards
 - identifying possible sites for staff co-location
 - obtaining UOW approval for identified site and designing suitable office and meeting spaces
 - planning for phased transfer of staff to new space
 - arranging for physical relocation to new space

Progress:

- Most objectives complete.
- Application for a Research lab was successful. Relocation of staff and students has been postponed until space is available in the Innovation Campus for the present incumbents.

Provide a pleasant working environment for SMAS staff

1. Provide all staff with adequate physical facilities
2. Maintain current inclusive and collegial atmosphere

Progress:

- New offices in building 15 now ready for use.

Angelina Lonard
31 October 2008