

# 2005 University Plan



## Faculty of Science, Engineering & Technology

### REPUTATION

UTAS will strengthen its international reputation through enhanced performance, so that it is equal to one of the current Go8 universities.

- 1 Match Go8 profiles in key foundation disciplines and thematic areas, building student and staff numbers, course offerings and research activity in accordance with comprehensive enrolment and staffing plans. [Ex, G]

The Faculty is committed to excellence in teaching and research and will aim to match Go8 profiles in key discipline and thematic areas by:

	Initiative	Priority	Responsibility	Budget	Date
1	Continuing to promote the courses offered by the Faculty, particularly new courses in theme areas and other strategic areas with the aim of increasing student load.  Outcome: The Faculty Marketing Officer and others have undertaken extensive marketing activities throughout Tasmania, interstate and overseas and have attracted students into new and existing courses in the theme areas. The Faculty introduced the following new degrees in 2005: AssocDegSc, BAntStud, BEnvSc, BForSc and BPsych.	H1	Faculty Office, Schools, All staff	C Marketing	12/2005
2	Stimulating and maintaining a culture in which research, informed by national and international standards of performance and best practice and yielding output of genuine significance, is valued and rewarded by the Faculty.	H	Dean, Research Directors, HoS	A	Ongoing
3	Continuing to improve the quality of teaching and learning within the Faculty.	H	Associate Dean, HoS	A	Ongoing
4	Ensuring that the staffing profile is continuously examined and developed to meet changing needs as reflected by changes in G8 universities.	H	Dean, Research Directors, HoS	A	Ongoing
5	To facilitate maximal growth in RHD numbers with a view to matching G8 profiles.	H	Dean, Research Directors, HoS	A	Ongoing

- 2 Benchmark and improve performance to match Go8 and other exemplar university outcomes in research, teaching quality, entry standards, staff quality, internationalisation, strategic collaborations and financial indicators. [Ex, D]

The Faculty will improve performance to achieve Go8 outcomes on a per capita basis by:

	Initiative	Priority	Responsibility	Budget	Date
1	Recruiting staff with records that match G8 standards and developing teaching and research links with G8 institutions.	H	Dean, Research Directors, HoS	A	Ongoing

	Initiative	Priority	Responsibility	Budget	Date
2	Developing measures of research performance to enable meaningful comparisons with comparable faculties in G8 institutions.	M	Dean, Research Directors, HoS	A	12/2005
3	The Faculty's proportion of university IGS, RTS and RIB funds will at least match that of comparable faculties in G8 universities.	H	Dean in conjunction with Research Office	B	12/2005
4	Significantly increasing research income by targeting staff to submit nationally competitive grant applications.	H	Research Directors, HoS	A	Ongoing
5	Actively promoting and resourcing efforts to maximise FFPOS enrolments.	H	Research Directors, HoS	A	Ongoing
6	Developing national and international linkages.	H	HoS, Faculty International Committee	C	Ongoing
7	Improve the quality of Teaching and Learning through targeted initiatives that will maximise returns from performance-based funding of teaching.	H	Dean, Associate Dean, HoS	A	Ongoing

- 3 Diversify and enrich the University by increasing enrolment of international students, both onshore and offshore, encouraging participation of students and staff in overseas activities, and by internationalising the curriculum. [G, En]

The Faculty will actively support the University's goals in conjunction with International Services by:

	Initiative	Priority	Responsibility	Budget	Date
1	Continuing to promote SET courses onshore in Singapore, Malaysia and China and offshore China.	H	HoS, Faculty International Committee	C Marketing	12/2005
2	Continuing to promote Special Focus Programs at US universities (particularly the University of California, Colorado State University and University of Denver) to increase US load by 10%.	H	Faculty International Committee	B Marketing	12/2005
3	Continuing to explore market opportunities in Europe (Germany and Scandinavia) and to explore other market opportunities, such as India and Thailand.	H	Faculty International Committee	B Marketing	12/2005
4	Encouraging undergraduate students to consider student exchange opportunities, and providing a scholarship of \$1,500 to each student, and a limited number of scholarships of \$3,000.  Outcome: The Faculty, in conjunction with the International Office, has continued to promote student exchange opportunities. Although application numbers are variable from year to year, scholarships are viewed as essential to encouraging students to take up the opportunity to study overseas. In an effort to increase the number of students on exchange, the Faculty provided scholarships of \$1,500 to each student and sourced industry support to provide additional scholarships (5 @ \$3,000 in 2005).	H1	Dean, HoS	B Marketing / External	12/2005
5	Continually monitoring the curriculum of courses to ensure they are internationally recognised.	H	Dean	A	Ongoing

**UTAS will maintain world leadership in key areas, and will develop new areas of international collaboration.**

**4 Target, support and showcase world-class performance across the University profile. [Ex]**

The Faculty be internationally recognised in key areas by:

	Initiative	Priority	Responsibility	Budget	Date
1	Identifying, supporting and showcasing key areas of international recognition including CODES, ACROSS, IASOS, Radio-Astronomy, Plant Genetics, Marine Science and Food Safety.	M	Dean, Research Directors, HoS	A	Ongoing
2	Submitting bids for competitive nationally funded research centres/networks and progressing 2004 initiatives (e.g. TasInformatics).	H	Dean, Research Directors, HoS	A	12/2005
3	Consolidating the successful development of recently formed collaborations including with CSIRO and the Australian Antarctic Division (e.g. Marine Science, Food Safety, ACROSS).	M	Dean, Research Directors, HoS	A	Ongoing

**5 Develop strategies for enhancing the teaching/research nexus – particularly in developing existing and new theme areas. [Ex, D]**

The Faculty is committed to aligning, where possible, teaching programs with areas of Research strength by:

	Initiative	Priority	Responsibility	Budget	Date
1	Developing a clear portal and appropriate structures for students and external agencies interested in the environment and natural resource management.	H	Dean, Research Directors, HoS	B	12/2005
2	Identifying and stimulating Faculty involvement in the new theme area of Community and Change.	H	Dean, Research Directors, HoS	A	Ongoing
3	Developing and obtaining approval for an undergraduate program related to the Marine Science area.	H	Director, Centre of Marine Science, Cour	C	12/2005
4	Stimulating the teaching/research nexus by introducing or highlighting innovative programs (e.g. research projects in undergraduate programs, Journal of Undergraduate Science).	M	Dean, Research Directors, HoS	A	Ongoing

**6 Broaden and strengthen existing distinctive research and teaching themes by providing incentives and structures to support interdisciplinary and inter-organisational research, teaching and course development within the theme areas. [D]**

The Faculty is committed to providing a budget model that provides clear incentives to schools/research centres that perform at a high level.

	Initiative	Priority	Responsibility	Budget	Date
1	Provide financial incentives to schools enrolling honours and FFPOS undertaking RHD.  Outcome: The Faculty has provided financial incentives to Schools enrolling RHD, Honours and FFPOS via \$1500 premium per EFTSU in the Faculty budget distribution. This is an on-going Faculty strategy.	H1	Dean	C	12/2005
2	Explore the development of interdisciplinary programs in the area of environmental and natural resource management.	H	Dean, FADG, Research Directors, HoS	B	12/2005
3	Support relevant staff appointments that are inter-organisational and focus on theme areas.	H	Dean, Research Directors, HoS	A	Ongoing

8 Establish a Distinguished Scholars Program to support themes and world-class areas and to promote world-class teaching and research. [Ex]

The Faculty will support the distinguished scholars program by:

	Initiative	Priority	Responsibility	Budget	Date
1	The nomination of high profile academics with strong teaching and research credentials for support by the program.	M	Dean, Research Directors, HoS	A	Ongoing
2	Identification of possible future scholars in the theme areas.	M	Dean, Research Directors, HoS	A	Ongoing

**UTAS will be increasingly acknowledged by all levels of government and industry as a vital partner in State, regional and national development, and will be recognised by the community for this contribution.**

9 Negotiate new State Partnership Agreement that recognises common goals of the State and the University and identifies new areas for joint development. [En]

The Faculty is committed to building industry, community and government partnerships by:

	Initiative	Priority	Responsibility	Budget	Date
1	Supporting the growth of emerging fields of research which are strategically important (eg. Informatics, natural resource management, alternative energy sources).	H	Dean, HoS	A	Ongoing
2	Increasing the number of conjoint appointments.	H	Dean, HoS	A	Ongoing
3	Increasing the awareness of the value of science, engineering and technology to the State.	M	Dean, HoS/Research Directors	A	Ongoing
4	Encouraging staff to undertake research relevant to the needs of the State.	M	Dean, HoS/Research Directors	A	Ongoing

	Initiative	Priority	Responsibility	Budget	Date
5	Continuing the strong growth of TIAR and TAFI.	H	Directors of TAFI and TIAR	A	Ongoing
6	Investigating other new partnerships with the State government (e.g. TasInformatics, Museum).	H	Dean, Research Directors, HoS	A	Ongoing

- 10 Offer professionally accredited courses that produce highly competitive graduates who have the skills to take up identified and emerging employment opportunities in Tasmania, Australia and overseas. [Ex, En]

The Faculty will train highly regarded professionals in engineering and technological sciences.

	Initiative	Priority	Responsibility	Budget	Date
1	Seek professional accreditation of its IT programs and re-accreditation of the Architecture programs.	H	HoS Computing	A	12/2005
2	Ensure ongoing high standards in Architecture, Chemistry, Earth Sciences, Engineering, Environmental Planning, Geomatics, Physics and Psychology to meet accreditation requirements.	H	HoS	A	Ongoing

- 12 Extend its engagement with all of its communities of interest. [En]

The Faculty is committed to continuing and expanding its external relationships by:

	Initiative	Priority	Responsibility	Budget	Date
1	Promoting the profile of Science, Engineering and Technology where possible through media, public lectures etc.	H	Dean, HoS, Marketing Officer	A	Ongoing
2	Providing scientific leadership in the community as measured by membership on external bodies/committees.	M	All Staff	A	Ongoing
3	Supporting the development of science teachers and enhancing their profile.	M	Dean, HoS, Marketing Officer	A	Ongoing
4	Ensuring we are the institution of choice in the State by external communities wishing to undertake research in areas of science, engineering and technology.	M	Dean, Research Directors, HoS	A	Ongoing

**UTAS will enhance its teaching so that it is ranked in the top ten Australian universities with respect to teaching performance.**

- 13 Develop distinctive, flexible, and innovative learning opportunities, especially programs that increase access for students in regional areas, streamline articulation from TAFE. [D, Ex]

The Faculty will actively support the development and introduction of new programs across all modes of teaching with emphasis on distinctive areas and interdisciplinary strength by:

	Initiative	Priority	Responsibility	Budget	Date
1	Successfully introduce new multi-disciplinary courses in distinctive and specialised areas such as Antarctic studies, environmental science and marine science.	H	Faculty Academic Development Group	B Faculty	12/2005
2	Successfully introduce an Associate Degree in Science to increase access for students without appropriate backgrounds for direct entry to Bachelor s degrees. Entry will be available at all campuses including the Cradle Coast Campus.	M	HoS, Faculty Office	A	4/2005
3	Working with the Graduate School to revise existing postgraduate coursework programs and to develop and introduce new programs where needs are identified.	H	Dean, Associate Dean, HoS	A	12/2005
4	Progressing developments such as the BAppSc(Ag)(Hons) at the Cradle Coast Campus, which utilizes expertise of TIAR staff, to help meet Faculty load targets.	H	Dean, Associate Dean, HoS	A	12/2005
5	Conducting and implementing major teaching projects.  Outcome: The Faculty has a successful record in bidding for Teaching Development Funds. In 2005, projects looking at ways to improve teaching performance within the School of Engineering were supported.	H1	Project Manager, Dean	C Teaching Development Fund	Ongoing

## PEOPLE

**UTAS will be renowned for its distinctive, quality student experience - 'the natural choice' for study in Australia - and be a first-choice destination for local, interstate and international students.**

17 Integrate student learning and lifestyle in vibrant campus environments, including enhanced infrastructure for student learning and "Island Experience" opportunities. [D]

The Faculty will endeavour to provide a wide and rewarding student experience by:

	Initiative	Priority	Responsibility	Budget	Date
1	Providing access to high quality laboratories and facilities.	H	Dean, HoS	A	Ongoing
2	Engaging students in a wide range of learning situations including laboratories, excursions and projects as appropriate for the course.	M	All Academic Staff	A	Ongoing
3	Utilising the distinctive attributes of Tasmania to inform their learning.	M	All Academic Staff in Relevant Areas	A	Ongoing
4	Maintaining easy and friendly access to staff at all levels.	H	All Staff	A	Ongoing

**UTAS will have a staff profile, an organisational culture and a working environment that supports its aspirations and recognises and rewards achievement.**

21 Undertake strategic staffing analyses to broaden processes for attracting key people, and review retention strategies and address gender and equity imbalance through targeted programs. [Ex]

The Faculty will actively pursue retention strategies and address gender and equity imbalance through targeted programs by:

	Initiative	Priority	Responsibility	Budget	Date
1	Encouraging appropriately qualified women to apply for staff vacancies when they arise.	H	Dean, HoS	A	As Required
2	Providing a Career Advancement Fund to assist female academic staff to advance their careers after a period of maternity leave.  Outcome: A Career Advancement Fund was specifically established by the Faculty to provide support to women returning from maternity leave to advance their academic career. Each female academic is able to access up to a maximum of \$10,000 for this purpose, with funds distributed on a pro-rata basis.	H1	Dean	A	Ongoing
3	Providing female staff at Level C and above (limit one per school) with the opportunity to become members of the Faculty Executive Committee with the view of increasing the number of female heads of school in the Faculty.	H	Dean	A	Ongoing
4	Providing appropriately attractive packages to recruit and retain key staff with national and international reputations.	M	Dean, VCE, HR	A	Ongoing

23 Provide/support a broad range of staff development opportunities that develop the capacity of staff to achieve the University's goals, while improving individual job satisfaction and career prospects. [Ex, En]

The Faculty views staff development as part of the normal daily work of staff members and recognises the resulting benefits. Through performance management the Faculty will actively support staff development activities that develop the capacity of staff to achieve the Faculty and University's goals while improving individual job satisfaction and career prospects by:

	Initiative	Priority	Responsibility	Budget	Date
1	Encouraging staff, to participate in a broad range of staff development activities (including conferences, study leave etc) that support teaching and learning, research and the Faculty and University's goals. General staff will be especially targeted.	H	HoS	A School	Ongoing
2	Ensuring that new academic and professional staff participate as appropriate in a range of courses to improve the quality of the teaching and learning, research and administration environment.	H	HoS	A School	Ongoing
3	Ensuring that staff development for general staff is specifically canvassed during performance management.	H	HoS	A School	Ongoing
4	Reversing the decline in staff participation in study leave through performance management.	H	Dean, Research Directors, HoS	A	Ongoing

**UTAS will enhance strategic alliances and demonstrate leadership in regional, national and global partnerships.**

25 Build prestigious international alliances with key research-led universities that embrace teaching and research, student and staff exchange, and other links. [En, D]

The Faculty is committed to research excellence and will actively pursue international alliances with key research-led universities, by:

	Initiative	Priority	Responsibility	Budget	Date
1	Forming research links and relationships with researchers from prestigious research-led international universities.	M	HoS	A	Ongoing
2	Encouraging SET students to participate in exchange opportunities with prestigious research-led universities.	M	Faculty Staff	A	Ongoing
3	Encouraging international networking through study leave, conference travel and hosting visits by distinguished scholars.	M	Dean, HoS	A	Ongoing

26 Joint venture with Go8 and other universities and with government agencies (eg. CSIRO) business and industry in key areas. [Ex, En]

The Faculty will actively support the University and engage in joint ventures with G8 and other universities, and with government agencies, business and industry, by:

	Initiative	Priority	Responsibility	Budget	Date
1	Actively pursuing joint ventures with CSIRO, the State government and other research organisations in areas such as quantitative marine science and energy and power systems.	H	Dean, HoS	A	12/2005
2	Progressing the jointly offered professional degree in Forest Science with the University of Melbourne.	M	Dean, Faculty Staff	A	04/2005
3	Investigating articulation and concurrent course offerings with TAFE Tasmania similar to the BComp and DipIT initiative.	M	Faculty Staff, HoS	A	Ongoing
4	Developing joint or feeder programs in areas that lack financial viability if conducted alone.	M	Dean, HoS	A	Ongoing

## POSITION

**UTAS will balance the development of campuses to maximise the advantages of community, location and networks. Campus profiles will be developed strategically, mixing and balancing courses, students and staff in real and virtual learning environments.**

31 Review Launceston profile to significantly increase mix and numbers to critical mass. [G]

The Faculty recognises the importance of the Launceston campus to the Faculty and University and will review its profile.

	Initiative	Priority	Responsibility	Budget	Date
1	Reviewing school profiles as part of school and course reviews.	M	Dean	A	Ongoing
2	Reviewing school profiles on an annual basis as part of the Faculty's planning process.  Outcome: School staff profiles were reviewed in 2005 and given the relatively junior profile VRs were not required. However, several staff were promoted including two to Level D.	H1	Dean, HoS	A	Annually
3	Introducing a specialised named degree on the Launceston campus that has demonstrated demand (e.g. Environmental Science).	H	Dean, Faculty Staff	A	12/2005
4	Growing areas of strength and differentiation (e.g. Architecture).	M	Dean	A	Ongoing

**UTAS will have administrative structures, budget processes, business systems and infrastructure that effectively and efficiently support its strategic priorities.**

33 Review all administrative areas to look at how current systems and processes will support quality, growth, internationalisation and compliance strategies; and be accountable to, and efficient for, users. In particular, review the service needs of students in the light of projected growth. [Ex]

The Faculty is committed to the provision of quality and efficient services that will be maintained and improved by:

	Initiative	Priority	Responsibility	Budget	Date
1	Maintaining an open door policy in the Faculty Office allowing students to access staff and information during normal business hours.	H	Faculty Staff	A	Ongoing
2	Maintaining a students page on the Faculty web-site to allow students to access a range of information including a Frequently Asked Question page.	M	Faculty Staff	A	Ongoing
3	Reviewing all Faculty and School documentation to improve clarity and identify areas requiring documentation.	H	All Staff	A	Ongoing
4	Ensuring that Faculty and School websites are attractive, informative and up-to-date.	M	Associate Dean, Faculty Staff, School St	A	Ongoing

**UTAS will have a clear brand that is recognised and attractive both locally, nationally and internationally, and a marketing profile that supports its strategic objectives.**

38 Initiate branding/marketing/PR and government relations program, directed nationally and internationally at key market sectors. [D, G]

The Faculty will actively support the University's domestic and international marketing programs directed nationally and internationally by:

	Initiative	Priority	Responsibility	Budget	Date
1	<p>Arranging science and mathematics Teachers Professional Development Forum.</p> <p>Outcome: The fourth Teachers Professional Development Forum was organised by the Faculty in 2005. The workshops conducted were related to Essential Learnings and covered topics such as building design and structure, modern technology, Tasmanian wild life and life in Antarctica, in addition to visits to the Applied Hydrogen Research Laboratory and the Science Library.</p> <p>Offering this professional development program is in accordance with stated objectives of the Tasmanian Science and Technology Industry Council Plan and provides opportunities for teachers to exchange experiences and establish networks with other teachers and researchers.</p>	H1	Faculty Office	B	06/2005
2	Arranging the Siemens Science Experience in Hobart and Launceston.	H	Faculty Office	A Externally Funded	01/2005

	Initiative	Priority	Responsibility	Budget	Date
3	Holding a SET Roadshow to regional Tasmania.	H	Faculty Office	B	04/2005 10/2005
4	Marketing Distinctive Science programs interstate and overseas.	H	Faculty Office	B	Various
5	Holding SET expo in Launceston and Hobart in conjunction with University Open Days and National Science Week.	H	Faculty Office, HoS	B	08/2005
6	Organising visits to high schools to promote SET courses.	H	HoS	A	Various