

INFORMATICS FACULTY PLAN (2008–2009)

FIRST PROGRESS REPORT

SUMMARY OF PROGRESS AGAINST OBJECTIVES

OVERVIEW

Yet again the University has changed their Faculty Planning and Resource template and timeline. The proposed new template is currently out for comment and the timeline has been adjusted to align with the budget cycle (therefore by financial year).

The Faculty held its smaller 'adjustment' Planning Day in December 2007 which realised one new initiative per School, FEC and Research. It is the Faculty's intention to continue with its current Planning cycle based on a non-financial-year timeline but reflecting the adjustments to its Plan at the financial year process.

As such, this Progress Report builds on the achievements of last year and reports against the same objectives and strategies as set for last year. The achievements identified in the three Progress Reports provided last year have not been retained for this report rather new achievements for this year are identified only. As a result, it is recommended that this Progress Report be read in conjunction with the Third report from last year.

HIGHLIGHTS

- Dean's Scholars program introduced and nine students enrolled
- Faculty's share of 85+ UAI first preferences increased by 19%
- 24 new Indian students enrolled in February
- Faculty leading one of the three national discipline projects in the ICT arena funded by the Carrick Institute
- Teaching & Learning Fellowship awarded to map Graduate Qualities across Faculty
- Course reviews progressing with subjects/courses deleted and new offerings developed and approved
- Break-up of SITACS and new School, incorporating Informatics and Commerce staff formed, located and operating successfully
- Centre for Statistical and Survey Methodology now at research strength status
- Six out of 10 ESDF grants awarded to Faculty (two more awarded later)
- Faculty ARC Discovery Project applications form 20% of University total
- Director and Deputy Director appointed to TITR
- Nine percent increase in publications submitted to DEST
- 2008 ANZIAM Metal and Australasian Combinatorial Maths Society Gold Medal awarded to Faculty members
- UniAdvice adoption of Faculty's marketing strategy and rolling out Early Entry program across the campus for 2008 using Faculty's format and process as blueprint

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 HCS 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:

- Deans Scholar's program introduced and attracting nine enrolments: 8 males and 1 female; 5 enrolling in SCSSE, 3 in SECTE and 1 in SMAS. SISAT have a Dean's Scholar potentially enrolling next year
- Careers market flyers revamped to make them more eye-catching and interesting to potential ug students; new promotional products sourced and secured; poster of Informatics' graduate business cards developed, and advertising again in Good Universities Guide
- HSC first preference share remained static at close of change of preferences, however the Faculty's share of 85+ UAI increased by 19%
- Enrichment Program revised and delivered again this year with registrations for the first deliveries already at capacity
- ESDF and Teaching & Learning funding has allowed a dedicated SISAT academic to lead the School's course review. As a result, a three-year plan to update subject content as related to new degree structure has commenced and the School is currently exploring the option of introducing Associate Degrees. The current phase of the three-year review is being conducted on a thematic (hub) basis: programming hub, networking hub, solutions development hub etc to ensure vertical integration year to year. A review of content within each year will commence towards the end of first Semester to ensure horizontal integration
- Discovery Days sessions with over 200 year 12 students attending SECTE sessions; School retaining names and addresses for further follow-up during the course of the year
- SECTE Science and Engineering Challenge held end 2007 will 224 students attending; planning underway for 2008 Challenge to be held over two days in June and involving the Faculties of Engineering and Science
- Discussions held between SECTE and CSC resulting in a new four-year work-integrated learning scholarship being provided
- SECTE held a forum for first-year and second-year students in March and a forum for Dean's Scholars students; forum for third and final year students to be held in May
- SECTE "at risk" students identified through MATH141 tests contacted in March and continue to be monitored regularly
- SCSSE delivered a presentation to introduce SCSSE Research Groups and Leaders to SCSSE Dean's Scholars students
- SISAT ug and pg review activities reported further down

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:

- Point 1 now complete
- Brochure developed for Master of Financial Mathematics, also translated into Mandarin
- 24 new Indian students enrolled February 2008
- Saudi students increased from five in 2007 to 29 in Autumn 2008
- Malaysian students increased from 4 in 2007 to 13 in Autumn 2008
- 235 students enrolled for Autumn 2008 of which 196 are Chinese nationals
- Information on Faculty courses and research strengths given to six Planet student agency reps from India
- New two-year study options brochure developed for India and China
- Chinese brochures and PowerPoint presentations updated to reflect degree changes
- MICT and MITM-specific brochures to be developed for PG articulation arrangement with Assumption University (Thailand)
- Formal invitation received from Yantai Yew Wah International School for International Officer to deliver presentation on next trip to Northern China
- Strategy under development for entry into Vietnam market, particularly in city of Danang

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:

- Strategy of new SISAT degrees focusing on business problems and solutions, rather than just technology solutions, thus making them more attractive to females supported by marketing feedback. Activities involving local female IT professionals to be investigated and implemented within next two quarters to support above strategy.
- SECTE's *Women in Engineering Network* Information Evening held end 2007 successful; currently liaising with RTA re convening a *Summer Camp for Women in Engineering*
- 50% of new students in Bachelor of Mathematics courses are female.

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:

Research Methodology (CSCI441/CSCI940) now compulsory for SCSSE Research students

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:

- Holly Tootell taken over leadership of the Graduate Qualities (GQ) group while Katina Michael on maternity leave and awarded a Teaching & Learning Fellowship to investigate Equella further to assist with mapping Graduate Qualities through the course spectrum, ie from course level through detailed subject levels, and down to individual assignment levels, mainly for SISAT courses at this stage
- Work to date presented at the end-of-year Faculty Planning Day which also included members of the Faculty Advisory Committee
- University requirements of Faculties changed but GQ group adjusted accordingly so that all Schools now have clear descriptions of their requisite Qualities interpretations

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 SCSSSE 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:

- As a result of its PG courses review, SECTE's MIT is scheduled for deletion along with the GradDipIT. A new GradDip and Master in Technology Engineering is scheduled for introduction in 2009, and the MEngStud and its associated Double Degree has been revised
- SISAT three-year roll out of new subject content being mapped to Graduate Qualities and ACS accreditation requirements. This allows for both horizontal and vertical analysis of content mapping to requirement qualities and skills
- SISAT commenced ACS accreditation for all nine new degrees
- Restructure of the delivery of ECTE171 and 172 now complete and the trial annual offering is occurring this year. These are now offered as annual instances of subjects in parallel without any change to the subjects and the documentation has been delivered to Engineers Australia for Accreditation purposes
- IEAust Accreditation Review of all Courses is currently in progress

- Software Engineering review completed; no new degree established, rather new major created within Master of Computer Science and Master of Computer Science (Advanced) degrees
- Deans Scholars program enrolled nine commencing students in 2008.
- Three new majors in BMathsFin (Risk Management and Insurance, Quantitative Corporate Finance, and Investments and Financial Services) proposals complete and have appropriate accreditation from professional societies (ASIC and FINSIA). Majors also provide articulation into Masters degrees in Actuarial Science.
- All SMAS degrees now successfully accredited by the Australian Mathematical Society along with above-mentioned accreditation for the BMathsFin.
- SMAS working party report's proposed changes to key first year subjects (Math 141 and 142) recommending refocusing subjects towards teaching Maths relevant to Engineering students and including workshops and labs into classes forwarded to FEC
- New Comparative Student Outcomes Reports received identifying no outstanding problems.
- Nine Dean's Scholars commenced in 2008 receiving book vouchers, increased internet quota and library privileges; welcoming lunch held with a more formal function planned for commencement of Spring session which will include research topics of interest across the Faculty; Dean's Scholars to be specifically invited to apply for vacation scholarships
- Arrangements formulated for non-UAC entry to apply by end of 2008
- BMaths(Adv) students also afforded increased internet quota and library privileges and to be invited to above-mentioned Spring session formal function

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:

- Meeting held in February 2008 with re-enrolled students with two or more Fails in Spring session (2007) and with Forced Offers students in March
- Congratulatory letters sent to SCSSE students who received two or more High Distinction grades in Spring session (2007)

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:

- Six out of 10 ESDF grants awarded to the Faculty; two more awarded after initial allocation
- Holly Tootell awarded Teaching & Learning Fellowship for 2008 to assist with developing Graduate Qualities across the Faculty
- Anne Porter received a 12-month \$100,000 grant for the Developing Maths Resources project, a multi Faculty exercise looking at remedial and instructional materials

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:

Proceeding under the direction of the Chair of the SMAS SEC

- Three new majors in BMathsFin (Risk Management and Insurance, Quantitative Corporate Finance, and Investments and Financial Services) proposals complete and have appropriate accreditation from professional societies (ASIC and FINSIA). Majors also provide articulation into Masters degrees in Actuarial Science.
- All SMAS degrees now successfully accredited by the Australian Mathematical Society; three new BMathsFin majors (Risk Management and Insurance, Quantitative Corporate Finance, and Investments and Financial Services) have appropriate accreditation from professional societies (ASIC and FINSIA)

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:

- External grant review process established; ARC Discovery Projects applications reviewed by an external consultant prior to submission to the University's Research Office
- 25 ARC Discovery Project grant applications submitted (20% of University total)

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:

- Director and Deputy Director of TITR appointed recently; external collaborations with industry expected to increase as a result
- Centre for Statistical & Survey Methodology (SMAS) and Centre for Census and Survey Research (Manchester UK) secured a Linkage Grant (\$140,000) under the International Social Sciences Collaboration between the Australian Research Council and the UK Economic and Social Research Council (one of only seven awarded nationally)

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:

- 31 HDR students newly-enrolled in first session (2008): 21 PhD and 11 Masters by Research
- 10 of above new students received either EPA or UPA scholarships

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:

- RQF has been disbanded by new Labor government
- 373 publications processed for 2007 – 9% over 2006 total

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:

New MICD, Henry Valk, appointed and commenced

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:

- Prof Jim Hill awarded the 2008 ANZIAM Medal in recognition of his work in Applied Mathematics
- Prof Matthew Want elected as a Fellow of the Australian Academy of Sciences, distinguished for his statistical work on nonparametric function estimation
- Prof Jennifer Seberry awarded the Australasian Combinatorial Mathematics Society Gold Medal

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:

- No call for applications to established new research strengths, however Faculty research structure well positioned for when call comes
- Discussion with URC re Faculty funding outside of research strength to take place shortly; Faculty continues to find strategic areas based on research outputs

2.3.3 Additional Faculty Objectives

Ensure that 85% of Academic staff are research active

Ensure priority allocated in career development interview/plan.

Progress:

Almost all staff belong to a research group or centre, and most have research outputs.

Produce bi-annual Faculty Research Report

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

Progress:

In progress with report due to be published by November 2008

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:

- Prof Matt Wand appointed to prestigious Fellowship of the Australian Academy of Science
- Prof Jim Hill awarded the ANSIAM medal for career achievements in Applied Mathematics
- Two successful Linkage grants and two Discovery grants in recent rounds
- Centre for Statistical and Survey Methodology achieved research strength status

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:

No progress achieved

Educational growth and development

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

Progress:

- New format again established devolving responsibility for delivering the Program to individual Schools but with Faculty administrative support
- Program now delivered on Friday afternoons (SECTE) and Saturday mornings (SCSSE and SMAS) between 3 May and end September
- 20 participants attended the first session delivered 3 May

PART 3: RESOURCES

3.1 Staff

3.1.2 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, ARG and MISG

Progress:

- SMAS hosting AMSI-sponsored workshop; also asked to host AMSI Summer School in 2009 (funded by AMSI CASR grant of \$220,000 and expecting approx 75 national Honours and graduate student attendances). This represents a 2200% return on subscription cost
- AGR used to teach ug students in the BMathEd degree and Honours courses remotely
- MISG2008 successful presenting seven projects tackled by 100 delegates

Employment equity and diversity

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

Progress:

- Teaching loads for 2008 reasonable and balanced and also allow for a number of staff to go on study leave.
- Three new SMAS staff applied for ARC grants in 2008 and currently co-supervising HDR students
- Three SMAS staff preparing for probation and two preparing promotion applications
- New SMAS teams instigated for teaching new Engineering Maths subjects (Math141 and 142)

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:

- SECTE Sub-committee Terms of Reference currently being reviewed
- Inspection schedule drafted; Schools to be sent reminders when inspections due with reports flowing back to WAC

3.1.3 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:

- SCS&SE HOS mentoring new staff with regards to probation and career development issues
- Informal mentoring established within SECTE in areas of research and governance
- Career development and planning interviews underway in SECTE to assist in professional development and promotion
- Three SMAS staff currently undertaking probation process

Improve staff morale in SCSSE

Increase public appreciation of efforts

Progress:

- Start of Session, and End of Session get togethers held
- Inclusion of activities on SCSSE news page
- SCSSE noticeboard used to highlight recent publications

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:

New School progressing well; routines and processes established for Staff Workload Interviews and Career Development Interviews. Similar process established for Promotions/Probations realising good results in last round

Provide a pleasant working environment for SMAS staff

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

Progress:

- Space issue still critical and becoming increasingly more so as more research-income-funded staff, postdocs and graduate students arrive
- Loss of meeting room to house Faculty Committee attendance numbers heavily impacting on Faculty's communication capabilities; currently Committee meetings held in various locations secured around campus resulting in significantly reduced attendance numbers (down 50%)

Solveig Dewhurst
7 May 2008