



University of Southern Queensland

Faculty of Engineering & Surveying Strategic Plan 2005-2009

June 2005

Executive Summary

The Faculty of Engineering & Surveying is characterised by:

- its integrated structure
- its highly regarded accredited programs in engineering and the spatial sciences
- its efficient and committed management team
- its highly qualified and research active academic staff
- its successful research centres and research concentrations
- its cohesiveness and its enjoyable and satisfying work environment
- its growing international presence, and
- its leadership in curriculum design, external education and in problem based learning

The plan aims to build on the considerable success already achieved by the Faculty, through a range of relatively modest but achievable initiatives.

The major threat to the achievement of the targets contained in this plan is the chronic under-funding experienced by the Faculty over recent years. This has led to excessive staff workloads, inadequate investment in maintenance of teaching materials, a reduction in staff development activity and to a rundown in the quantity and currency of equipment and laboratory infrastructure all of which now threaten the viability and quality of the Faculty's programs. This is despite very careful management of the course and program offerings of the Faculty.

Key elements of the plan are:

- A restructuring of the Faculty management and committees to give an increased focus on teaching and learning, research and international programs.
- An increase in academic staff numbers sufficient to reduce academic workloads by 25% and so allow resources to be directed to the learning and teaching, research and student recruitment initiatives contained in the plan.
- Improved student learning through the use of Problem Based Learning, a Student Learning Centre, and the development of retention strategies based on appropriate research.
- Appointment of a Commencing Students' Coordinator.
- The development during 2006 of programs in Architecture and the Built Environment for delivery at the Springfield campus from 2007.
- A flexible academic workload model that determines performance based research allocations in an open and defensible manner.
- Support for the research centres and research concentrations in or allied to the Faculty through workload allocations and targeted recruitment.
- Active promotion of the industry based Engineering Doctorate.
- Use of the activity based costing data to assess and ensure the financial viability of the Faculty's programs.
- The development of collaborative programs with major engineering organisations for the education of their professional and technical staff.
- The establishment of a limited number of viable quality accredited programs with international partners.

- Support for key schools initiatives such as: the Science and Engineering Challenge, the Head Start Program, the Technology Mathematics & Science Centre of Excellence, and the Girls and Boys Mathematics Science and Technology Summer Schools.

Initiatives Summary

Please complete for initiatives which will require funding additional to current profile.

Section Strategy	Section Target	Initiative	Cost
Learning & Teaching:			
Monitor student progression and apply appropriate intervention strategies.	Increase progression rates in first year courses.	Appoint part-time commencing students coordinator.	\$30,000 - to meet part salary of coordinator
Introduce professional practice skills and graduate attributes and capabilities to all students.	Improved transition from school to university and improved transition to USQ for students who enter with advanced standing.	Develop a revised course on professional practice skills that will be mandatory for all commencing students.	Estimated cost \$25,000
Student Experience:			
Dedicated learning space for students.	Improve facilities in FoES for student self learning and for problem based learning by 2008	Convert Z block undercroft (or other available space) to a student learning centre.	Estimated cost \$400,000
Research & Research Training:			
Identify research and subject areas where professorial appointments would be of greatest value.	One level E academic in each discipline group in the Faculty (4) and each research centre associated with the Faculty (3) by 2007.	Two level E appointments	\$350,000
Staff:			
Increase academic staff numbers.	Decrease academic workloads by 25% and increase staff performance and satisfaction (2006/07).	12 to 15 additional academic staff appointments	\$1.5M
Equity & Multiculturalism:			

Region Engagement:			
Internationalisation:			
Understand factors that influence success at USQ for students transitioning from other institutions.	Develop defensible strategies to increase retention rates of international students.	Research project.	\$10,000
Enterprise & Operations:			
Marketing of Faculty to employers.	Increase in enrolments in the Associate Degree in Engineering by 90 EFTSL by 2007.	Establishment and operation of cooperative education initiative with major engineering organisations.	\$110, 000 from Strategic Initiatives Fund

Vision and Mission

Vision

To develop and provide educational programs in engineering, spatial sciences, and built environment which provide graduates to meet the needs of the 21st century world.

Mission

To provide a flexible, supportive learning environment where students can obtain globally recognised professional qualifications underpinned by educational innovation, strategic research of regional significance and international quality, and professional, industry and community involvement.

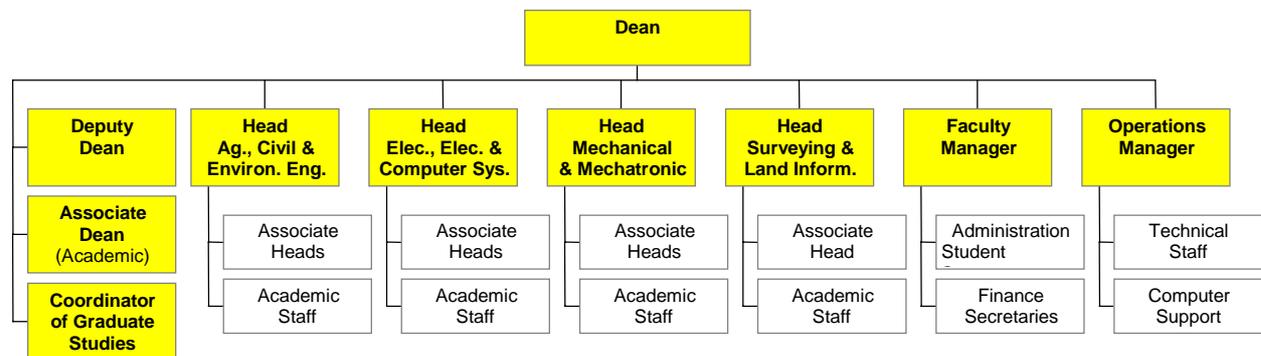
Operating Environment

Structure

Overall management of the Faculty of Engineering & Surveying (FoES) is the responsibility of the Dean, who is supported by a Deputy Dean, an Associate Dean (Academic), and a Coordinator of Graduate Studies, who take functional responsibility for major activities within the Faculty.

FoES is as an integrated 'zero-department' Faculty, which allows maximum flexibility and optimal use of resources. The Faculty is divided into four (4) academic discipline groups, which are responsible in the main for the management and delivery of the academic programs. Each discipline group is managed by a Head who is the academic leader responsible for course quality, design and delivery.

The centralized model also sees technical operations and administration supported centrally, and managed by the Operations Manager and Faculty Manager, respectively. Direct line management is delegated through a Faculty Manager, Operations Manager, and four Heads of Discipline.



The Dean receives advice from the Faculty Board, which is chaired by the Dean. Faculty Board has three standing committees which consider and develop policy, and oversee implementation of the core academic function of the Faculty:

- Undergraduate Studies Committee
- Research and Higher Degrees
- Academic Planning Committee

Discussion on academic matters cycles through standing committees and discipline staff meetings (Discipline Consultative Committees) and advice is brought to Faculty Board and the Dean.

The other principal committees of Faculty Board, in addition to specific working parties, are:

- Marketing and Promotion
- Workplace Health & Safety
- Quality

Programs

The Faculty provides flexible, innovative, accredited programs to satisfy the needs of the Engineering and Surveying professions, all of which are available in distance and on-campus modes.

FoES engineering programs are accredited by the Engineers Australia (EA) and through the Washington Accord receive International recognition. In that context, engineering and surveying qualifications gained at the University of Southern Queensland have a global currency. FoES Surveying programs are recognised by the Spatial Sciences Institute of Australia. Engineering and surveying qualifications are highly rated in the Pacific Rim and the Faculty of Engineering and Surveying is promoting its programs into that region.

Undergraduate program development in FoES is based on three recognised workplace tiers:

- Professional Engineer or Surveyor: Four year programs leading to recognition as a chartered professional engineer or professional surveyor, which require substantial conceptual and analytic skills.
- Bachelor of Technology: Recognised as a program leading to a career as a Surveying or Engineering Technologist concerned with the practical implementation of surveying and engineering projects.
- Associate Degree: Recognised as a program leading to recognition as a Surveying or Engineering Associate. The qualification leads to careers associated with detailed design and manufacture or testing in a variety of engineering and surveying procedures.

The programs at USQ are vertically integrated and articulation between them is encouraged.

Research

The Faculty continues to expand its commitment to Research and Scholarship and it hosts or works closely with three major engineering research centres:

- Centre for Excellence in Engineered Fibre Composites, which is an autonomous University centre, with the Director reporting directly to the DVC(S).
- The National Centre for Engineering in Agriculture, a joint venture between USQ and DNR&M. The Director reports to the NCEA Board, chaired by an independent but with the Dean and PVC(R) as Board members, and two Faculty staff as observers.
- The Computational Engineering Research Centre, which operates within the Faculty, and its Director, Professor Thanh Tran-Cong, reports to the Dean.

Research in engineering in agriculture, conducted in cooperation with the National Centre in Engineering in Agriculture (NCEA), continues to build profile particularly in the area of irrigation and rural water use efficiency. Of particular note is the establishment of the CRC for Irrigation Futures in 2003 with USQ/NCEA as a major node. As part of the University's commitment to the CRC, the Faculty provides in-kind research effort equivalent to two full time positions, made up from contributions from six (6) Faculty staff. The Faculty currently supervises eight (8) irrigation research students supported by the CRC.

The Faculty established the Computational Engineering Research Centre (CERC) as a Faculty research centre. This group has been built around the pioneering work of Professor Tran-Cong and colleagues, and seeks to deliver high-end solutions to industry problems in addition to its own fundamental research. The Centre received a significant boost through an untied injection of funds from RME to seed fund the centre. The Centre is attracting interest from other major industry sectors.

The Centre is thus the third major research centre to emerge from the Faculty and will grow to be a major plank in the University's Research Management Plan.

Emerging areas of strength in the Faculty include water resources, GIS, networking (wireless, signals processing and control), and engineering education.

Environment

The Faculty has identified the following elements of its operating environment as those most likely to impact on the operation of the Faculty in the next five years. These elements are recorded in their perceived priority order:

1. Continued low levels of Federal Government funding.
2. Contraction in the demand for admission to courses in engineering and surveying from domestic students.
3. Increased competition from other Australian universities which are seeking to increase enrolments for on campus and distance engineering programs both domestically and internationally.
4. The impact of changes in the accreditation requirements of professional bodies, including the accreditation of offshore partners.
5. Steadying demand for courses by offshore students.

The Faculty subscribes to a strategic planning methodology that seeks to identify opportunities, where aspects of the operating environment can be exploited utilising the strengths of the Faculty.

The goals and the operational initiatives of the Faculty endeavour to take advantage of our opportunities and to minimise any threat to the organisation. The Faculty has identified the following areas where it perceives that it has particular strengths compared with other organisations. These represent the Faculty's competitive advantage:

1. The corporate culture and ethos of the Faculty, and its operation as a single integrated unit.
2. The Faculty's acknowledged leadership in distance education for engineering and surveying.
3. The range of programs offered by the Faculty and the degree of articulation between these programs.
4. The importance attached by the Faculty to catering for the needs of its professions and its students.

Conversely, the Faculty has identified the following which represent competitive disadvantage:

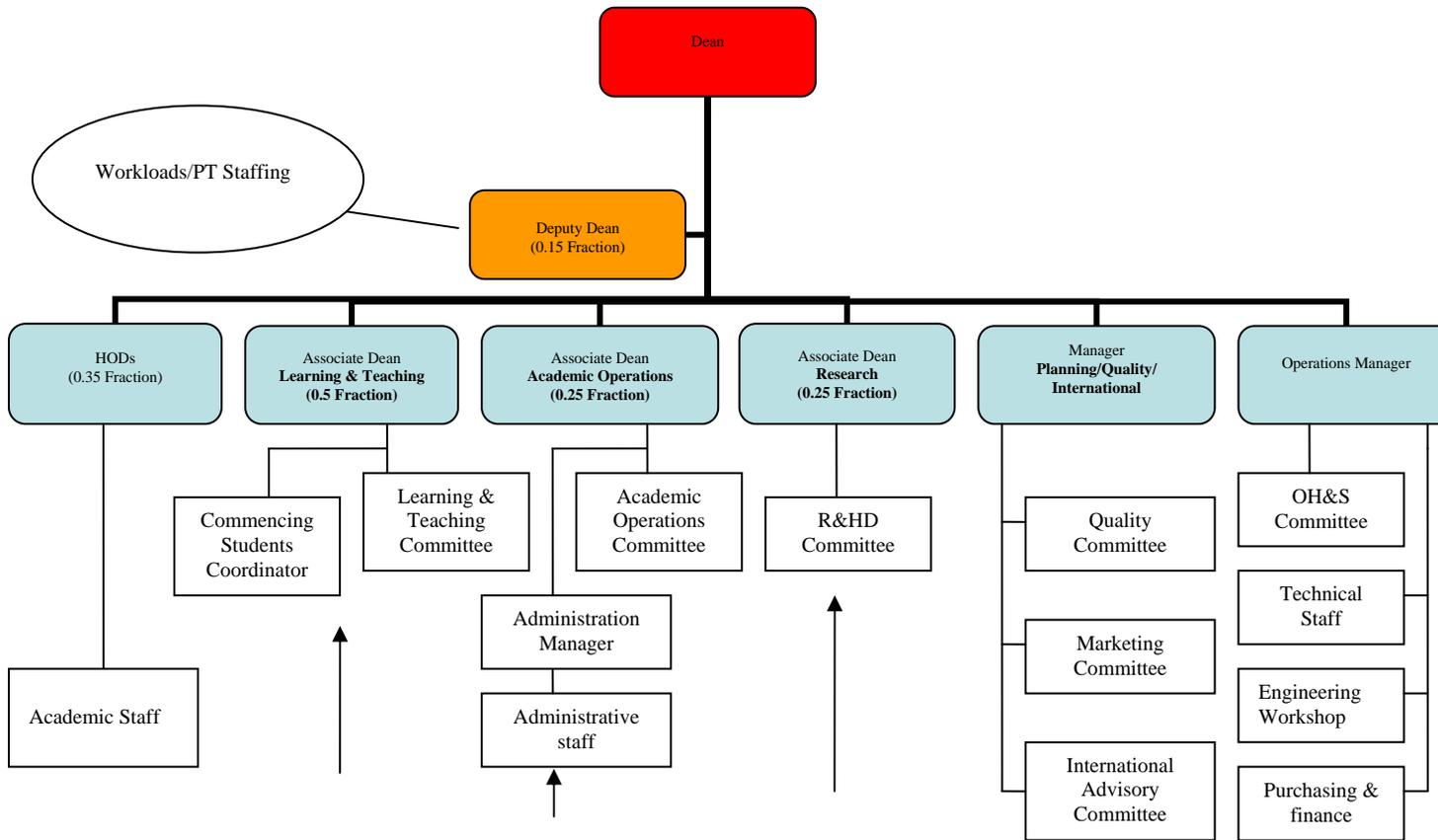
1. The lack of human resources resulting in high academic workloads
2. On-going erosion of our capital infrastructure (laboratories and equipment)
3. The lack of time for liaison with professional bodies and industry

Proposed Revision of the Faculty Structure

The strategic plans for the University and the Faculty place considerable emphasis on teaching and learning, research, and internationalisation. Reflection on the existing management structure of the Faculty suggests that it is ill equipped to undertake significant initiatives in these areas.

A revised structure is proposed that involves the appointment of an Associate Dean or equivalent with the specific responsibility to lead each of these portfolios. The proposal calls for an Associate Dean (Learning and Teaching), an Associate Dean (Research), and a Manager (International, Planning and Quality). Each of these portfolios will be advised by appropriate committees. These changes also in turn force some revision of the responsibilities for operational matters, which include the appointment of an Associate Dean (Academic Operations) and some expansion of the responsibilities of the Operations Manager.

The proposed structure follows along with the relevant responsibilities and proposed committees.



	Accreditation (UG & PG)	Academic Admin	Postgraduate	International	Buildings/Infra
	Curriculum Design	Course offers	• Program coord	Quality	Tech Support
	Learning & teaching	DEC liaison	• Student support	Budgeting/ORMP	Financial Ops
	• Pedagogy	LTSU liaison	Research	Planning	Purchasing
	• Policy	Program evaluation	• Policy	Marketing	Equipment Planning
	• Staff development	SETL & course eval ⁿ	• Support	ABC Costing	Travel
	Transition/Retention		• Reporting	Contracts/Agreements	ITS Liaison
	Academic Planning		• Staff development	Business Planning	Asset Management
	Moderate ENG core courses				OH&S

Review of Current Performance

The Faculty is satisfied that the quality of the delivery of its courses remains acceptable as evidenced by the data obtained from graduates and their employers, the high proportion of graduates that gain appropriate employment, course progression rates and by student responses to course surveys conducted towards the end of each semester. All undergraduate programs offered by the Faculty are accredited by appropriate professional bodies. Research performance, as measured both by published outcomes and research grants won, has been such as to place the Faculty at the forefront of agricultural engineering and fibre composites engineering demonstrating the Faculty's research leadership within the University.

The Faculty has identified the following significant achievements during the past year:

Learning and Teaching

During September 2004 the Faculty hosted the biennial conference of the Australian Association for Engineering Education (AaeE). A total of 113 delegates from international as well as most Australian universities attended the conference. Faculty staff presented 11 papers spanning topics as diverse as cultural diversity, teaching engineering management, use of simulations, flexible learning and problem based learning.

The Faculty introduced two innovative new programs designed specifically to elevate the skills of practicing professional engineers and technologists. The Master of Engineering Practice (MEP) was developed in response to a request from Engineers Australia (EA) for an alternative pathway for experienced technologists to achieve professional engineer status. The 12 unit program consists of a mix of traditional coursework units drawn from the Bachelor of Engineering program and a range of new portfolio courses. In these portfolio courses candidates are required to document their workplace experiences in a structured and rigorous way to demonstrate that they have met the attributes and competencies required by EA for recognition as a professional engineer. The program has been accredited by EA and the first students were admitted into the portfolio courses in 2005.

The second program introduced is Australia's first professional Engineering Doctorate (EngD). Equivalent to but different from a PhD, the EngD is designed to enhance the skills of already high performing professional engineers in the areas of detailed technical investigation, applied research and development, innovative design and analysis. Candidates will develop and demonstrate these essential skills by communicating their significant and original technical achievements in a formal academic format.

In seeking reaccreditation for its Surveying programs, the Faculty has taken the opportunity to opt for a single award with two majors, one in traditional Surveying and a second in GIS to cater for demand. Moreover, the Faculty has followed industry trends and named the degrees Spatial Sciences, in line with the new amalgamated Spatial Sciences Institute.

The Faculty has won priority provider status with Ergon Energy. From Semester 2 2005 Ergon staff will commence studies in the Associate Degree in Electrical & Electronic Engineering. Expected numbers are 15 commencing students per year.

In conjunction with two local secondary schools (Glennie College and Christian Outreach College), the Faculty piloted an 'early-start' program in Semester 1 2005. A small number of year 12 students from the two schools have each enrolled in one foundation level course offered by the Faculty. This program provided the stimulus for the University to establish the Head Start program from semester 2.

Eight Faculty and externally sponsored scholarships were awarded in 2005 to outstanding commencing students from the region.

First Class honours graduates from the Bachelor of Engineering program, Cheryl McCarthy and Peter Hockings were the recipients of the University medals for 2004. Both were recipients of Faculty scholarships in 2001.

The results of the ABC costing indicate that the Faculty continues to return a substantial positive contribution to the University, reflecting the efficiency of its operation and the active management by the Faculty of its course offerings.

Two applications have been submitted to the 2005 Australian Awards for University Teaching:

- The first, in the Institutional Awards Category 3 Provision of Educational Services to the Community, is an application by the Faculty for the development of the Master of Engineering Practice.
- The second from Ms Lyn Brodie and the problem based learning team on Engineering Education for the 21st Century is in the Institutional Awards Category 4 Enhancement of the quality of teaching and learning at the applicants' institution.

Dr Thiru Aravinthan and the course team for ENG2102 Engineering Problem Solving 2 were awarded the USQ 2005 award for the Design and Delivery of Teaching Materials.

Ms Brodie, Dr Thiru Aravinthan and the problem based learning team are also finalists in the 2005 Australasian Association for Engineering Education (AaeE) Awards for Excellence in Engineering Education in the category for curriculum team projects in engineering education. The winner is to be announced at the AaeE conference in September.

Research

Staff were successful in obtaining major external competitive grants during the year, viz:

- Dr David Buttsworth was part of the hypersonics research team which was funded through the State Government's Smart State Research Facilities Fund in 2004. Dr Buttsworth's component is a \$250,000 grant for the construction of a second 'gun tunnel' for hypersonic flow research.
- Dr Richard Merifield was successful with his ARC Discovery Grant application for a project on *Rigorous Three Dimensional Plasticity Solutions for Soil and Rock Slopes*.

- An ARC Linkage grant went to the team of Prof Thanh Tran-Cong, Dr Wenyi Yan, Prof Graham Baker and Dr John Russell (from RME) for the project *Optimising non-explosive rock breaking technology* funded over the period 2005-2008.
- Assoc Prof Nigel Hancock and Dr Andrew Maxwell have formal confirmation of a follow-up grant from Dairy Australia for the commercialisation phase their dairy process industry instrumentation research. The title for their project is: "Commercialisation of conductivity-based acidity measurement systems for dairy applications". The grant is for \$330,858 and runs until January 2007, allowing continuation of the full-time research fellow position for Dr Maxwell.

A team from the Faculty led by Associate Professor Mark Porter has been engaged on a project funded through the Wide Bay Water Research and Training Centre related to pressure management in urban water supply systems. Fieldwork will be undertaken in Toowoomba and Hervey Bay. Dr Vasantha Aravinthan has been employed as the research officer for the project.

The recently completed audit of the Faculty's research publications for 2004 showed a very substantial growth in the research output from the Faculty. In 2004 staff published 36 journal papers and 73 conference papers. This total of 109 papers represents 2 publications per academic staff member and 2.8 papers per publishing staff member and is a 56% increase on the previous two years. This growth is a clear reflection of the success of the Faculty policy to recruit research qualified and research active staff which has seen the number and proportion of PhD qualified staff rise from 26 (or 52%) in 2002 to the present figure of 37 (or 65%).

The Faculty of Engineering & Surveying was successful in winning grants for 2005/06 totalling \$125,000 from the USQ Research Infrastructure Program, from a total pool of \$410,000. Successful applicants were:

- Dr Sunil Bhaskaran & the GIRS group \$25000 for hyperspectral remote sensing
- Assoc Prof Nigel Hancock & Dr Ian Craig \$36000 for atmospheric eddy correlation equipment.
- Dr Jim Shiau \$9000 for road pavement research.
- Dr John Lies, Dr Hong Zhou, Dr Wei Xiang \$55000 for a telecommunications research facility.

An engineering education research group has been established within the Faculty. Building on the efforts of individual staff in this area, the purpose of the group is to facilitate and where necessary coordinate the research in engineering education with a view to enhancing both the quantity and quality of the research and publication. The research program of the group will initially focus on (but not be restricted to) areas such as problem based learning, learning styles and spatial abilities, graduate attributes, school to university transitions, alternative delivery, and electronic platform capabilities.

Organisational Unit: Faculty of Engineering & Surveying

USQ Program: Learning & Teaching

USQ Goal: To produce graduates from a diverse student community with discipline expertise and generic attributes prepared for success internationally.

USQ Objective(s)	USQ Targets	Sectional Strategies	Sectional Target(s) (Timeline)	Sectional Indicator(s)	Sectional Resources	Sectional Responsibility
1. A diverse student community to be developed and sustained, while striving to maximise USQ's market position	1.1 Maintain the proportion of international students to at least 25% of student load to 2009.	Development of accredited offers of Faculty programs through reputable partner providers in international locations.	Maintain international student load at the current level of 27%. Three accredited international programs by 2006 and five by 2009. .	Student load. Number of programs	Normal recurrent funding	Faculty Manager
	1.2 Maintain USQ's proportion of students from LSES, R&I and Indigenous groups above national sector means and promote programs encouraging participation by people from all identified disadvantaged groups.	Continue to offer scholarships to outstanding commencing students including scholarships for Women in Engineering and for Indigenous students. Continue to support the Science and Engineering Challenge and the GMSTSS.		Proportion of students from LSES, R&I and Indigenous groups	Normal recurrent funding plus support from engineering industry	Dean
2. A range of delivery modes, study pathways, entry and exit points, and teaching strategies to be sustained that	2.1 Achieve student progress and retention rates sufficient to place USQ in the LTPF funding group.	Decrease academic workloads by 25% to allow investment of time in improvements in T & L.	Improve quality of teaching materials, delivery and feedback to students (2006 and on-going	Staff numbers	Increase of 12 to 15 academic staff required at cost of \$1.5M	Dean

<p>facilitate student access to, and completion of, a program of study</p>		<p>Appoint part-time commencing students coordinator</p> <p>Continue to monitor progression rates in foundation courses common to 2, 3 and 4 year programs</p> <p>Train staff in Problem Based Learning strategies</p> <p>Introduce revised course on professional practice skills into first year of all undergraduate programs. Consider making mandatory first course for all commencing students</p> <p>Development of standard protocols for overseas qualifications and articulation agreements with TAFE Colleges and other providers</p> <p>Research factors that influence success for both domestic and international students by mode. Expand existing research to</p>	<p>Increase progression rates in first year courses</p> <p>Double number of courses utilising Problem Based Learning by 2009</p> <p>Improve transition from school to university (2007)</p> <p>Improve transition to USQ, and retention rates, for students who enter with advanced standing</p> <p>Improved processes for granting of advanced standing to students who have completed programs of study at recognised institutions (on-going)</p> <p>Improved definition of entry requirements for FoES programs.</p>	<p>Equivalence of progression rates across programs</p> <p>Number of courses</p> <p>Accreditation of course</p> <p>Number of protocols and agreements</p>	<p>Additional funding of \$30,000 required to meet part salary of coordinator</p> <p>Normal recurrent funding but, subject to workload constraints</p> <p>Estimated cost \$25,000 - Faculty will seek funding from the USQ Strategic Development Fund in 2006</p> <p>Normal recurrent funding</p> <p>Faculty will seek funding from the Strategic Development Fund in 2006</p>	<p>Associate Dean (Academic)</p>
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		include institution, award type etc data for previous tertiary study, IELTS scores etc.				
	2.2 Achieve student progress, retention and completion rates above the mean for transnational universities by broad level of program, discipline, domestic/international and Tertiary Entrance Rating	As above				
3. The quality of learning & teaching and the rigour of the academic profile to be continually improved.		Establish a new position of Associate Dean (Learning & Teaching) Establish a Learning & Teaching Committee	Modify Faculty structure to give Increased focus on the quality of learning and teaching (2006)	Adoption of new structure	Normal recurrent funding	Dean
	3.1 Maintain employer satisfaction with USQ graduates above 85%. USQ graduates to consistently rate well against those from other institutions that employers have hired.	Implement new USQ graduate Attribute Policy in all Engineering programs. Embed professional attributes in all undergraduate programs	Engineering and surveying graduates to display specified USQ and professional attributes (2007 & on-going)	Student comments at exit interview. Monitor CEQ and GDS data	Normal recurrent funding	Assoc Dean (Academic)
	3.2 On-campus SETS ratings for overall satisfaction to consistently exceed mean of 5.0 on a	Continue to analyse data at the Faculty level: recognise excellence, review courses in which	Raise Faculty mean from 5.43 (2004) to above 5.5 by 2007.	On-campus SETS ratings for overall satisfaction	Normal recurrent funding (but need to recognise impact of high workloads on teaching quality)	Assoc Dean (Academic)

	scale of 7.	teaching was poorly rated. Use Engineering Education Seminars to provide feedback to staff, and to enhance knowledge and skills to improve ratings				
	3.3 Improve the proportion of OP 1-7 enrolments from 20.5% in 2005 to 25% in 2009; while improving the median OP from 11 in 2005 to 10 in 2009.	Promote 2 and 3 year programs as alternative entry to professional engineering and spatial sciences	Raise OP cut-off for 4 year professional programs to 10 by 2009.	OP cut-off scores	Normal recurrent funding	Assoc Dean (Academic)

Organisational Unit: Faculty of Engineering & Surveying

USQ Program: Student Experience

USQ Goal: To be flexible and responsive in order to adapt to the diversity of student needs; and to create an overall environment that is caring, nurturing and supportive of students achieving their own educational, personal and developmental goals.

USQ Objective(s)	USQ Targets	Sectional Strategies	Sectional Target(s) (Timeline)	Sectional Indicator(s)	Sectional Resources	Sectional Responsibility
1. Students to value their experience at USQ.	1.1 Achieve ratings for CEQ Overall Satisfaction, CEQ Good Teaching and CEQ Generic Skills sufficient to place USQ in the LTPF	Implement proposed 'Qualities of a USQ Graduate Policy in Faculty programs.	Engineering and surveying graduates to display specified USQ and professional attributes (2007 & on-going)	Student comments at exit interview. Monitor CEQ and GDS data	Normal recurrent funding	Associate Dean (Academic)

	funding group.	Implement revised professional practice skills course which includes module on graduate attributes and capabilities and their place in program.(see above) Use Engineering Education Seminars to provide staff with knowledge and skills to improve ratings		Accreditation of course Staff attendance at seminars	Estimated cost \$25,000 - Faculty will seek funding from the USQ Strategic Development Fund in 2006 Normal recurrent funding	
	1.2 Maintain CEQ good teaching item ratings well above State and national means for the following items: 'The staff put a lot of time into commenting on my work'; 'My lecturers were extremely good at explaining things'; and 'The teaching staff worked hard to make their subjects interesting' [AEP - CEQ Supl]	As per 3.2 above				
	1.3 A net improvement in PHR for the following STAFF/FACILITIES/COMPONENTS on the Supplementary Questionnaire: Graduate Assessment					

	<p>of Aspects of Educational provision at USQ: 'Teaching Skills'; 'Practical Training for the Workplace'; 'Computer Facilities'; 'Library'; 'Research Facilities'; 'Quality of the Degree; and 'Status of USQ' [AEP - CEQ Supl]</p>					
	<p>1.4 A net improvement in PHR for the following EXTERNAL STUDY ASPECTS on the Supplementary Questionnaire: Graduate Assessment of Aspects of Educational provision at USQ: 'Quality of study material'; 'Material well-presented'; 'Effective/Timely feedback'; and 'Residential School' [AEP - CEQ Supl]</p>					
	<p>1.5 Quality of Service Standards consistently met</p>					

<p>2. A range of services and activities to be provided to support the achievement of students' professional aspirations.</p>	<p>2.1 Maintain CEQ good teaching item ratings well above State and national means for the following items: 'The staff put a lot of time into commenting on my work'; 'My lecturers were extremely good at explaining things'; and 'The teaching staff worked hard to make their subjects interesting'.</p>					
	<p>2.2 A net improvement in PHR for the following STAFF/FACILITIES/COMPONENTS on the Supplementary Questionnaire: Graduate Assessment of Aspects of Educational provision at USQ: 'Student Administration Staff'; 'Student Services'; 'Student Guild'; 'International'.</p>					
	<p>2.3 A net improvement in PHR for the following EXTERNAL STUDY ASPECTS on the Supplementary Questionnaire:</p>					

	Graduate Assessment of Aspects of Educational provision at USQ: 'Quality of study material'; 'Material well-presented'; 'Effective/Timely feedback'; and 'Residential School'.					
	2.4 A net improvement in Measure of Agreement (MOA) ratings on the following CEQ Student Support Scale Item: 'Health, welfare and counselling services'					
3. A range of services and activities to be provided to support the achievement of students' personal aspirations.	3.1 Maintain CEQ good teaching item ratings well above State and national means for the following items: 'The teaching staff normally gave me helpful feedback on how I was going'; 'The teaching staff of this course motivated me to do my best work'.					
	3.2 A net improvement in PHR for the following					

	<p>STAFF/FACILITIES/COMPONENTS on the Supplementary Questionnaire: Graduate Assessment of Aspects of Educational provision at USQ: 'Student Administration Staff'; 'Student Services'; 'Student Guild'; 'International'.</p>					
	<p>3.3 A net improvement in PHR for the following EXTERNAL STUDY ASPECTS on the Supplementary Questionnaire: Graduate Assessment of Aspects of Educational provision at USQ: 'Regional Liaison Officers'; and 'DEC Administration'.</p>					
	<p>3.4 A net improvement in Measure of Agreement (MOA) ratings on the following CEQ Student Support Scale Item: 'Health, welfare and counselling services'.</p>					

4. A diversity of student needs and expectations to be recognised and accommodated.	4.1 USQ learning environments and services to rate favourably when benchmarked against other Australian and international universities.	Development of student learning centre in FoES	Improve facilities in FoES for student self learning and for problem based learning by 2008		Estimated cost \$400,000 - Application to Minor Works Program and/or Strategic Development Fund from 2005	Operations Manager and Associate Dean (Academic)
	4.2 USQ learning environments and services to rate favourably in the outcomes of Equity & Diversity Audit.					

Organisational Unit: Faculty of Engineering & Surveying

USQ Program: Research & Research Training

USQ Goal: To develop a research and research training profile that focuses on developing a small number of research concentrations of international or national prominence, which will have major impact on the University's communities.

USQ Objective(s)	USQ Targets	Sectional Strategies	Sectional Target(s) (Timeline)	Sectional Indicator(s)	Sectional Resources	Sectional Responsibility
1. A framework to be established to nurture research concentrations ranging from burgeoning strengths to those with national and international status.		<p>Research active staff contributing to centres to receive workload allocations to enhance centre contributions.</p> <p>Recruitment of new staff to be based on ability to contribute to research strengths</p>	Support USQ research centres associated with the Faculty and developing strengths within the Faculty (2006 and on-going)	Number and performance of staff active in centres	Normal recurrent funding - Subject to increase in Faculty staffing and reduction in academic workloads	Dean
	1.1 Providing at least of 12.5% of operating budget in support of research and research related activity.	Research workload allocations to be performance based in an open and defensible manner	Increase academic staff time in the faculty allocated to research and research training from the present 25% to 30% by 2007.	Workload allocated through Faculty workload process.	Normal recurrent funding -Subject to increase in Faculty staffing and reduction in academic workloads – increase of 12 to 15 academic staff required.	Dean
	1.2 Developing staff and work profiles which optimize the University's research and teaching potential as Australia's leading transnational educator, specifically:	Research workload allocations to be performance based in an open and defensible manner.	Increase research workload allocations for research active staff up to 50% of allocated load by 2007.	Workload allocated through Faculty workload process.	Normal recurrent funding - Subject to increase in Faculty staffing and reduction in academic workloads.	Dean

	1.2.1 Increasing the number of full-time Level E academic staff, excluding those in senior management roles, to 8% of FTE academic staff;	Identify research and subject areas where professorial appointments would be of greatest value.	One level E academic in each discipline group in the Faculty (4) and each research centre associated with the Faculty (3) by 2007.	Number of level E staff in Faculty.	Subject to increase in Faculty budget by approx \$350,000 and contribution from performance funding to centres.	Dean
	1.2.2 Increasing the proportion of PhD qualified academic staff by 20% of FTE;	Recruit only PhD qualified academic staff. Support selected staff in doctoral programs.	Increase the proportion of PhD qualified staff from the present 65% to 75% by 2009.	Number of successful new appointments and PhD completions by current staff.	Normal recurrent funding.	Dean
	1.2.3 For research active staff members, increasing their research active time to an average minimum of 15 hours per week;	Research workload allocations to be performance based in an open and defensible manner.	Increase research workload allocations for research active staff up to 50% of allocated load by 2007.	Workload allocated through Faculty workload process.		Dean
	1.2.4 Accurately account for research activity conducted by University academic employees.	Research workload allocations to be performance based in an open and defensible manner.	Accurately account for research activity conducted by Faculty academic staff.	Workload allocated through Faculty workload process.		Dean
2. Improve research performance to be achieved as measured by a set of key performance indicators.		Establish new position of Associate Dean (Research)	Modify faculty structure to give Increased focus on research and research training (2006)	Adoption of new structure	Normal recurrent funding	Dean
	2.1 USQ to rank within the top three transnational educators in Australia by 2010 as measured against relevant	See 2.2 below				

	research metrics.					
	2.2 A doubling of USQ's average DEST reportable research outcomes by 2010 both in total and per academic, specifically:					
	2.2.1 Attracting \$30,000 of external research funding per equivalent full time academic staff member (FTE) each year;	Application of Faculty small grants to seed promising project ideas.	External research grants to Faculty staff equivalent to \$10,000 per academic staff member by 2007 and \$20,000 by 2009	Value of external grants	Recurrent funding Subject to increase in Faculty staffing and reduction in academic workloads	Coordinator Graduate Studies
	2.2.2 Attracting in total at least \$15,000,000 per annum of external income from research and the commercialization of research;					
	2.2.3 Publishing 350 equivalent single-authored DEST recognized articles, scholarly or creative works each year;	Research workload allocations to be performance based in an open and defensible manner. Use of conference travel funds to reward publication of journal papers	Two DEST recognized papers (single or multi-authored) per academic staff member (2009)	Number of publications per annum	Recurrent funding Subject to increase in Faculty staffing and reduction in academic workloads	Coordinator Graduate Studies
	2.2.4 Accomplishing 60 successful HDR completions per annum.	Promotion of the EngD to industry. Development of twinning	5 EngD enrolments per year from 2006. 10 new international PhD enrolments per	Number of EngD enrolments Number of agreements and	Recurrent funding	Coordinator Graduate Studies

		arrangements with overseas universities	annum from 2007	enrolments		
	2.3 Commercialisation of research to improve.	Promote FoES research capacity to industry	5 EngD enrolments per year from 2006.	Number of EngD enrolments	Recurrent funding	Coordinator Graduate Studies

Organisational Unit: Faculty of Engineering & Surveying

USQ Program: Staff

USQ Goal: To attract and retain highly qualified staff, and sustain a workplace which values, recognises and rewards effort appropriately.

USQ Objective(s)	USQ Targets	Sectional Strategies	Sectional Target(s) (Timeline)	Sectional Indicator(s)	Sectional Resources	Sectional Responsibility
1. USQ's workplace performance to be improved as measured by a set of key performance indicators	1.1 USQ's Total Separation Rate to remain at, or slightly below, the industry average of 16.16% to indicate a stable workforce.					
	1.2 USQ's Employee Initiated Separation Rate by Length of Service for employees with less than 3 years service to decrease from current 55% to the industry average of 39% to limit the costly loss of new talent.					

	1.3 USQ's Unscheduled Absence Rate to remain low at 2.1%, well below the industry rate of 3.0% to reflect a healthy and productive workforce.					
	1.4 USQ's OH&S Premium Rate to reduce from approx \$650K per annum through a reduction in OH&S Incident Rate from 2.35% to the industry average of 1.2%.	OH&S obligations to be reinforced in all Managers' PDs. Risk assessment training for all academic and general staff.	Maintain FoES low incident and injury rate (on-going)	OH&S's obligation appearing as specific duties/accountabilities in PDs. Training list held by WH&S Officer/Managers	Normal recurrent funding	Operations Manager
	1.5 Increased staff satisfaction as assessed by survey.	Delegate authority to lowest practical level while maintaining control. Revise composition of Faculty committees Spread academic administrative, program coordination and pastoral care functions more broadly	Increase opportunities for staff to participate in the operation and management of the Faculty. (2007)		Normal recurrent funding	Dean
2. A workforce profile to be secured that			Increase number of academic staff in	Number of staff appointed	Increase of 12 to 15 academic staff	Dean

meets the needs of the organisation through effective workforce planning resulting in agreed faculty and Divisional workforce profiles.			Faculty to decrease academic workloads by 25% and increase staff performance and satisfaction (2006/07).		required at cost of \$1.5M	
	2.1 Increase USQ's percentage of academic and senior staff with a doctoral qualification to a level above the mean for transnational universities.	Recruit only PhD qualified academic staff (except for some specific skills based positions). Support selected staff in doctoral programs.	Increase the proportion of PhD qualified staff from the present 65% to 75% by 2009.	Number of successful new appointments and PhD completions by current staff.	Normal recurrent funding	Dean
	2.2 Agreed Faculty and Divisional workplace profiles for 2009 to be met in terms of - Employment Status, Tenure, Age, Occupation, Education, Equity.	Succession planning by all sections Minimum qualification of BTech for all future technical staff appointments	December 2007 A professional technical support staff capable of supporting the teaching and research needs of the faculty and its associated research centres (on-going)	Change to profile		Managers Operations Manager
3. A more equitable staff profile to be secured.	3.1 Improved participation by women in academic Levels C and above, HEW Levels 7 and above, and senior management.	Targeted recruitment Development of existing staff to target opportunities for advancement.	10% of academic positions at all levels to be held by women. (on-going)	Changed profile		Dean
	3.2 Improved level of participation by identified under-represented groups – particularly Indigenous					

	peoples, people from non-English speaking backgrounds and people with disabilities – in the USQ staff profile.					
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Organisational Unit: Faculty of Engineering & Surveying

USQ Program: Equity & Multiculturalism

USQ Goal: To have a student body that closely reflects the make-up of the broader society, to build an environment which fosters successful participation by people from diverse backgrounds, and to develop graduates who are culturally sensitive in order to contribute to creating a society that values diversity and difference.

USQ Objective(s)	USQ Targets	Sectional Strategies	Sectional Target(s) (Timeline)	Sectional Indicator(s)	Sectional Resources	Sectional Responsibility
1. Demonstrable improvements to be secured in diversity management and equity services over the next five years.	1.1 Growing evidence supporting the furthering of the development of an institutional culture that fully values equity and diversity (target: establishment of element equity committees?).					
	1.2 Maintain USQ's proportion of students from LSES, R&I and Indigenous groups above national sector means (data to be circulated) and promote programs encouraging participation by people from all identified disadvantaged groups.	Continue to offer scholarships to outstanding commencing students including scholarships for Women in Engineering and for Indigenous students. Continue to support the Science and Engineering Challenge and the GMSTSS.		Proportion of students from LSES, R&I and Indigenous groups	Normal recurrent funding plus support from engineering industry	Dean
	1.3 Improve TPP and IHEPP progression					

	rates and transfer rates into award programs. (current data to be circulated).					
2. Demonstrable improvements to be secured in the development of graduates who are culturally sensitive and well informed on diversity.	2.1 Global citizenship to feature as attributes of a USQ graduate so that USQ graduates will have the ability, through understanding and valuing diversity, to live and work competently in cultural diverse communities around the world.	Implement new USQ graduate Attribute Policy in all Engineering programs. Embed professional attributes in all undergraduate programs	Engineering and surveying graduates to display specified USQ and professional attributes (2007 & on-going)	Student comments at exit interview. Monitor CEQ and GDS data	Normal recurrent funding	Assoc Dean (Academic)
	2.2 USQ Transnational Pedagogies Framework developed and providing a recognised impact.					
3. Demonstrable improvements to be secured in USQ as a workplace that supports diversity. (Cross reference staffing)	3.1 Improved participation by women in academic Levels C and above, HEW Levels 7 and above, and senior management.	Targeted recruitment. Development of existing staff to target opportunities for advancement.	10% of academic positions at all levels to be held by women. (on-going)	Changed profile		Dean
	3.2 Improved level of participation by identified under-represented groups – particularly Indigenous peoples, people from	Continue policy of recruiting the most highly qualified and suitable staff	Maintain existing staff profile (on-going)			Dean

	non-English speaking backgrounds and people with disabilities – in the USQ staff profile.					
4. USQ's research output to be increased on the themes of equity and multiculturalism.	4.1 Increase in research income, publications and number of projects on the themes of equity & multiculturalism by at least 50 per cent between 2005-2009.					

Organisational Unit: Faculty of Engineering & Surveying

USQ Program: Regional Engagement

USQ Goal: To contribute to the community by developing ‘University Cities’ built on community partnerships, service and engagement.

USQ Objective(s)	USQ Targets	Sectional Strategies	Sectional Target(s) (Timeline)	Sectional Indicator(s)	Sectional Resources	Sectional Responsibility
1. USQ's role in the economic, social and cultural development of its regions to be enhanced through proactive and coordinated strategies.	1.1 Increased range of University-based regional initiatives and other engagements covering communication activities, regional development, extension and education activities, collaboration and interchange with business and industry, consultancy, and non-acad	The Faculty will seek to create and develop interactions with engineering and surveying industries within the region in order to foster student learning and relevant research.	Ongoing, but a specific industry-liaison program is planned if a USQ Incentive Grant is successful.	Number of formal learning agreements created with specific engineering and surveying companies and organisations.	Faculty staff time (dependent on success of USQ Incentives Grant application).	Professor D Ross
	1.2 University facilities and resources increasingly available for use by the community.	The Faculty will endeavour to make its expertise and facilities available to regional engineering and surveying organisations on a cost recovery basis.	Ongoing	Staff consultancies and engineering testing jobs completed with regional engineering and surveying industries.	Faculty staff Faculty laboratories and equipment.	Dean Operations Manager
2. USQ's role as a key leader in the ongoing development of	2.1 Clear public understanding of USQ contributions to the					

knowledge-based industries and services in the City of Toowoomba to be enhanced . (Audits required)	Toowoomba community					
	2.2 Increased number and range of University/community partnerships					
	2.3 Increased number and range of new knowledge-based initiatives involving USQ and community partners	Continue to support the Science and Engineering Challenge	Ongoing	Number of staff who volunteer to work on the committees and support the projects during the challenge		
	2.4 Growing evidence of strengthened relationships between USQ staff and other educationalists in the Toowoomba area	Continue to support and contribute to the Toowoomba's Technology, Mathematics & Science Centre of Excellence (TMSCE)	Ongoing	Number of staff involvement in committees and projects		
3. USQ's level of mutually beneficial community engagement in the Wide Bay/Burnett region to be enhanced. (Audits and current data required)	3.1 Increased number of strategic partnerships	Continued development of Faculty research partnerships including the current Wide Bay Water partnership.	Ongoing	Number of partnerships	Faculty staff	Dean
	3.2 Increased number and range of new programs/courses/events relevant to regional needs					

	<p>3.3 Increased staff contribution to local community and professional bodies</p> <p>3.4 Increased level of regional community support for USQ Wide Bay programs as measured by awards, scholarships, work placement, provision of homestay accommodation etc.</p> <p>3.5 Increased level of interest and participation of local community in USQ Wide Bay programs / courses / events</p> <p>3.6 Increased number of research projects relevant to the needs to the Wide Bay Burnett region</p>					
4. A strong community development / service	4.1 Successful implementation of	Seek approval and appoint staff (1 level E	Bachelor of Built Environment and	Number of students enrolled, S1, 2007	Recurrent funding - (dependent on DEST	Dean & Assoc Prof R Ayers

<p>learning theme for USQ Springfield to be established</p>	<p>Campus theme of 'community centred – career focussed'</p> <p>4.2 Growing staff contributions to local community and professional bodies</p> <p>4.3 Growing participation of local community in USQ Springfield programs/courses/events</p>	<p>& 1 level B) late 2006.</p> <p>Design and development of programs in 2006.</p> <p>Involvement of Faculty staff located at Springfield in community and professional bodies.</p> <p>Offering of relevant and well designed programs by the Faculty.</p>	<p>Bachelor of Architecture programs to commence S1, 2007</p>		<p>full funding of student places)</p>	
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Organisational Unit: Faculty of Engineering & Surveying

USQ Program: Internationalisation

USQ Goal: To ensure that it remains Australia's leading transnational educator, the University will include an international perspective in all of its operations and services.

USQ Objective(s)	USQ Targets	Sectional Strategies	Sectional Target(s) (Timeline)	Sectional Indicator(s)	Sectional Resources	Sectional Responsibility
1. International student numbers to grow.		Appoint senior manager with direct responsibility for international recruitment and partnerships.	Modify Faculty structure to give increased focus on international programs (2006)	Adoption of new structure	Recurrent funding	Dean
	1.1 Maintain the proportion of international students to at least 25% of student load to 2009.	Increase marketing involvement in student recruitment in cooperation with USQ International.	Maintain minimum international student load to the current level of 27%.	Student load	Recurrent funding	Faculty Manager
	1.2 Growth in international student enrolments to 10,000 by 2009.	Support educational partners in local marketing activities.	Increase international student load from the current level of 27% to 30 % by 2009.	Student load	Recurrent funding	Faculty Manager
	1.3 Increase international on-campus load from 650 EFTSL in 2005 to 780 EFTSL by 2009.	Pursue markets and partnerships that encourage growth in on-campus load.	Increase enrolments of international on-campus students by 20% by 2009.	Student load	Recurrent funding	Faculty Manager
	1.4 Increase number	Development of	Fiji Institute of Tech	Number of programs	Recurrent funding	Faculty Manager

	of distance direct and partner enrolments from 2800 in 2005 to 4200 in 2009.	accredited offers of Faculty programs through reputable partner providers in international locations	accredited by 2007. Two further accredited programs by 2009.	and enrolments		
2. The efficiency and profitability of international activity to be improved.	2.1 Increased revenue from international operations. (Target required?).	Strategies to increase enrolments as per 1.1 to 1.4 above.	As above	Faculty revenue	Recurrent funding	Faculty Manager
	2.2 International operations to have a contribution to income return of at least 20% by 2009.	Strategies to increase enrolments as per 1.1 to 1.4 above.	As above	Faculty revenue	Recurrent funding	Faculty Manager
	2.3 Improved efficiency in administrative functions demonstrated, such as shorter inquiry turnaround times, lower cost per administrative function and streamlining (fewer administrative steps and elimination of duplication) in administrative processes.	Liaise with USQ International to improve efficiency of administrative processes in both sections.	Approved and documented processes in place by Semester 2 2006.	Turnaround times Error rates	Administrative staff workload	Faculty Manager
3. Ongoing opportunities to be supported for students to continue a long-term relationship with USQ	3.1 Number on USQ's international alumni register to exceed 5,000 by 2009.	Liaise with educational partners to increase alumni participation.	All partners briefed and projects in place by 2006.	Alumni register	Recurrent funding	Faculty Manager

4. International student performance to be optimised.	4.1 Achievement of progression, retention and completion rates for international students above the mean for transnational universities by discipline. (Data required).	Research into factors that influence success at USQ for students transitioning from other institutions. Both ONC and EXT	Develop defensible strategies to increase retention rates 2006-2008	2007 -2008: Report on strategies to improve retention may include recommendations in the following areas: curriculum, advanced standing protocols, distance education materials, teaching strategies etc.	Strategic funding application	Extension of existing Student Learning Profiles project led by Associate Professor David Dowling.
5. The curriculum to have an international focus	5.1 Criteria to measure internationalisation of curriculum endorsed by Academic Board by end 2006.					
	5.2 All faculties making good progress towards internationalisation of curriculum as measured against agreed criteria.	Develop implementation plan in consultation with Instructional Designers	All FoES courses to include internationally relevant material or international examples, case studies, and standards as appropriate (2009)	Number of courses	Recurrent funding	Associate Dean (Academic)
	5.3 Number of twinning / joint degree programs to increase.					
6. The development of USQ graduates as good global citizens to be encouraged.	6.1 Strategies in place to strengthen the interaction between domestic and international students.	Maintain compulsory residential schools for all external students Continue mixed teams in PBL courses Maintain project conference	FoES to maintain existing strategies (on-going)		Recurrent funding	Assoc Dean (Academic)

		Establish student learning centre	Develop infrastructure to enable interaction (2007)		Application to Minor Works Program and/or Strategic Development Fund	Operations Manager
	6.2 Growing evidence supporting increased interaction between domestic and international students studying onshore at USQ.	As above				
	6.3 USQ's Study Abroad Program fully subscribed.					
	6.4 An attributes of a USQ graduate introduced which encompasses global citizenship					
7. Teaching staff to have sufficient diversity of background and international experience or background to be able to provide an appropriate learning experience.	7.1 Faculty targets met for a proportion of staff to have international experience or background – to be developed.	Active encouragement through R & HD committee Pursue opportunities to increase ADL funding to support targeted overseas initiatives	50% of ADLs to be taken overseas by 2007	Number of overseas ADLs	Normal recurrent funding	Coord Graduate studies
	7.2 Faculty/staff mobility programs, visiting scholar programs and culture training for staff in	Active encouragement through R & HD committee	FoES to host four (4) visiting scholars at any time (from 2006)	No of scholars	Normal recurrent funding	Coord Graduate studies

	place.					
	7.3 International achievements of staff recognised in performance review and promotion.					
	7.4 Increased number of staff engaged in international collaboration.	Active encouragement through R & HD committee	50% of ADLs to be taken overseas by 2007 FoES to host four (4) visiting scholars at any time (from 2006)		Normal recurrent funding	Coord Graduate studies

Organisational Unit: Faculty of Engineering & Surveying

USQ Program: Enterprise & Operations

USQ Goal: To improve USQ's financial situation through both securing a more robust revenue stream and improving the efficiency of resource use.

USQ Objective(s)	USQ Targets	Sectional Strategies	Sectional Target(s) (Timeline)	Sectional Indicator(s)	Sectional Resources	Sectional Responsibility
1. Growth in the revenue the University receives from students and other sources to be achieved.	1.1 Meet published load growth targets, including the government funded cluster targets embedded within them.	Support for and an active participation in the Science and Engineering Challenge backed up by appropriate activities directed at year 12 students.	Increase student numbers in the flagship programs of the Faculty (the on-campus offers of the BEng and BSpSc) 20% by 2009.	EFTSL in programs	Normal recurrent funding	Faculty Marketing Committee
		Establishment and operation of cooperative education initiative with major engineering organisations.	Increase in enrolments in the Associate Degree in Engineering by 90 EFTSL by 2007.	Number of agreements with major engineering organisations.	Full realisation of target subject to grant of \$110, 000 from Strategic Initiatives Fund. In-kind commitment of 400 hours of effort from senior Faculty staff.	Prof David Ross & senior staff of Faculty
		In conjunction with Engineers Australia (EA) promote the MEngPrac as the pathway of first choice for experienced technologists to achieve professional engineer status.	Increase in enrolments in the MEngPrac to 20 EFTSL by 2009.	EFTSL in program.	Normal recurrent funding.	Associate Dean (Academic)
	1.2 Proportion of fee-paying revenue to					

	total revenue to increase from 21.5% in 2005 to 25% in 2009.					
	1.3 Increased revenue from non-government sources from \$13.5million in 2005 to \$25 million in 2009.	Expansion of the jointly badged BEngTech program with the Open Polytech of NZ to include an on-campus offer.	Increase in income from the program to \$250,000 by 2009.	Income from the program.	Subject to agreement with Open Polytechnic and Wellington Polytechnic	Associate Dean (Academic)
	1.4 Commercialisation of research to improve.					
2. Cost centre heads to better manage resources under their control and to report on performance.	2.1 Cost/profit centre contributions and bottom line surpluses to improve.	Restructure workshop as independent cost centre managed by Faculty. Proposal to University for engineering workshop to provide services to all University units and centres.	Improve cost effectiveness of the engineering workshop (2006/07)	Adoption of proposal		Operations Manager
	2.2 Costs contained or reduced as based on benchmarking costs internally (including through the use of ABC data) and externally.					
3. Permanent staff expenditure to be appropriately	3.1 Percentage of salary expenditure against total	Increase Faculty budget for equipment to increase to	Implement recapitalisation project		Subject to increase in Faculty budget.	Operations Manager

managed.	expenditure to reduced to 60% by 2009.	\$500,000 per annum from 2007.				
4. Workforce productivity to be improved.	4.1 Productivity as assessed by number of staff FTE per revenue to increase from \$100,000 per FTE in 2005 to \$135,000 per FTE in 2009.					
	4.2 Number of student EFTSL per academic staff FTE to be above the sector mean by discipline.					
	4.3 Number of student enrolment per general staff FTE to increase.					
	4.4 Academic staff FTE per general staff FTE to be maintained above the mean for transnational universities.					
5. Greater efficiency of use of the University's resources to be achieved.	5.1 All programs to have a contribution to income return of at least 22% by 2009.	Redesign and reaccredit MEngTech program. Manage offers of MTM courses until demand increases	MEngTech program to be profitable from 2006 MTM program to be profitable from 2007	ABC contribution from 2006 ABC contribution from 2007		Coordinator Graduate Studies.

	5.2 Growing evidence for reduced duplication and increased efficiency of financial processes as assessed by benchmarking progress both internally and externally.					
	5.3 Student enrolments per EFTSL (Student Load Density) to be below 2.0 by 2009.					
	5.4 Efficiency of resource utilisation to rate above sector mean for at least 80% of indicators in TEFMA benchmarking survey.					
6. Improvements to the efficiency, effectiveness and productivity of time and mission critical processes to be achieved.	6.1 Quality of Service Standards consistently met.					
	6.2 Roll-out of Planning, Quality & Review Framework finalised by end 2006.					
	6.3 Implementation of recommendations from the Final Report					

	of the ICT Review Committee largely completed by 2009.					
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