Present: Professor Ross McAree (Chair), Professor David St John, Associate Professor Rowan Truss, Professor David St John, Dr Vincent Wheatley, Professor Paul Lever, Dr Saiied Aminossadati, Mr John Varghese, Ms Katie Gollschewski (Secretary).

Apologies: Mrs Kim Lamb, Professor Jin Zou, Associate Professor Han Huang.

1. Report from Chair

The committee welcomed three new members:
- Mr John Varghese, postgraduate research student representative;
- Dr Saiied Aminossadati, representing mining engineering and
- Dr Vincent Wheatley, representing mechanical engineering (A/Prof Han Huang is on SSP in semester 2, 2011).

The committee also thanked Dr Aleks Atrens for the valuable contributions he made to the committee as the postgraduate research student representative.

2. Three Minute Thesis Competition

The Three Minute Thesis Competition involves research higher degree (PhD and MPhil) students presenting a compelling three minute oration on their thesis topic and its significance in language appropriate to an intelligent but non-specialist audience.

The School held an information session on Friday 29 July with approx 20 participants. Dr Jessica Gallagher, the UQ Advantage Senior Manager, also attended and participated in the discussion.

The School of Mechanical and Mining Engineering 3MT heat was held on Tuesday 16 August. There were 15 participants and the winner of the School heat was Mr Iain Williams who received a $500 cash prize and advanced to the Faculty final. Ms Kun Yang placed second, received $250 and also advanced to the Faculty final. All audience members cast their vote on the day for the ‘People’s Choice’ prize, which was won by Mr Rolf Gehre who received $250.

Mr Iain Williams and Ms Kun Yang represented the School in the Faculty final on 23 August and while Mr Williams placed second, Mr Hanif Baharin from ITEE was the winner of this final and progressed to the UQ Final.

Last year the School had 17 participants in the School 3MT Heat, which was a significant increase from 9 in 2009. In 2012, the School aims to increase participant numbers to 30. It was noted that the communication about the event was sufficient and that the prize money was a motivator for participating students. It was resolved to maintain the monetary prize in 2012 and work on strategies for increasing student participation.

3. 2011 EAIT Faculty Research, Innovation and Supervision Awards (RIS)

The 2011 EAIT Faculty Research, Innovation and Supervision Awards (RIS) are designed to recognise and reward outstanding achievement in research, innovation and supervision within the Faculty. The Research, Innovation and Supervision Awards (RIS) categories are: Early Career Researchers, RHD Supervision Excellence, Internationalisation, Commercialisation and Impact.

Members noted that strong applications were submitted by the School in each of the categories. One member commented that it was important for nominees to check the criteria carefully as some applicants did not meet the listed criteria. Members also noted that these awards promote good scholarship and recognition of staff achievements so these awards should be strongly supported by the School.

The award winners will be announced at a special awards ceremony in the First Year Engineering Learning Centre on Monday 12 September.
4. Research Quarters

The Fees Reviewing Committee has approved the Graduate School’s proposal to implement research quarters for all research higher degree students from 2012. Research quarters will replace the current semester model of enrolment for all RHD students and will impact on how fees are charged to international students. This model will have a number of benefits for students and enrolling units, including:

- increased flexibility, particularly in terms of commencement, interruption and thesis submission dates
- maximum value for money for fee paying students
- alignment with existing RHD scholarship rounds
- alignment with the existing university administrative system

The new model will also more closely match research higher degree student enrolment and work patterns. The approved dates for the research quarters are as follows:

<table>
<thead>
<tr>
<th>Research Quarter</th>
<th>Start date of quarter</th>
<th>Due date for payment of charges</th>
<th>Census date / final date to cancel without financial penalty</th>
<th>End date of quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>1 Jan</td>
<td>15 Jan</td>
<td>1 Feb</td>
<td>31 Mar</td>
</tr>
<tr>
<td>Q2</td>
<td>1 Apr</td>
<td>15 Apr</td>
<td>1 May</td>
<td>30 Jun</td>
</tr>
<tr>
<td>Q3</td>
<td>1 Jul</td>
<td>15 Jul</td>
<td>1 Aug</td>
<td>30 Sep</td>
</tr>
<tr>
<td>Q4</td>
<td>1 Oct</td>
<td>15 Oct</td>
<td>1 Nov</td>
<td>31 Dec</td>
</tr>
</tbody>
</table>

Members noted that there was some concern about thesis submission dates, particularly relating to those students who intended to submit by the first census date in 2012 (31 March). The Graduate School has contacted all students about the change to research quarters and is following up individually with students they believe will be affected and provided detailed information and options.

4. Conference

The Engineering Postgraduate Conference Organising Committee was held on 6 June 2011. The 2011 Engineering Postgraduate Conference Report is attached for noting.

The committee for the 2012 conference has been formed and has commenced preparations. The new student representative Mr John Varghese will join this committee and will report back to the Research Committee on the organisation of the conference. Ross McAree and Katie Gollschewski also sit on this committee.

Members noted that the School strongly supports the conference continuing in 2012 as it is an opportunity for our students to practice presenting to an audience and consequently meet one criteria of the milestones. It encourages professional developments. Members noted that ITEE would be taking on the management of the conference in 2012 (e.g. payments and administration support).

5. RHD Online Applications

The University is introducing online applications for Expression of Interest and Application for Admission and Scholarship. The Online Applications Process aims to contribute to Student Experience by increasing the ease, speed, reliability, and consistency of the application process. In addition to these aims, the system will also provide more thorough reporting on applications and expressions of interest. This valuable market research will help towards the University achieving its 60:40, undergraduate postgraduate enrolment goal.

The University has commissioned Tribal Education to assist with the implementation of their SITS:Vision admissions module. Tribal’s student administration system is currently used by over 70% of the UK higher education sector. It is, arguably, the UK’s answer to Oracle’s PeopleSoft application. The module lets applicants apply for particular programs of study via an online web form and provides Staff with a dedicated portal to assess, manage and track applications. The online form allows applicants to...
upload various documents, apply for multiple programs via their own unique username and password, accept and decline offers as well as receive correspondence from UQ staff via their own in-tray. For the purposes of RHD administration, SITS: Vision also contains inquiries functionality and effective workflow management that can be adapted to streamline UQ’s current RHD EOI and application process.

Given the complexity of the RHD EOI and Application process, the project team is keen to undergo comprehensive consultation to ensure that all stakeholders are familiar with the system, the challenges associated with implementation and the goals of the Student Lifecycle Project Steering Committee. On 5 August the Postgraduate Coordinator and Postgraduate Administrative Officer met with Mark Englemann, the Business Analyst for the project, to discuss our business processes and requirements. The Postgraduate Administration Officer gave members a brief overview of how the new system would affect the School’s business process.

The School has been asked to nominate five or so broad areas of research which will be available for students to select when submitting an Expression of Interest. These areas will allow the School to search through Expressions of Interest more effectively; as well as allow them to be efficiently allocated.

Members briefly discussed the school’s research areas, noting that these areas of research would be marketing tools in this instance. Members noted that research areas would be discussed later in the meeting and agreed to hold the discussion until later in the meeting.

6. School Contribution to UQ ERA Outcomes

The Units of Evaluation for ERA 2010 were the Fields of Research at each Australian university (provided the number of eligible published outputs exceeded 50 in citation-based fields and 30 in peer-reviewed fields). As predicted, no Academic Organisational Unit at UQ contributed work to only a single Field of Research. The interdisciplinarity that characterises so much UQ research also led to a relatively high percentage of outputs being assigned to more than one Field. Nevertheless, every publication can be tracked (proportionately) to the Organisational Unit whose staff members produced it.

This has enabled the UQ ERA 2012 Steering Committee to calculate a composite ERA 2010 Outcomes Index for each Organisational Unit – the weighted mean of the product of the ERA Ratings and the percentage of outputs contributed to all 4-digit FoRs by Organisational Unit. The Organisational Unit affiliation of every staff member who contributed Research Outputs to ERA 2010 was captured from Aurion as at 31 March 2009 (the ERA 2010 census date). The Faculty Index is therefore not an aggregate of the Indexes of the associated Units.

The ERA 2010 Outcomes Index for the Faculty of Engineering, Architecture & Information Technology is 4.3191.

<table>
<thead>
<tr>
<th>Department</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Water Management Centre</td>
<td>4.6174</td>
</tr>
<tr>
<td>Architecture</td>
<td>3.9792</td>
</tr>
<tr>
<td>Chemical Engineering</td>
<td>4.4596</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>4.0184</td>
</tr>
<tr>
<td>Information Technology &amp; Electrical Engineering</td>
<td>3.8426</td>
</tr>
<tr>
<td>Mechanical &amp; Mining Engineering</td>
<td>4.6047</td>
</tr>
</tbody>
</table>

School of Mechanical and Mining Engineering
- 58% of the Outputs towards FoR 0913 - Mechanical Engineering (which received a Rating of 5);
- 48% of the Outputs towards FoR 0912 - Materials Engineering (which received a Rating of 5);
- 33% of the Outputs towards FoR 0914 - Resources Engineering and Extractive Metallurgy (which received a Rating of 5);
- 15% of Outputs towards FoR 1007 - Nanotechnology (which received a Rating of 5).
Members noted that the School was second only to the research centre AWMC in the Faculty index and noted that the School input into each FoR was high.

7. Library Research Information Service

The Library Research Information Service is trying to develop new ways of supporting RHD students. At present, a library staff member meets each new research higher degree student as they enrol and provides them with a library tour and an introduction to research skills as part of the general induction process. The Library also offers regular Endnote classes throughout the year and some generic advanced classes during Research Week and Graduate Student Week (e.g. Finding influential research).

The library staff would like to conduct some information skills workshops that would be customised to the specific research group, for example one for mechanical engineering students, another for materials engineering students. These workshops have been offered to research higher degree students at the Sustainable Minerals Institute over the last couple of years.

The intention of these workshops would be to engage with students, ensuring they are aware of the library resources and to encourage good scholarship. The library has developed a handout to be used during the sessions (attached), and our session will be held on Wednesday 28 September 2011.

The Research Chair and secretary met with Cristina Ghiculescu, the Research Information Service Librarian (Engineering & Sciences) to discuss the challenges of getting involvement from a computer literate cohort. Members noted that most students would not benefit from a ‘how to’ course, but acknowledged that most students do not have an in-depth understanding of the databases available or how this knowledge can reduce their time spent searching for relevant papers (for example students using Google Scholar as opposed to receiving an automatic weekly personalised feed from a library database). The Research Chair indicated to Ms Ghiculescu that the school would promote the workshop to students and would seek to have at least 30 students attend.

9. Underwriting of APA scholarships to high performing undergraduate students

The Chair of the Research Committee and Head of School have discussed creating a School based scheme that would allow the early offer of a scholarship at APA rates to be made to high performing undergraduates to give them the certainty of a scholarship and encourage them to undertake RHD study. The School would underwrite the APA in the expectation that the student would receive an APA. Accordingly the scheme would be limited to very high performing undergraduates.

In general, APA scholarships are not awarded until students have graduated. Most students have secured employment at this time, particularly our better students and there is a feeling that good research students may be lost because we are unable to provide them with certainty of a scholarship offer. Top-up scholarships would be at the discretion of the supervisor.

Members discussed whether this scheme would be available to non-UQ applicants and it was determined that the program should be expanded to include any domestic applicant who is in their final year of their bachelor program. Members also determined that the offers would need to be sent mid-year as this is the time most students are considering offers of employment.

Members also discussed whether the scheme should be advertised and it was determined that the scheme should be advertised via the School website and an email from the Head of School.

It was acknowledged that due to the length of time between the School offer and the Graduate School’s scholarship round in November that there may be changes to the title of the project and supervisor. Members agreed that there should be a note in the offer letter that acknowledges that these details may change by the time the student commences through mutual agreement.

The following were suggested as conditions:

- To be eligible, the applicant must have a GPA of 6.3 or higher
- The offer would be made in the student’s final year
The offer would be conditional on the student maintaining their GPA and applying for an APA.

The supervisor must have funds to support the project.

Applicants would apply for the scheme using the existing application forms of the Graduate School, with administration completed at the School.

The decision to offer an ‘early scholarship’ would be made by the Head of School based on a recommendation from the Research Committee.

There would be no limit on the number of early scholarship offers, provided all applicants meet the GPA requirements.

It was recommended that –

(i) The Research Chair build a business case for this scheme for consideration by the Head of School and School Manager;

(ii) The Head of School will discuss this scheme with the Dean of the Graduate School

10. Increasing Funding: Research Grant Preparation Scheme

At the School Advisory Team meeting on 11 July, members discussed methods to increase the amount of ARC funding received. The School’s HERDC return showed an increase for 2010 funding. Members noted that it was important to take steps to increase the Category 1 income to the School and it was suggested that Professor Graham Schaffer and Prof Jin Zou be asked to assist with the development of a program designed to increase the amount of ARC grants awarded.

The Research Grant Preparation Scheme is scheduled to run on 17 November between 8am - 11am. It is proposed that the format for this session be –

• Prof Graham Schaffer (20mins) “How does the ARC work”
• Prof Jin Zou (20 mins) “How to succeed in ARC grants”
• Library Representative (10 mins) “How the Library can help you prepare your grant”
• Individuals intending on applying for a grant have 10 minutes to present their idea for an ARC proposal to the group and receive feedback.

Members acknowledged that this session would probably more beneficial to presenters as they will need to articulate their research, but noted that no technical holes were likely to be identified. Another benefit may be that it could open doors to future collaborations.

Members noted that other preparatory schemes offered by the University were very general and welcomed the creation of a discipline specific session. Members also noted that the scheduled date would be beneficial at is would encourage staff to start preparing their proposals earlier than usual.

It was recommended that –

(ii) That Professor David St John, Dr Vincent Wheatley and Dr Saied Aminossadati form a sub-committee to organise this event and report back on preparations at the next committee meeting.

11. Staff Research Days

In 2013 the School will be involved in the accreditation of the Bachelor of Engineering program, and a School Review and consequently it is important that all staff is aware of the research that is occurring in the School. It has been proposed to hold staff research sessions on two consecutive afternoons in October. The first session will consist of eight different research groups within the School giving fifteen minute presentations on the research they have undertaken over the past 5 years, and their intended research path for the next five years. In the next session, held one week later, another four
groups would present while the final hour would be a discussion on the strengths and weaknesses of research in the School and possible future directions.

This event is scheduled to run on the 5th and 12th of October from 2:00pm – 4:00pm and will be advertised to staff in early September.

It was recommended that –

(i) The Research Chair coordinate the list of speakers and advertise this event within the School.

12. Milestones

In previous meetings members have discussed the composition of milestone review committees. The Chair of the milestone review committee should be an independent academic who is not directly involved with the candidate’s research. To better ensure the independence of the Chair, and to help principal advisors identify potential chairs, the committee needs to determine ‘clusters’ of research activity. This list will be disseminated via a School memo and will then allow principal advisors to nominate a chair from a cluster other than their own.

It was recommended that –

(iii) The milestone memo be finalised and distributed to all staff.

13. Benchmarks

Members noted the School’s quarterly benchmarks, and discussed the low rates of milestone completion and concerns about student numbers which some members believed may lower in 2012.