



PROJECT HANDBOOK
for
MASTERS (by Coursework)

SCHOOL OF MECHANICAL ENGINEERING

2015

Copyright © 2015 by The University of Adelaide. All rights reserved.

DISCLAIMER

The School of Mechanical Engineering has taken every effort to ensure that an up-to-date and accurate summary of all information is provided in this manual to date; however, this information is subject to change. If you have any queries about the information in this manual please contact the School Office on 8313 5460 or email info@mecheng.adelaide.edu.au

The information in this document does not override University Policies or data available through the University online. Please visit <http://www.adelaide.edu.au/publications/postgraduate/#pils> for the University's Postgraduate Calendar.

All information contained in this document is accurate at the date (27/2/2015) of publication.

REVISION LOG

Version Level	Revision(s) Made	Revised By	Release Date
8	<ul style="list-style-type: none"> • Inclusion of student performance requirements and assessment weighting rubrics for all key deliverables. • Alignment strengthened with AQF Level 9. • Restructure and general overhaul. 	Carl Howard Eric Hu Sasha Shamshurin	27/2/2015

CONTENTS

1	PURPOSE OF THIS PROJECT HANDBOOK.....	5
1.1	Definitions of Terminology	5
2	COURSE DESCRIPTION.....	6
2.1	Student Deliverables, Deadlines and Submission Methods.....	8
2.2	Schedule of Activities.....	8
2.3	Penalty for Late Submission	10
3	HOW TO DETERMINE YOUR PROJECT TOPIC AND FIND A SUPERVISOR	11
3.1	Australian Qualifications Framework (AQF) Justification	11
3.2	Project Registration	12
3.3	Autonomous Sanctions.....	12
3.4	Plagiarism.....	12
4	PROJECT ASSESSMENT	14
4.1	Generic Grade Descriptors	14
4.2	Certification of Report for Examination	15
4.3	Submission Against the Advice of Your Supervisor	17
4.4	Examiner Anonymity	17
4.5	Revised and Resubmitted Reports	17
5	RESEARCH PROCESS	18
5.1	Student Performance Requirements and Assessment Weighting	18
6	REPORTS.....	21
6.1	Project Proposal	21
6.2	Project Definition Statement and Plan	21
6.2.1	Student Performance Requirements and Assessment Weighting	21
6.2.2	Requirements for the Document.....	21
6.3	Mid-Project Report.....	24
6.3.1	Student Performance Requirements and Assessment Weighting	24
6.3.2	Requirements for the Document.....	24
6.4	Final Report	27
6.4.1	Student Performance Requirements and Assessment Weighting	27
6.4.2	Requirements for the Document.....	27
6.4.3	Additional Requirements	27
7	SEMINAR	30
7.1	Student Performance Requirements and Assessment Weighting	30
7.2	Seminar Time and Location	30
7.3	Additional Requirements.....	31
8	TUTORIAL TOPICS	33
9	RESOURCES FOR PROJECTS	35
9.1	Computing Facilities	35
9.2	Budget	35
9.3	Technical Support.....	35
9.4	Project Software	36
9.5	Literature Resources	36
10	STUDENT FEEDBACK.....	37
11	STUDENT SUPPORT	37
12	POLICIES AND GUIDELINES.....	37
	Appendix A: Getting Started.....	38
	Appendix B: Student Performance Guidelines	41
	Appendix C: Project Workbook Guidelines	42
	Appendix D: Project Proposal Guidelines.....	43
	Appendix E: Project Definition Statement and Plan General Guidelines	44

Appendix F: Mid-Project Report and Final Report Guidelines	46
Appendix G: Additional Guidelines for Preparation of your Seminar	47
Appendix H: Expectations in Masters by Coursework Project	48
Appendix I: Student Project Participation Agreement.....	49
Appendix J: Laboratory Access and Space Requirements.....	54
Appendix K: Project Closeout Form	55
Appendix L: Electronic Media Submission	56

1 PURPOSE OF THIS PROJECT HANDBOOK

This document provides the *first point of reference* for students and academic staff in the following 2 courses:

1. MECHENG 7041 (A and B) - Masters by Coursework (Parts A and B)
2. MECHENG 7049 (A and B) - Marine Engineering Research Project (Parts A and B)

The courses are divided into Parts A and B. Both parts are available each semester. However, it is a requirement that Part A must be completed before Part B.

1.1 Definitions of Terminology

The handbook for this course uses standard project management terms. Table 1 defines the key terms used.

Table 1: Definitions of terminology

TERM	DEFINITION
Activity	Body of work required to achieve a specific end. Activities comprise tasks (detailed steps that must be taken), deliverables (specific items that must be submitted) and deadlines (latest time they must be submitted by).
Aim	Overall mission of project. Sometimes called 'goal'. Broken down into specific ends to be sought called objectives.
Deliverable	Specific item that must be submitted by a deadline.
Constraint	Limitations that impede the successful completion of the project.
Deadline	Latest time that a deliverable can be submitted - by a certain hour on a certain day.
Gantt Chart	Bar chart showing the work breakdown structure (vertical) versus project schedule (horizontal). Created typically using Microsoft Project (.mpp)
Hazard	Potential event that has adverse effect on the project.
Milestone	Critical event in the successful completion of the project. Provides a reference point for the determination of activities, tasks, deliverables and the allocation of deadlines.
Objective	Specific end sought in SMART format: S pecific, M easurable, A chievable, R ealistic and T ime-related.
Outcome	Overall contribution to existing body of knowledge. Judged in terms of impact, influence and effect.
Project Schedule	Work breakdown structure linked to milestones, deliverables and deadlines. Represented horizontally on a Gantt chart.
Project Scope	Limits of project. Definition of what will be achieved and what will not be achieved.
Resource	Human, financial and material assets available for the project.
Risk	Measure of the severity of a potential hazard the likelihood of its occurrence.
Task	Detailed step within an activity.
Work Breakdown Structure	Major bodies of work required for the successful completion of the project. Comprises activities broken down into tasks. Defines dependency between tasks and resources. Represented vertically on a Gantt chart.

2 COURSE DESCRIPTION

Course Code: MECHENG 7041 and 7049

Course Type: Core for Master programs and elective for Master in Marine Engineering

Credit: 12 Units (2 semesters)

Offered in Semester: Commence in Semester 1 or semester 2 but preferably Semester 1

Pre-requisites / Assumed Knowledge: 18 units of courses from the Masters program must have been completed prior to beginning this course

Teaching Method: There are no formal lectures. However, it is a requirement that each student must meet regularly with their supervisor(s). Students shall work **individually** on a two-semester **research** project under the supervision of a university supervisor. Additionally, external organisations that sponsor research projects may provide additional supervisors. Here, several individuals may be working on related projects using the same experimental equipment or model. In these cases, each student shall be responsible for a particular aspect of a project and shall be required to submit an individual report, which also requires an individual seminar.

Supervision:

All students must meet with their university supervisor for at least one hour per week throughout the duration of the project. Students doing an industry based project must also meet with their industry supervisor for at least one hour per week, which is in addition to meeting with their university supervisor for at least one hour per week.

Composition of Examiners:

For all projects, examination is done through multiple assessors, which comprises independent examiners, your supervisor and a panel of university academics. For industry based research projects, assessment may include an industry supervisor. Students should note that a key consideration in examination is the student's ability to satisfy AQF requirements for Level 9, Masters Degree (Coursework). Here, external examiners play a pivotal role.

Weekly Tutorials (optional): Students have access to weekly tutorials that have been designed to help students develop their research and writing skills. Whilst the tutorials are not compulsory, students are advised strongly to attend. The tutorials are about supporting students along their research journeys. There, students will find a flexible forum. A nominal schedule of tutorial topics is shown in Table 11.

Assessment: The assessment for the project will include the extent to which the student achieves the objectives defined in the Project Definition Statement and Plan. In particular the student will be assessed by their attitude and performance, which includes meeting attendance, keeping a workbook and meeting minutes, keeping a timesheet and the key deliverables listed below. Details of what is expected for each deliverable and its relative weighting in the overall assessment scheme are provided in this project manual,

Key student deliverables:

- Project definition statement and plan
- Mid-project report
- Seminar
- Final Report

Course Objectives: The Masters project aims to educate students in research methods and techniques, develop critical evaluation skills appropriate to their project topic, and provide project management experience.

On completion of the course, students should:

- Have a good understanding of research methodology that should be employed when undertaking a technical research project;
- Be able to critically review current literature relevant to a proposed research project;
- Be able to define and scope a research project from vague descriptions of problems that the research needs to address;
- Be able to design numerical or physical experiments to verify any theory or hypotheses developed as part of the project;
- Be able to apply the appropriate software tools or instrumentation necessary to obtain sensible results from the physical or numerical experimental work;
- Be able to undertake an error analysis on the experimental or numerical results and identify the major contributing factors to any errors;
- Be able to produce a high-quality, professional technical report detailing the research project and all aspects of the work undertaken to achieve the results;
- Be able to communicate the results of the project verbally in the form of a seminar to colleagues;
- Understand the need to undertake lifelong learning;

Graduate Attributes to be developed:

1. ability to apply knowledge of basic science and engineering fundamentals;
2. ability to undertake problem identification, formulation and solution;
3. understanding of the social, cultural, global and environmental responsibilities of the professional engineer, and the need for sustainable development;
4. understanding of professional and ethical responsibilities and a commitment to them;
5. expectation of the need to undertake lifelong learning, and the capacity to do so.

Assessment of Graduate Attributes: All attributes except the last one will be assessed through assignments. The last attribute is expected to be developed as a result of the formal program of study and the realisation by students that to be a competent and effective member of the engineering profession, it is necessary to continually update knowledge and skills through various professional activities such as attendance of conferences and short courses as well as reading and contributing to professional journals.

Course Synopsis: The topic of the research project will be agreed upon by discussion between the project supervisor and the student, and will be submitted for review to the Masters by Coursework coordinator for approval.

Content: The course consists of project work, a structured program and a research seminar program.

The project work consists of research aimed at providing solutions to engineering or to school research.

The School structured program consists of the School Induction, the Barr Smith Library tutorial and the weekly Masters Project tutorials.

The School Induction includes the following topics:

- layout of school and introduction to key staff
- building access and security
- access to computing facilities and policies on their use
- access to telephones and policies on their use

- Occupational Health and Safety issues, including evacuation procedures, location of first aid assistance, laboratory and workshop rules.

The Barr Smith Library tutorial is to be done in conjunction with library staff and includes an introduction to online search and database facilities.

The School research seminar program consists of attendance of weekly research seminars presented by HDR students during the semester teaching weeks in the School of Mechanical Engineering.

Text Book: None

Recommended Reading: A comprehensive list of references will be advised by your supervisor.

Workload: Each student is expected to work approximately 300-350 hours each semester for two semesters.

2.1 Student Deliverables, Deadlines and Submission Methods

Students are required to submit deliverables throughout the course. Every deliverable has a specified deadline and submission method. The default submission document type is electronic PDF file format that is submitted via MyUni. Table 2 defines deliverables, deadlines and submission methods for the course.

2.2 Schedule of Activities

Students are required to complete a schedule of structured activities throughout the course. Table 2 defines the schedule of student activities.

Table 2: Schedule of activities for the two semesters.

Course Milestones and Deadlines for Deliverables	Activity	Deliverable
FIRST SEMESTER OF PROJECT		
Orientation Week	Determine project topic and find supervisor	
Week 1, Monday	Meet supervisor and conclude project topic	
Week 1, Friday 4pm.	Meet supervisor and begin project work;	Project registration on https://projectselect.mech.eng.adelaide.edu.au/ Project title, name of supervisor and abstract submitted through email to MEng coordinator A/Prof Eric Hu
Week 2, Friday 4pm	Submit 1-2 page proposal via MyUni describing research project.	Brief research proposal
Week 1 - Week 3	Attend school induction. Attend Barr Smith Library tutorial.	
Week 1 - Week 12	Attend masters project tutorial. Attend all HDR regular research seminars.	

Course Milestones and Deadlines for Deliverables	Activity	Deliverable
Week 4, Friday, 4pm	Submit project definition statement and plan.	Project definition statement and plan
Week 5	Assessment of project definition statement and plan by supervisor.	
Week 10, Monday 9am	Submit draft of Mid-Project report through Turnitin and MyUni for feedback from supervisor (due Monday 9am).	Mid-project report
Week 11, Monday	Written feedback on draft mid-project report by supervisor.	
Week 12	Review changes to draft mid-project report with supervisor and complete form "Certification of Report for Examination".	Certification of Report for Examination form.
Week 12, Friday, 4pm	Submit Mid-Project report (*A) Show project workbook to supervisor.	Report and workbook
Week 13	Review progress with supervisor End first part of project.	
Week 16 (Exam week 2), Friday, 4pm	Project performance (supervisor) and mid-project report grades from examiners, are entered to MyUni independently.	

Course Milestones and Deadlines for Deliverables	Activity	Deliverable
SECOND SEMESTER OF PROJECT		
Week 1	Start second part of project. Review and address the feedbacks for mid-project report.	
Week 1 – Week 12	Attend all mechanical engineering regular research seminars.	
Week 8, Monday 9am	Submit draft seminar abstract to supervisor for reviewing.	Draft seminar abstract
Week 10, Monday 9am	Seminar abstract reviewed by supervisor to be updated for submission to MEng coordinator	Seminar Abstract
Week 11, Friday 4pm	Review changes to draft and complete form "Certification of Report for Examination" with supervisor.	Certification of Report for Examination form.
Week 12	Rehearse seminar with supervisor and obtain feedback. Student and supervisor to complete acknowledgement form that rehearsal was conducted and that feedback was provided.	Seminar rehearsal acknowledgement form.
Week 12, Friday, 4pm	Submit Final report, PDF via MyUni, (*A) Submit project workbook Submit documentation CD	Final report , Workbook, Documentation CD.
Week 13	Present Seminar	Seminar
Week 13, Friday	Receive confirmation from Administration that all assessment tasks have been delivered and reports will be distributed to examiners.	

Week 14	Meet supervisor to get feedback on project	
Week 14	Close Project.	Project Closeout form.
Week 16 (Exam week 2), Friday, 4pm	Assessment by supervisor and examiners. Marks entered into MyUni by supervisor and examiners independently.	

(*A) Reports shall be submitted in electronic PDF file format via MyUni.

2.3 Penalty for Late Submission

A late penalty of 10% of the maximum report marks may be applied for each day beyond the nominal submission date. For example, if the report is to be submitted on Friday and is only received on Monday, there will be a deduction of 20% of the grade for the task - if the report was graded by the examiners as 60%, after the 20% late penalties are deduct the grade will be 40%. Only the Masters by Coursework coordinator can vary this rule and only in the most unusual circumstances. *Supervisors cannot grant extensions to the submission date.* Assessment deadlines are non-negotiable and only will be given on serious medical grounds for a condition existing for a continuous week before the deadline. The message is that you should plan to complete your work well before any deadline in case you get sick in the few days leading up to the deadline.

Important Dates: The calendar dates of the activities in the activity schedule can be found on the University website: www.adelaide.edu.au/student/info/dates.

3 HOW TO DETERMINE YOUR PROJECT TOPIC AND FIND A SUPERVISOR

After enrolling into the course, MECHENG 7041A or 7049A (Masters Project Part A), it is your responsibility to determine a suitable project topic and find a supervisor. You must do this before the end of the 1st week of the semester at the latest and preferably before the semester starts. There are 3 common ways to determine a project and find a supervisor:

- 1) Based on your background, you can come up with a project idea/topic and then talk with an academic staff member (potential supervisor) in the relevant area about it. If you both agree, then the project can be established.
- 2) Visit the web page: <https://projectselect.mecheng.adelaide.edu.au/> to view the Masters project topics offered by individual staff members and find one you are interested in. Next, you can make an appointment with the potential supervisor to meet and discuss the project topic. If you both agree, then the project can be established. Note: unlike the 4th year design project, you may not be able to register or vote for your project on the web page.
- 3) Make an appointment to meet and talk with an academic staff member working in the area in which you are interested for your project. You can then both jointly develop and determine a suitable project topic.

If you still have difficulty in finding a project topic and/or supervisor, you can make an appointment with the Masters (Coursework) Program Coordinator to discuss options.

3.1 Australian Qualifications Framework (AQF) Justification

It is a requirement of The [Australian Qualifications Framework](#) (Second Edition January 2014, p17) that the Masters by Coursework must satisfy the AQF Level 9 criteria that include:

“Graduates of a Masters Degree (Coursework) will demonstrate the application of knowledge & skills: ...to plan and execute a substantial research-based project, capstone experience and/or piece of scholarship”.

Hence only substantially *research* based projects can be undertaken. Consulting-engineering, or design-and-build type projects do not satisfy the AQF Level 9 requirements and are not acceptable.

It is the student’s responsibility to justify how their project is substantially research-based and satisfies the AQF requirements for Level 9, Masters Degree (Coursework). Students will not be awarded a degree if the project does not meet the AQF specification.

Important Advice to Students: Students should pay close attention to the performance requirements and assessment weightings in the tables found within this handbook. There, students will find details of how they will be assessed. The tables for student performance specify the key elements for assessment and the weighting attributed to them. The tables specify assessment criteria for the overall course through to specific deliverables. Students should note that the tables have been designed to satisfy AQF requirements and provide direction for success in the course.

3.2 Project Registration

Once you have determined your project topic and found a project supervisor, you must register your project on the web site <https://projectselect.mecheng.adelaide.edu.au/>. You must also write an email to the Masters by Coursework Coordinator ([A/Prof Eric Hu](#)), during week one of the semester, and include:

- your name and student ID number,
- project title,
- the name of your supervisor,
- a half to one page outline that contains a brief summary of the *research* project. In the summary you must justify how the project satisfies the AQF level 9 requirement that the project is “substantially *research based*”.

3.3 Autonomous Sanctions

Students from sanctioned countries are not permitted to undertake certain types of projects. Students from the countries of Eritrea, Fiji, Iran, Lebanon, Libya, Myanmar, North Korea, Somalia, Sudan, Syria and Zimbabwe are prohibited from doing research in areas listed in the Autonomous Sanctions documents (see <http://www.adelaide.edu.au/graduatecentre/admission/apply-now/international/sanctions/>)

The list of sanctioned regimes is on the DFAT web site:

<http://www.dfat.gov.au/sanctions/sanctions-regimes/>

For a summary of the University process that is in place for students see:

<http://www.adelaide.edu.au/graduatecentre/staff/sanctions-protocol/docs/sample-hdr-compliance-assessment-form.pdf>

The list of sanctioned topics is described in the minister of defence’s document “Defence and Strategic Goods List,” : <http://www.comlaw.gov.au/Details/F2011L02061/7ce5ecc7-7271-439a-8e0f-9019219efcfa>

For example, a student from a sanctioned regime cannot work on a project relating to UAVs, which is mentioned at 9A012 on page 240 of 353.

If your proposed topic falls under these Autonomous Sanction laws, please work with your supervisor on selecting a different project, or alternatively find a different supervisor, who is willing to supervise you on a suitable research project.

3.4 Plagiarism

Plagiarism is a serious offence that can result in penalties and expulsion from the course. Plagiarism is defined as using another person’s ideas, designs, words or works without appropriate acknowledgement. A further aspect of plagiarism is collusion, which is defined as another person assisting in the production of an assessment submission without the express requirement or consent of the assessor. It is a requirement of the course that students read and understand the policies in Table 3.

Consequences of Plagiarism and Collusion: The penalties associated with plagiarism and collusion are designed to impose sanctions upon offenders that reflect the seriousness of the University’s commitment to academic integrity. Penalties may include: the requirement to revise and resubmit assessment work, receiving a results of zero from the assessment work, failing the course, expulsion and/or receiving a financial penalty.

Turnitin: Students are advised to view Turnitin as a tool for informing and protecting them against plagiarism.

Intellectual Property: In addition to acknowledging the intellectual property of other persons, students are required to protect the intellectual property generated throughout their project. Here, students are required to sign the Student Project Participation Agreement, which can be found in [Appendix I](#) of this handbook.

Table 3: Policies relating to plagiarism, collusion and intellectual property.

Cheating in Examinations and Related Forms of Assessment	http://www.adelaide.edu.au/policies/1963
Copyright	http://www.adelaide.edu.au/policies/2643
Plagiarism	http://www.adelaide.edu.au/policies/230

4 PROJECT ASSESSMENT

Students shall be assessed on their performance in research, planning, execution and management of the project, as well as on the quality of the project deliverables. The assessment is conducted in stages over the two project semesters.

Assessment consists of 3 parts:

1. Research Process
2. Reports:
 - Project Definition Statement and Plan
 - Mid-Project Report
 - Final Report
3. Seminar

The assessment of the project will be conducted by independent examiners, your supervisor and a panel of university academics. The assessment role of the supervisor is to provide grade for student performance and project definition and statement plan. The independent examiners will provide marks for the mid-project report and final report. The contributions of the assessment components and the examiners are weighted as shown in Table 4. This scheme is applicable to students commencing Part A after Semester 1, 2014.

Before submission of your mid-project report and final report, you and your supervisor are required to complete the form [“Certification of Report for Examination”](#).

Table 4: Assessment components and weighting for students commencing Part A after Semester 1, 2014.

	Supervisor	Examiner 1	Examiner 2	Panel	Sub-Total
Part A					
Student Performance	10%				10%
Project Definition and Statement Plan	5%				5%
Mid-Project Report		10%	10%		20%
Sub-total	15%	10%	10%		35%
Part B					
Student Performance	10%				10%
Final Seminar				15%	15%
Final Report		20%	20%		40%
Sub-total	10%	20%	20%	15%	65%
TOTAL	25%	30%	30%	15%	100%

4.1 Generic Grade Descriptors

The generic grade descriptors in Table 5 provide a general guide to the standard of work that is expected, which is consistent¹ with the [University of Adelaide generic grade descriptors](#).

Specific grade descriptors for the research process, reports and seminar are found within this handbook.

¹ (approved by the Vice-Chancellor and President on behalf of Council, 9 March, 2005 on the recommendation of the Academic Board at meeting 1/05, 2 March 2005; Updated by Assessment Monitoring Committee 4/10)

4.2 Certification of Report for Examination

At the time of submission you are required to lodge Certification of Report for Examination form completed by yourself and your supervisor. The purpose of the form is two-fold:

1. Firstly, it confirms that you and your supervisor have reviewed your work and are satisfied that it is suitable to proceed through the assessment process.
2. Secondly, it provides a mechanism for your supervisor to certify that:
 - they are satisfied with the content and technical presentation of your report and consider it to be of an acceptable standard for examination in its current form,
 - the standard of English in the report is at a level expected of a professional engineer (practicing in Australia), and for a thesis,
 - the formatting of the report complies with the guidelines (e.g. Executive summary, table of contents, proper referencing, margins, number of pages, etc.).
 - you have satisfactorily completed any coursework requirements,
 - the report is within the maximum allowable page-length,
 - you have abided by the University's policies with regard to assistance and editing and the inclusion of appropriate acknowledgements within the report,
 - the report has been submitted through Turnitin for similarity assessment and has a similarity score less than 20%, and
 - you have lodged all the original data or primary research materials relevant to your research with the School, as is required under the [Australian Code for the Responsible Conduct of Research](#).

The Certificate of Report for Examination form is available on MyUni.

Table 5: Generic grade descriptors.

	High Distinction	Distinction	Credit	Pass/NGP*	Fail
General description	Outstanding or Exceptional work in terms of understanding, interpretation and presentation	Avery high standard of work that demonstrates originality and insight	Demonstrates a high level of understanding and presentation and a degree of originality and insight	Satisfies the minimum requirements	Fails to satisfy the minimum requirements
Reading	Strong evidence of Independent reading beyond core texts and materials	Evidence of Reading beyond core texts and materials	Thorough understanding of core texts and materials	Evidence of having read core texts and materials	Very little evidence of having read any of the core texts and materials
Knowledge of topic	Demonstrates insight, awareness and understanding of deeper and more subtle aspects of the topic. Ability to consider topic in the broader context of the discipline	Evidence of an awareness and understanding of deeper and more subtle aspects of the topic	Sound knowledge of principles and concepts	Knowledge of principles and concepts at least adequate to communicate intelligently in the topic and to serve as a basis for further study	Scant knowledge of principle sand concepts
Articulation of argument	Demonstrates imagination or flair. Demonstrates originality and independent thought	Evidence of imagination or flair. Evidence of originality and independent thought	Well-reasoned argument based on broad evidence	Sound argument based on evidence	Very little evidence of ability to construct coherent argument
Analytical and evaluative skills	Highly developed analytical and evaluative skills	Clear evidence of analytical and evaluative skills	Evidence of analytical and evaluative skills	Some evidence of analytical and evaluative skills	Very little evidence of analytical and evaluative skills
Problem solving	Ability to solve very challenging problems	Ability to solve non-routine problems	Ability to use and apply fundamental concepts and skills	Adequate problem-solving skills	Very little evidence of problem-solving skills
Expression and presentation appropriate to the discipline	Highly developed skills in expression and presentation.	Well developed skills in expression and presentation.	Good skills in expression and presentation. Accurate and consistent acknowledgement of sources.	Adequate skills in expression and presentation	Rudimentary skills in expression and presentation. Inaccurate and inconsistent acknowledgement of sources.

4.3 Submission Against the Advice of Your Supervisor

The school is unable to accept a report that has not been certified for examination by your supervisor.

If you disagree with your supervisor's advice about the readiness of your report for examination, it is expected that the dispute will be dealt with, in the first instance, at the local level (1) with your supervisor, (2) by the masters by coursework coordinator, (3) head of school. The general process to be adopted for the resolution of the dispute should follow the University's Student Grievance Resolution Process <http://www.adelaide.edu.au/student/grievance/>. If the dispute cannot be resolved at the local level, the matter should be referred to the Associate Dean of Learning and Teaching ECMS, either by the School or the student concerned. All relevant documents must be forwarded to the Associate Dean of Learning and Teaching ECMS at the same time. The Associate Dean will deal with the matter in consultation with the head of school, masters by coursework coordinator if required.

4.4 Examiner Anonymity

To be consistent with the process for Masters by Research and PhD programs, examiners of your work will remain anonymous from candidates, and also from other examiners. The Masters by Coursework coordinator is responsible for the selection of examiners. The reason for this is to ensure there is an unbiased and independent assessment of your work.

If the identity of appointed examiners is revealed to the candidate (except following the examination process with their consent) the examination will be invalidated. In such circumstances, new examiners must be appointed and consequently, the examination process will be significantly delayed.

4.5 Revised and Resubmitted Reports

In the event that the grade for the final report is low and contributes to the student failing the course, then according to university policies (<http://www.adelaide.edu.au/policies/3303/>) students have the opportunity for additional assessment. Under normal circumstances, a revised report can be submitted and will be examined by the original examiners. However, for valid academic reasons, the Masters by Coursework coordinator or Head of School may decide that the thesis be examined by different examiner(s). Such a decision is very rarely undertaken and will be made on a case-by-case basis.

- Examiners will be advised where a thesis has been revised and resubmitted, and will be instructed to check whether or not the requirements for additional work specified during the original examiners and supervisor(s)' report and outcome letter, have been addressed.
- Examiners must not introduce new areas of substantive concern in the re-examination.
- Examiners must not recommend an outcome of 'revise and resubmit' as the University's rules only permit a student to revise and resubmit his/her thesis for examination once.

Following consideration by the Masters by Coursework coordinator, the outcome of the re-examination will be a revised grade. According to the university policy:

“a. The maximum mark/grade for a course for which an Additional Assessment is granted is 50 Pass or Non-Graded Pass in accord with the University's approved Mark and Grade Schemes.”

5 RESEARCH PROCESS

Part A of project assessment focuses upon how the student plans, manages and executes the research process. The performance requirements and assessment weightings used reflect AQF requirements for Level 9, Masters Degree (Coursework). A particular focus is upon a student's ability to apply knowledge and skills in professional practice.

5.1 Student Performance Requirements and Assessment Weighting

The requirements to pass this part of the project assessment, and their associated activities and assessment measures, are listed in Table 6.

Additional guidelines for the performance assessment can be found in Appendix B: Student Performance Guidelines.

The project workbook shall be submitted as part of the project performance assessment. The workbook is a record of the work that you did for the project. Guidelines for the workbook are given in Appendix C: Project Workbook Guidelines.

Table 6: Student performance requirements and assessment weighting (research process).

Research Process	Facet	Fail	Pass	Credit	Distinction	High Distinction
		Fails to satisfy the minimum requirements	Satisfies the minimum requirements	Demonstrates a high level of understanding and presentation and a degree of originality and insight	A very high standard of work that demonstrates originality and insight	Outstanding or exceptional work in terms of understanding, interpretation and presentation
A. Students embark on inquiry* and so determine a need for knowledge/ understanding (10%)	Objectives stated	Unclear or inappropriate	Clear but lacks focus	Clear and focussed	Clear, focussed and innovative	Clear, focussed, innovative, open inquiry
	Context of project	Not described	Minimally described	Satisfactorily described	Informative, well-researched	Comprehensive, extensively researched
B. Students find/generate needed information/ data/ ideas using appropriate approach/method (10%)	Project approach informed by sources that are	Narrow or superficial	Limited and entirely prescribed by supervisor	Extensive and mostly prescribed by supervisor	Extensive and somewhat self-prescribed	Very extensive and mostly self-prescribed
	Quality of sources used in formulating project approach.	Low quality	A few high quality sources	Several high quality sources	Numerous high quality sources	Numerous high quality sources with diverse range
C. Students critically evaluate information/data / ideas, their approach and results, and react appropriately (15%)	Technical approach	Flawed or ineffective	Mostly effective but should be improved	Effective	Highly effective	Highly effective with novelty
	Critical analysis in producing the taken approach	Little or no evidence of analysis	Some evidence of analysis	Clear evidence of analysis	Strong evidence of analysis	Strong evidence of analysis, leading to innovation
D. Students perform necessary processes to meet stated project objectives (25%)	Project progress overall	Fails to meet expectations	Meets minimum expectations	Mostly meets expectations	Completely meets expectations	Completely meets, and exceeds expectations
	Ability to meet the planned project milestones	Frequently miss milestones	Missed some milestones	Missed milestones occasionally	Missed milestones rarely	No missed milestones

Research Process	Facet	Fail	Pass	Credit	Distinction	High Distinction
E. Student actively participates and 'owns' their project. (10%)	Engagement with project	Disengaged, minimal participation	Somewhat engaged, low level of participation	Generally engaged, regular participation	Highly engaged, active participation	Very highly engaged, very active participation, shows enthusiasm
F. Student communicates project objectives, achievements and the process (20%)	Progress reporting in supervision meetings	Unengaging, laboured, disjointed	Mildly engaging, need improvements for the future	Generally engaging, minor improvements for the future	Strongly engaging, well presented	Exceptionally engaging, brilliantly presented, highly professional
	Written language communication	Poor, many errors, incomprehensible	Comprehensible, but many errors or inappropriate style	Comprehensible, occasional errors	Succinct and effective, easy to follow	Succinct and eloquent; of publication standard
G. Workbook (10%)	Project logbook and other ongoing documentation	Inconsistent or incoherent entries	Occasional entries; minimal level of details	Regular entries; adequate level of details	Very regular entries; high level of details	Very regular entries; meticulous details, professional level of documentation

6 REPORTS

6.1 Project Proposal

The Masters by Coursework projects must satisfy the AQF Level 9 requirement that the project should be a “substantial research-based project”. To ensure compliance with this requirement you are to submit a brief 1-2 page proposal via MyUni that describes your project, and specifically describe the research component of the project and how it addresses the AQF Level 9 research requirement. It is expected that your project proposal will be expanded upon and form part of your Project Definition Statement and Plan, which will in turn be used in your Mid-Project Report and Final Project Report.

Additional guidelines and a suggested Project Proposal layout are available in Appendix D: Project Proposal Guidelines.

6.2 Project Definition Statement and Plan

The Project Definition Statement and Plan should consist of a project definition statement and a detailed project plan. The definition statement should describe:

- the aims of the project,
- the expected outcomes,
- the deliverables from the project,
- how the project satisfies the AQF level 9 criteria that it is “substantially research based”.

The project plan should detail how you will go about achieving the outcomes proposed. The plan should also give a list of milestones with corresponding dates.

6.2.1 Student Performance Requirements and Assessment Weighting

The Project Definition Statement and Plan is assessed according to the marking rubric in Table 7.

6.2.2 Requirements for the Document

The layout for the Project Definition Statement and Plan shall be according to the template found in MyUni entitled ‘Template_Project Definition Statement and Plan’. There, students will find instructions for how to fill in the template.

Additional guidelines of a general nature are available in Appendix E: Project Definition Statement and Plan General Guidelines.

Table 7: Student performance requirements and assessment weighting (project definition statement and plan).

Program Graduate Attributes 1, 2 & 3	Element of Report	No Evidence	Unsatisfactory Below Benchmark: Incomplete or inaccurate	Satisfactory At Benchmark: Complete but not fully accurate, comprehensive or insightful	Highly Satisfactory Above Benchmark: Complete, accurate, comprehensive, and insightful/ innovative
a. Embark & Clarify <i>Embark on research and clarify the knowledge that is needed</i>	Executive Summary (0%)		Introduction of project vague, OR description of work confusing, OR summary of findings not adequately described.		Introduction of project clear, AND description of work clear, AND summary of findings described clearly and related to project aims in introduction.
	Introduction (0%)		Description of project is vague OR inadequate.	Project is described but not entirely accurate or incomplete.	Project is described clearly, accurately, and succinct.
	Proj Definition Statement adheres to SMART scheme (10%)	Does not adhere to SMART scheme.	Partial attempt to address elements to SMART scheme OR are vague OR incomplete.	A thorough attempt has been made to address all elements to SMART scheme.	All elements adhere to SMART scheme.
	Aims and Objectives (10%)		Significance of the research project is stated, but not based on leads from, or gaps in, the literature.	Significance of the research project is stated explicitly and is based on leads from, or gaps in, a limited number of references.	Significance of the research project is stated explicitly, and is based on leads from, or gaps in multiple sources.
	Justification project meets AQF Level 9 (20%)		Claims not compared with AQF Level 9 requirements.	Claims are compared to AQF Level 9 requirements, but further clarification is necessary	Claims are precisely compared to AQF Level 9 requirements and there is strong justification.
b. Find & Generate <i>Find and generate needed information/data using appropriate methods.</i>	Brief Literature Review (5%)		Limited number of journal & conference papers, text books. References lack relevance to the topic.	Search strategy uses several different sources <i>types</i> , e.g. journals and books References usually relevant to the focus of the project.	Extensive number of sources. Information drawn on/data generated is highly relevant to the focus of the project.

c. Evaluate & Reflect <i>Evaluate information/data and reflect on the research processes used.</i>	Literature Review (15%)		References listed are barely compared, or put into context of project.	References are compared, critiqued and put into context with the project.	References are compared, critiqued, put into context with project, and insightful suggestions of future work for referenced authors. Distinguishes between the quality of different evidence.
	Technical Approach (10%)	Resubmission required.	Flawed or ineffective.	Effective.	Highly effective with novelty.
d. Organise & Manage <i>Organise information collected/ generated and manage research processes.</i>	Proposed Project Execution Plan (20%)	Missing component (Gantt, WBS, Risk Assessment)	Plan is difficult to follow / inappropriate. Token effort made on Gantt chart, and project management tasks.	Plan is present / appropriate, yet only partially coherent. Gantt chart has some detail. Reasonable attempt at project management tasks.	Plan is present / appropriate, and has a high level of coherence. Extensive Gantt chart, WBS, risks and contingencies have extensive details.
e. Analyse & Synthesise <i>Analyse information/data and synthesise new knowledge to produce coherent individual & understandings.</i>					
f. Effective Communication <i>Production of high quality engineering research report.</i>	Referencing (2%)		Some referencing, but does not follow the appropriate conventions.	Appropriate referencing style is specified & applied, but with some errors.	Appropriate referencing style is specified & applied consistently.
	Adheres to Formatting Requirements (2%)		Does not follow.	Generally adheres and suitable for distribution.	Adheres to all requirements and suitable for distribution.
	Cross Referencing of Figures and Tables (2%)		Unsatisfactory cross-referencing.	Usually done correctly.	Always done correctly.
	Quality of Figures, Tables, Drawings (4%)	Unacceptable.	Often vague or confusing.	Usually clear, appropriate and effective.	Elegant & precise, strongly appropriate for discipline.

6.3 Mid-Project Report

The Mid-Project Report is to meet the following 3 objectives:

1. To provide a critical literature review
2. To report on the project progress to date.
3. To discuss the further work i.e., the second half of the project and to report any changes from the original plan and reasons for the changes.

6.3.1 Student Performance Requirements and Assessment Weighting

The Mid-Project Report is assessed according to the marking rubric in Table 8.

6.3.2 Requirements for the Document

The layout for the Mid-Project Report shall be according to the template found in MyUni entitled 'Template_Mid-Project Report'. There, students will find instructions for how to fill in the template.

Additional guidelines of a general nature are available in Appendix F: Mid-Project Report and Final Report Guidelines.

Table 8: Student performance requirements and assessment weighting (mid-project report)

Program Graduate Attributes 1, 2 & 3	Element of Report	No Evidence	Unsatisfactory Below Benchmark: Incomplete or inaccurate	Satisfactory At Benchmark: Complete but not fully accurate, comprehensive or insightful	Highly Satisfactory Above Benchmark: Complete, accurate, comprehensive, and insightful/ innovative
a. Embark & Clarify <i>Embark on research and clarify the knowledge that is needed</i>	Executive Summary (0%)		Introduction of project vague, OR description of work confusing, OR summary of findings not adequately described.		Introduction of project clear, AND description of work clear, AND summary of findings described clearly and related to project aims in introduction.
	Introduction (0%)		Description of project is vague OR inadequate.	Project is described but not entirely accurate or incomplete.	Project is described clearly, accurately, and succinct.
	Aims and Objectives adhere to SMART scheme (5%)	Does not adhere to SMART scheme.	Partial attempt to address elements to SMART scheme OR are vague OR incomplete.	A thorough attempt has been made to address all elements to SMART scheme.	All elements adhere to SMART scheme.
	Aims and Objectives (5%)		Significance of the research project is stated, but not based on leads from, or gaps in, the literature	Significance of the research project is stated explicitly and is based on leads from, or gaps in, a limited number of references.	Significance of the research project is stated explicitly, and is based on leads from, or gaps in multiple sources.
b. Find & Generate <i>Find and generate needed information/data using appropriate methods</i>	Literature Review (5%)		Limited number of journal & conference papers, text books. References lack relevance to the topic.	Search strategy uses several different sources <i>types</i> , e.g. journals and books References usually relevant to the focus of the project.	Extensive number of sources, approaching the standard of a PhD thesis. Information drawn on/data generated is highly relevant to the focus of the project.
c. Evaluate & Reflect <i>Evaluate information/data and reflect on the research processes used</i>	Literature Review (20%)		References listed are barely compared, or put into context of project.	References are compared, critiqued and put into context with the project.	References are compared, critiqued, put into context with project, and insightful suggestions of future work for referenced authors. Distinguishes between the qualities of different evidence.

d. Organise & Manage <i>Organise information collected/ generated and manage research processes</i>	Proposed Project Execution Plan (20%)	Missing component (Gantt, WBS, Risk Assessment)	Plan is difficult to follow / inappropriate. Token effort made on Gantt chart, and project management tasks.	Plan is present / appropriate, yet only partially coherent. Gantt chart has some detail. Reasonable attempt at project management tasks.	Plan is present / appropriate, and has a high level of coherence. Extensive Gantt chart, WBS, risks and contingencies have extensive details.
e. Analyse & Synthesise <i>Analyse information/data and synthesise new knowledge to produce coherent individual & understandings</i>	Description of Work Completed to Date (35%)		Tasks (designs, experiments, software, etc.) barely commenced or inadequate progress, unlikely to meet objectives.	Good progress made on tasks (designs, experiments, software, etc.), adequate progress made, very likely to meet objectives.	Excellent progress made on tasks (designs, experiments, software, etc.), nearly completed all project objectives.
f. Effective Communication Production of high quality engineering research report.	Referencing (2%)		Some referencing, but does not follow the appropriate conventions.	Appropriate referencing style is specified & applied, but with some errors.	Appropriate referencing style is specified & applied consistently.
	Adheres to Formatting Requirements (2%)		Does not follow.	Generally adheres and suitable for distribution.	Adheres to all requirements and suitable for distribution.
	Cross Referencing of Figures and Tables (2%)		Unsatisfactory cross-referencing.	Usually done correctly.	Always done correctly.
	Quality of Figures, Tables, Drawings (4%)	Unacceptable.	Often vague or confusing.	Usually clear, appropriate and effective.	Elegant & precise, strongly appropriate for discipline.

6.4 Final Report

The Final Report is to meet the following objectives:

- To present literature review
- Describe the aims and the scope of the project.
- To describe what was done in the project.
- To report the findings or the outcomes of the project
- To describe the management of the project.
- To communicate the lessons learned during the project and describe future work, if any.

The report should be a stand-alone report of the entire project and as such should include much of what is in the preliminary report prepared at the end of Semester 1. The submitted reports will not be returned.

6.4.1 Student Performance Requirements and Assessment Weighting

The Final Project Report is assessed according to the marking rubric in Table 9.

6.4.2 Requirements for the Document

The layout for the Final Project Report shall be according to the template found in MyUni entitled 'Template_Final Report'. There, students will find instructions for how to fill in the template.

Additional guidelines of a general nature are available in Appendix F: Mid-Project Report and Final Report Guidelines.

6.4.3 Additional Requirements

An electronic copy of the whole report in PDF format must be submitted via MyUni and the final report must be uploaded to the <https://projectselect.mecheng.adelaide.edu.au/> website. Each student must submit a single CD or DVD to their supervisor containing the electronic copies of all project reports, design documents, final seminar presentation materials, and copies of any software and other documentation.

Guidelines for the submission of electronic media can be found in [Appendix L: Electronic Media Submission](#).

Table 9: Student performance requirements and assessment weighting (final report).

Program Graduate Attributes 1, 2 & 3	Element of Report	No Evidence	Unsatisfactory Below Benchmark: Incomplete or inaccurate	Satisfactory At Benchmark: Complete but not fully accurate, comprehensive or insightful	Highly Satisfactory Above Benchmark: Complete, accurate, comprehensive, and insightful/ innovative
a. Embark & Clarify <i>Embark on research and clarify the knowledge that is needed.</i>	Executive Summary (0%)		Introduction of project vague, OR description of work confusing, OR summary of findings not adequately described.		Introduction of project clear, AND description of work clear, AND summary of findings described clearly and related to project aims in introduction.
	Introduction (5%)		Description of project is vague OR inadequate.	Project is described but not entirely accurate or incomplete.	Project is described clearly, accurately, and succinct.
	Aims and Objectives adhere to SMART scheme (5%)	Does not adhere to SMART scheme.	Partial attempt to address elements to SMART scheme OR are vague OR incomplete.	A thorough attempt has been made to address all elements to SMART scheme.	All elements adhere to SMART scheme.
	Aims and Objectives (5%)		Significance of the research project is stated, but not based on leads from, or gaps in, the literature.	Significance of the research project is stated explicitly and is based on leads from, or gaps in, a limited number of references.	Significance of the research project is stated explicitly, and is based on leads from, or gaps in multiple sources.
b. Find & Generate <i>Find and generate needed information/data using appropriate methods</i>	Literature Review (5%)		Limited number of journal & conference papers, text books. References lack relevance to the topic.	Search strategy uses several different sources <i>types</i> , e.g. journals and books References usually relevant to the focus of the project.	Extensive number of sources, at the standard of a PhD thesis. Information drawn on/data generated is highly relevant to the focus of the project.
c. Evaluate & Reflect <i>Evaluate information/data and reflect on the research processes used</i>	Literature Review (10%)		References listed are barely compared, or put into context of project.	References are compared, critiqued and put into context with the project.	References are compared, critiqued, put into context with project, and insightful suggestions of future work for referenced authors.

					Distinguishes between the quality of different evidence.
d. Organise & Manage <i>Organise information collected and manage research processes.</i>	Project Management (5%)	Missing component	Plan is difficult to follow / inappropriate. Token effort made on Gantt chart, and project management tasks.	Plan is present / appropriate, yet only partially coherent. Gantt chart has some detail. Reasonable attempt at project management tasks.	Plan is present / appropriate, and has a high level of coherence. Extensive Gantt chart, WBS, risks and contingencies have extensive details.
e. Analyse & Synthesise <i>Analyse information/data and synthesise new knowledge to produce coherent understandings</i>	Quality of Work Completed (40%)		Tasks completed are not demonstrated to a professionally competent standard, or at the standard of an honours project.	Tasks completed are at a standard of masters (higher than honours) and is professionally competent. Has met most of the project objectives.	Tasks completed to a very high professional standard, and comparable to a PhD project. All project objectives have been met.
	Findings, Conclusions and Future Work (10%)	Missing component	Findings and conclusions of project not described clearly / inaccurate. Inadequate comparison of work completed to stated project objectives and tasks.	Findings and conclusions of project described clearly. Work completed has been clearly compared to stated project objectives and tasks. Proposed future work is included and reasonable.	Findings and conclusions of project described clearly. Work completed has been clearly compared to stated project objectives and tasks. Proposed future work is reasonable and highly innovative.
f. Effective Communication Production of high quality engineering research report.	Quality of writing, figures, tables, drawings. Referencing Cross referencing of figures and Tables (10%)	Resubmission required.	Often vague or confusing. Some referencing, but does not follow the appropriate conventions. Unsatisfactory.	Usually clear, appropriate and effective. Well organised, but needs refinement for publication. Appropriate referencing style is specified & applied, but with some errors. Usually done correctly.	Elegant & precise, strongly appropriate for discipline. Professional quality, suitable for publication. Appropriate referencing style is specified & applied consistently. Always done correctly.
	Adheres to Formatting Requirements (5%)		Resubmission required.	Poor quality, not suitable for submission.	Adheres to almost all requirements.

7 SEMINAR

The Seminar is to meet the following objectives:

1. To present the background, literature review and findings/results of the project.
2. To describe the works and the management of the project.
3. To allow your examiners to observe and assess your technical presentation skills.
4. To clarify some project details through the question time at the end of your presentation.
5. Satisfy the AQF Level 9 requirements for oral communication skills.

Oral communication skills are important and required by the AQF Level 9 requirements. Communication skills are defined as:

Communication skills: Communication skills are the skills that enable a person to convey information so that it is received and understood and include written and oral skills appropriate for the level of the qualification.

Further, it is a requirement of the Engineers Australia that for [Stage 1 Competency](#) that engineers should have “Effective oral and written communication in professional and lay domains” and “proficient in listening, speaking, reading and writing English including ... expressing information effectively and succinctly, issuing instruction, engaging in discussion, presenting arguments and justification, debating and negotiating - to technical and non-technical audiences and using textual, diagrammatic, pictorial and graphical media best suited to the context.”

You are required to rehearse your seminar with your supervisor before the final presentation that will be assessed by a panel of academics. Your supervisor will provide verbal feedback, and may also provide written feedback. Students and supervisors are required to complete an online acknowledgement form that includes the following information:

- Date the rehearsal was conducted.
- Acknowledgement that verbal feedback by the supervisor was provided.
- That the supervisor is satisfied the seminar presentation is suitable for assessment.

Additional guidelines for preparation of your seminar can be found in Appendix G: Additional Guidelines for Preparation of your Seminar.

7.1 Student Performance Requirements and Assessment Weighting

The Seminar is assessed according to the marking rubric in Table 10.

7.2 Seminar Time and Location

The seminar schedule shall be posted on the course website 5 working days before the seminar day. The schedule provides the date, time and room of your seminar. Digital projectors shall be available in every seminar room. If you have any requirements apart from a basic electronic slide presentation (i.e., MS PowerPoint and Adobe Reader), you must consult the [Local Computing Officer](#) at least one working day prior to your seminar presentation.

7.3 Additional Requirements

The final seminar is 20 minutes plus 8 minutes of questions and is assessed by the academics present at the seminar.

Students shall create seminar presentations in an electronic slide format and they shall be brought to the seminar on a portable memory medium (*e.g.* USB memory device).

Each student should provide a hard copy of his/her presentation (printed six slides per page) to the examiners at the start of the presentation.

Sessions shall start and finish on time as the examiners have to move between streams, but sessions shall not start until the examiners are present.

Students shall attend the other seminars in the stream in which their seminar is scheduled. No changes in the schedule for seminars are permitted except in special circumstances.

Table 10: Student performance requirements and assessment weighting (seminar).

Description	Grade				Score
	1	2	3	4	
Organisation	Audience cannot understand presentation because there is no sequence of information.	Audience has difficulty following presentation because student jumps around.	Student presents information in logical sequence which audience can follow.	Student presents information in logical, interesting sequence which audience can follow.	
Subject Knowledge	Student does not have grasp of information. Many of the concepts presented are incorrect.	Student is uncomfortable with information. Some understanding of topic shown. Some links and connections made between ideas. Points are usually developed with minimum detail. Information is usually relevant.	Good understanding of topic shown. Links and connections between ideas made clear. Information was relevant and expressed in own words. Points were developed with sufficient and appropriate details	A very good understanding of the topic shown. Links and connections between ideas made clear. Information was relevant and well expressed in own words. Points were well-organised and developed with sufficient and appropriate details.	
Graphics	Student uses superfluous graphics or no graphics	Student occasionally uses graphics that rarely support text and presentation.	Student's graphics relate to text and presentation.	Student's graphics explain and reinforce screen text and presentation.	
Mechanics	Presentation has four or more spelling errors or grammatical errors.	Presentation has three misspellings and/or grammatical errors.	Presentation has no more than two misspellings and/or grammatical errors.	Presentation has no misspellings or grammatical errors.	
Eye Contact	Student reads all of report with no eye contact.	Student occasionally uses eye contact, but still reads most of report.	Student maintains eye contact most of the time but frequently returns to notes.	Student maintains eye contact with audience, seldom returning to notes.	
Elocution	Student mumbles, incorrectly pronounces terms, speaks too quietly for students in the back of class to hear.	Student's voice is low. Student incorrectly pronounces terms. Audience members have difficulty hearing presentation.	Student's voice is clear. Student pronounces most words correctly. Most audience members can hear presentation.	Student uses a clear voice and correct, precise pronunciation of terms so that all audience members can hear presentation.	
Answering Questions	Student cannot answer questions about subject or is evasive.	Student is able to answer only rudimentary questions.	Student is at ease with expected answers to all questions, but fails to elaborate.	Student demonstrates full knowledge by answering all class questions with explanations and elaboration.	

8 TUTORIAL TOPICS

Whilst tutorial participation is optional, students are encouraged strongly to attend. Students should remember that the tutorials are all about the students and their needs. Tutorials are a place where students can find help in achieving deliverables and writing. Table 11 shows the nominal schedule of tutorials, which can be modified if required to address specific student needs. Announcements about tutorials are made via MyUni.

Table 11: Nominal schedule of tutorial topics for the two semesters.

Date/Time	Tutorial Topics	Facilitator(s)	Room
FIRST SEMESTER OF PROJECT			
Week 2/TBA	Creating a Project Plan. Creating a Gantt Chart.	EH, CH, AZ, SS	TBA
Week 3/TBA	Managing intellectual property: plagiarism, workbook, literature search, referencing. Writing a Project Definition Statement.	SS	TBA
Week 4/TBA	Writing a Project Definition Statement (due this week) . Developing a Project Plan.	SS	TBA
Week 5/TBA	Writing a Mid-Project Report. Managing your project.	SS	TBA
Week 6/TBA	Writing a Mid-Project Report. Managing your project.	SS	TBA
Week 7/TBA	Writing a Mid-Project Report. Managing your project.	SS	TBA
Week 8/TBA	Writing a Mid-Project Report. Managing your project.	SS	TBA
Week 9/TBA	Writing a Mid-Project Report. Managing your project.	SS	TBA
Week 10/TBA	Writing a Mid-Project Report (due this week) . Managing your project.	SS	TBA
Week 11/TBA	Editing changes to Mid-Project Report (if required). Completing a Certification of Report for Examination form.	SS	TBA

Date/Time	Tutorial Topics	Facilitator(s)	Room
SECOND SEMESTER OF PROJECT			
Week 2/TBA	Writing a Seminar Abstract. Managing your project.	SS	TBA
Week 3/TBA	Writing a Seminar Abstract. Managing your project.	SS	TBA
Week 4/TBA	Writing a Seminar Abstract (Draft due week 8) . Managing your project.	SS	TBA
Week 5/TBA	Presenting a Seminar. Managing your project/Writing a Final Report.	SS	TBA
Week 6/TBA	Presenting a Seminar. Managing your project/Writing a Final Report.	SS	TBA
Week 7/TBA	Presenting a Seminar. Managing your project/Writing a Final Report.	SS	TBA
Week 8/TBA	Writing a Final Report (Draft due this week). Presenting a Seminar.	SS	TBA
Week 9/TBA	Writing a Final Report. Presenting a Seminar.	SS	TBA
Week 10/TBA	Writing a Final Report (Due week 12) . Presenting a Seminar (Due week 13).	SS	TBA
Week 11/TBA	Editing changes to Final Report (if required).	SS	TBA

EH – Associate Professor Eric Hu eric.hu@adelaide.edu.au,
eric.hu@adelaide.edu.au,

CH – Associate Professor Carl Howard carl.howard@adelaide.edu.au,

SS – Dr Sasha Shamshurin sasha.shamshurin@adelaide.edu.au,

AZ - Associate Professor Anthony Zander anthony.zander@adelaide.edu.au

9 RESOURCES FOR PROJECTS

9.1 Computing Facilities

The Computer Aided Teaching Suites (CATS) on Level 2 of Ingkarni Wardli (formerly Innova21) provide PC access to Masters students for project and course work. The computers in these suites feature a number of specialised engineering software packages. In addition, Masters students undertaking a project based in the School of Mechanical Engineering may access the computers in the Mechatronics and Electronics labs in the School of Mechanical Engineering (S311b and S311c, Level 3, Engineering South). There is also a small “walk in” Mechanical Engineering computer suite in room S326c on Level 3 of Engineering South.

9.2 Budget

Each project will be given a specific amount of budget limited to **\$1500** to cover all items including travel, consumables and capital purchases. However, the amount of the budget differs from case to case and it will be clarified by your supervisor. If your supervisor has any additional fund he/she may be able to increase the funding level to the need of the project, especially for purchasing any essential equipment/consumables etc. needed for the project.

9.3 Technical Support

During the planning stage of your project you can seek advice on system manufacture or equipment availability from the Senior Technical Officers listed on the Student Handbook. They may direct you to other members of the technical staff for more detailed discussion. However your supervisor should be your first port of call for all questions and he/she will direct you to the appropriate source of information.

For industry sponsored projects, any component manufacture or purchase will be the responsibility of the project sponsor. For university projects, any component manufacture will require you to submit your technical drawings, approved by your supervisor, to the Senior Technical Officers involved in your work who will allocate workshop time to your job. You are encouraged to submit your jobs to the workshop as early as possible. You should address queries about the progress of your job to the Senior Technical Officers. Please use the following form for submitting job requests: [Work Support Request Form](#)

How to submit a job to the workshop?

If your project requires technical support please follow the steps below:

1. Discuss the matter with your supervisor.
2. Discuss your proposal with workshop staff and availability of material *BEFORE* preparing detailed drawings.
3. Produce clear drawings and instructions of what you want done.
4. Fill in a Work/Support/Purchase Request Form, including the OH&S section and ask your supervisor to sign it. Ensure that the Legal Compliance has been addressed.
5. Submit to the appropriate workshop.

Please follow these guidelines and procedures to get your project finished on time and to minimise the workload on our overloaded staff.

Any requirements for machining and fabrication that are to be outsourced to another workshop must be discussed with the appropriate workshop manager (Garry Clarke garry.clarke@adelaide.edu.au for the Mechanical Workshop or Philip Schmidt philip.schmidt@adelaide.edu.au for the Electrical Workshop) AND the Head of School and a written case made as to why it is not being done in house.

9.4 Project Software

You will be required to make use of project planning software package Microsoft Project, which is available on the computers in CATS and the three Mechanical Engineering labs/suites. Your Project Plan and Preliminary Report must contain at least a Gantt chart prepared using this software.

9.5 Literature Resources

The following references are useful when preparing reports and seminar presentations.

1. D. Beer, D. McMurrey, *A Guide to Writing as an Engineer*, 2nd ed. New Jersey: John Wiley & Sons, Inc., 2005.

This book contains guidelines and tips for engineering writing (Chapters 2 and 3), report writing (Chapter 6), information search (Chapter 8) and seminar presentation (Chapter 9).

2. <http://www.mhhe.com/mayfieldpub/tsw/toc.htm> Accessed March.1, 2014.

This website contains details guidelines for writing reports.

Additional guidelines for writing reports and presenting seminars can be found in the Appendices of the Masters Project Handbook and the course website.

10 STUDENT FEEDBACK

The University places a high priority on approaches to learning and teaching that enhance the student experience. Feedback is sought from students in a variety of ways including on-going engagement with staff, the use of online discussion boards and the use of Student Experience of Learning and Teaching (SELT) surveys as well as CEQ surveys and Program reviews.

SELTs are an important source of information to inform individual teaching practice, decisions about teaching duties, and course and program curriculum design. They enable the University to assess how effectively its learning environments and teaching practices facilitate student engagement and learning outcomes. Under the current SELT Policy (<http://www.adelaide.edu.au/policies/101/>), course SELTs are mandated and must be conducted at least once every 2 years. Feedback on issues raised through course SELT surveys is made available to enrolled students through various resources (e.g. MyUni). In addition aggregated course SELT data can be found at: <http://www.adelaide.edu.au/clpd/selt/aggregates>

11 STUDENT SUPPORT

Academic Support	Maths, writing and speaking skills	http://www.adelaide.edu.au/clpd/students
Counselling Service	Personal counselling for issues affecting study	http://www.adelaide.edu.au/counselling_centre
International Student Care	Ongoing support	http://www.international.adelaide.edu.au/support/isc
Student Care	Advocacy, confidential counselling, welfare support and advice	http://www.aau.org.au/site/page.cfm?u=69
Students with a Disability	Alternative academic arrangements	http://www.adelaide.edu.au/disability
	Alternative Examination Arrangements Policy	http://www.adelaide.edu.au/policies/63
	Reasonable Adjustments to Teaching & Assessment for Students with a Disability Policy	http://www.adelaide.edu.au/policies/64

12 POLICIES AND GUIDELINES

This section contains links to relevant assessment-related policies and guidelines. All University Policies can be obtained from: <http://www.adelaide.edu.au/policies>

Assessment for Coursework Programs	http://www.adelaide.edu.au/policies/700
Cheating in Examinations and Related Forms of Assessment	http://www.adelaide.edu.au/policies/1963
Copyright	http://www.adelaide.edu.au/policies/2643
Examinations	http://www.adelaide.edu.au/policies/465
Plagiarism	http://www.adelaide.edu.au/policies/230
Student Grievance Resolution Process	http://www.adelaide.edu.au/student/grievance/
Unsatisfactory Academic Progress by Coursework Students	http://www.adelaide.edu.au/policies/1803

Appendix A: Getting Started

This appendix contains some general advice for undertaking your project.

A.1 Project Startup Checklist

Getting your project off to a good start is an important step to a successful outcome. The following information gives you a guide on how to start your project. Note that you should be spending about 20 hours per week on your project. It is important that you make this time available, especially at the start of the project.

1. Determine your Project Topic, Find a Supervisor and Arrange a Meeting

Determine your project topic and find a supervisor using one of three ways recommended in Section 3, as early as possible, and by the end of 1st week of the semester at the latest. You must arrange a meeting with your supervisor by email. This meeting must occur before the project topic is determined.

At the start of the project you should discuss student and supervisor expectations using the guide in Appendix H: Expectations in Masters by Coursework Project.

Register your project topic with the Masters by Coursework coordinator ([A/Prof Eric Hu](#)) by sending him an email with your name, ID, supervisor's name and project title.

2. Enrol for and Attend a Literature Search Seminar

An important part of the project is a critical survey of existing published material relating to your project investigation. This involves locating, reading and analysing the relevant material. To help you locate such material, a Literature Search Seminar will be arranged with the Engineering Research Librarian at the Barr Smith Library. She (or he) will explain how you can find out more information about your particular topic using the electronic resources. Please contact the Engineering Research Librarian at the Barr Smith Library about enrolment details.

3. Attend Talk on Laboratory and Computing Facilities

All students undertaking projects in the School of Mechanical Engineering are required to attend a talk by the Laboratory Manager and the School Computing Officer in Week one. The Laboratory Manager will discuss the use and availability of laboratories, (including S311b, S311c and S237), and safety in the workplace. The Computing Officer will outline the computing facilities in the School and the CATS, and will discuss the rules and regulations when using the facilities.

During the planning stage of your project, you can seek advice on computing facilities or equipment availability from the Computing Officer and the Laboratory Manager. They may direct you to other members of the technical staff for more details.

4. Purchase a Laboratory Notebook and Bring to First Meeting

Each student must maintain a project workbook. This should be a daily diary of your progress and should include notes from all meetings, problems encountered, decisions made, design ideas and sketches, references to data sources, calculations, equipment settings, experimental results etc.

A good workbook forms a valuable record of your work, which you can refer to in later parts of your project and is an excellent source of information for your final report. The workbook must be kept up to date as you progress through your project.

Workbooks are submitted with your project report and are taken into account in assessment. They should always be brought to the project meetings.

University of Adelaide Good Practice Workbooks can be purchased from The School of Mechanical Engineering Office (S116).

5. Meet with your Supervisor

At the first meeting your supervisor will explain the aims and objectives of the project, and the deliverables expected on completion of your project work. The supervisor will also give you some background information and pointers for starting your literature investigation.

The supervisor's role is to provide advice and guidance, and to ensure that your project proceeds in a fruitful direction. You should not expect your supervisor to do your thinking for you, or give you detailed step-by-step instructions on what to do. You are expected to generate your own ideas, to seek out information for yourself, and to make your own decisions about what to do and how to do it.

At this first meeting, arrangements are normally made for regular (usually weekly) meetings. Note that it is the responsibility of the student to keep the supervisor informed of progress on the project.

6. Begin Writing Your Project Definition Statement and Project Plan

The project definition statement must be given to your supervisor within 1 to 2 weeks of beginning the project. This allows the supervisor to check that you have properly understood the project aims and expected outcomes and ensures that the project is off to a good start. If you have an industry sponsor supervisor, then the project definition statement should first be discussed with that person.

The project plan forms your roadmap for the project and it must be completed by the end of week 4. It should describe why the project is important, what has been done before, and clearly explain what you are aiming to achieve and how you plan to go about it. More information on the content of the project plan is described in Appendix D.

Note that the project plan is only an initial plan and the actual course of the project may change during the year. Major changes are possible but they should be carefully discussed with your supervisor before proceeding.

The Project definition statement and the project plan shall be compiled into one document, titled "Project definition statement and plan" and submitted by the end of the week 4 to your supervisor for assessment.

7. Begin Preparing Your Mid-Project Report and Final Report

It is a common mistake to begin your mid-project and final project report a week or two before it is due. It is at this time that you may be busy doing the technical work on your project and can least spare the time required.

The best practice is to write up your reports as you go along. A good technique is to create a word processor document at the beginning of the year as your "electronic workbook". As you progress through the project, you should draw key figures and store them in this document. You can also include key results from simulations and experiments, and photos of equipment etc. This will save you substantial effort at the end of the project, as you will already have the majority of the figures and data for your report.

As you complete each section of work, which may form a chapter in your final report, it is worthwhile highlighting important aspects to be covered in the chapter.

Using the above approach, you will find it much easier to complete your final report at the end of the year. You will also easily recognise if you are missing important information from the report.

A.2 Some Good Advice

Take your project plan very seriously. The work you do planning and researching your project at the start can make an enormous difference to the quality of your project.

Break the project into activities and then individual tasks (no bigger than 2 weeks). Link the activities to key milestones.

Assign a deliverable and deadline to each task. Make sure they are things you can demonstrate.

Do not just assign blocks of time to 'learning', 'researching', or 'choosing'. Specify what the demonstrable, useful, outcomes of this activity will be for example:

If you need to learn a new piece of software then use it to do something useful.

If you need to learn a new programming language then specify a small, useful program you will write in the language. If you need to do some research then specify the questions you will answer and how you will present the answer.

If you need to make a decision then produce an interim report which compares the alternatives and justifies the decision.

Do not just put 'documentation' or 'writing-up' as a big task performed in parallel with the rest of your project. Break the documentation down into smaller steps with deliverables. (Interim reports are one way of writing your report as you go. Each interim report can eventually form a section of your final report.)

Breaking up a project like this is hard, especially at the start when you do not fully understand the project, but that is when you must do it. If you do not have a plan at the start of the project, you will not have one until it is too late.

In your reports, consider breaking the background into 2 sections, motivation and background theory.

In the motivation sections you need to describe the context (or big picture) of the project. You need to write just enough to allow the reader to understand why your project is important and interesting and what the likely constraints of the project are.

It is sometimes helpful to present background theory in your reports. You should present enough theory to help the reader (e.g. one of your classmates) understand the report.

When things go wrong with your project:

If you fall behind your schedule you must either re-design your schedule or work hard to get back on track. If the project is not going well, let your supervisor know. Do not leave it to the last minute to try and get things back on track.

Do not let anyone or anything hold you up. You may have to wait for software to be installed. You may have to wait for parts to be delivered. You may have to wait for the workshop to complete construction of some crucial experimental equipment. You may have to wait for your supervisor to answer your questions. Do not let these things stop you. Find another part of your project to do, find a way around the problem, get help from someone else or fix the problem yourself. **Things will go wrong. How you handle problems is an important aspect of the project. Fix the problems and don't just blame other people.**

Appendix B: Student Performance Guidelines

The project is a miniature version of projects which you may encounter in your working environment. It is an opportunity for you to learn new technical and research skills. The project requires that you use your own initiative. You are required to plan what is required and then execute it.

The first semester project performance is based on your progress, the meetings with your supervisor and your project workbook. This workbook must be kept up to date and submitted to the supervisor at the end of the first semester and at the conclusion of the project.

Enthusiasm and initiative are important. This is **your** project and you need to take responsibility for it. It is not uncommon that as you progress through the project, you will encounter unexpected difficulties. It is from overcoming these challenges that you will learn the most about research. The methods that you use to solve these problems can form a significant part of your final report and seminar.

When you encounter difficulties, the key thing is not to panic. You should assess the issues, develop a plan (and maybe a back-up) and then discuss this with your supervisor. Especially in the later stages of the project, if you feel that you will probably not be able to complete all the objectives, then you should discuss priorities with your supervisor.

Remember that the main aim of the project in terms of its contribution to your education is not simply for you to accomplish all the goals your supervisor has set out for you (though clearly this is important!). The educational aim is to give you an opportunity to learn and demonstrate key research skills such as self-motivation, methodical approach to research, time management and the ability to tackle challenging problems. If you demonstrate that you are dedicated and diligent in tackling your project, you should do well, even though you may not achieve all the original project goals.

Appendix C: Project Workbook Guidelines

The project workbook is a record of the work that you did for the project. The workbook is sometimes referred to as the log book or lab book.

University of Adelaide Good Practice Workbooks can be purchased from the School of Mechanical Engineering Office (S116).

Choose a notebook you are comfortable with. An A4 hardback bound book with numbered pages would be a good choice.

Write your entry in English. Your supervisor and examiners may read the workbook to assess your performance.

Date each entry, including time of day.

Record all your ideas. The workbook can indicate the progression of your thoughts.

Record all work performed. Even mistakes are useful to enter so that they are not repeated by your successor.

Record any assumptions made.

Record all references used.

Record all problems encountered.

Record all precautions and procedures taken.

Record from where or whom you obtain equipment, devices, special tools, etc.

State model number and make of all equipment and devices used.

State software and version used.

Include sketches, drawings, diagrams, and schematics. Label diagrams and graph axes.

At the end of each project semester, write a two-page summary.

Appendix D: Project Proposal Guidelines

The purpose of writing the project proposal is to:

- Initiate the formal description of the project aims, goals, objective, and deliverables.
- Describe how the research component of the project and how it satisfies the AQF Level 9 criteria that the project is “substantially research based”.

Your project proposal will be reviewed by the Masters by Coursework coordinator to ensure that it has sufficient research to satisfy the AQF Level 9 requirement. It is important that your proposal is approved at the early stage of the project, so that if required changes can be made early rather than later.

It is expected that the contents of the 1-2 page Project Proposal can be used in the more thorough [Project Definition Statement and Plan](#). When writing the project proposal, use the following headings:

- Your Name and Student ID number
- Project Title
- Name of Supervisor
- Executive Summary
- Project Objectives
- Justification Project Addresses Research Based Requirement

The required contents for each of these headings are described in the template found in MyUni entitled ‘Template_Project Definition Statement and Plan’ and Appendix E: Project Definition Statement and Plan General Guidelines.

Appendix E: Project Definition Statement and Plan General Guidelines

At the first project meeting, your project supervisor will explain the aims of the project. The project definition statement is an opportunity for you to clearly explain back to your supervisor what you think is required. It should clearly state the aims and objectives of the work, the project requirements and the expected outcomes, which include the deliverables that you are promising.

The project plan should be a detailed plan describing how you will go about achieving the outcomes stated in your project definition statement. It should also give a list of milestones with corresponding dates and clearly separate the required tasks into individual roles and include the project definition statement.

You should discuss with your supervisor the content of the project definition statement and plan as different projects may require different aspects to be covered.

The Project definition statement and the project plan should be finally compiled into one document, titled "Project definition statement and plan" and is due according to the date listed in Table 2.

After submission of the "Project definition statement and plan", your supervisor will provide feedback on it and may suggest changes before the project proceeds further. You should update your project plan to document any agreed changes.

During the course of the project you may find that you will need to make major changes to your project plan. In this case you should consult with your supervisor before proceeding. Managing changes in an orderly manner is a key part of project management.

E.1 Some Important Points to Remember

Literature review: The literature review must be a critical review of any published work relevant to your project. Don't just state what others have done. Relate it to your project and identify any knowledge gaps that will be addressed by your project. Give opinions regarding the published work, especially if you think it is incomplete, that it challenges existing knowledge or if it disagrees with other published work.

Project Objectives: The objectives must define what is to be achieved and the method of measuring the extent of the achievement. The description of the project objective must adhere to the [S.M.A.R.T. criteria](#):

- Specific – target a specific area for improvement.
- Measurable – quantify or at least suggest an indicator of progress.
- Assignable – specify who will do it.
- Realistic – state what results can realistically be achieved, given available resources.
- Time-related – specify when the result(s) can be achieved.

An example of a well written project objective is,

In this research project the author will experimentally measure the hoop stress in a rib-stiffened steel cylinder of 10cm in diameter and 50cm long when placed under varying internal hydrostatic pressure. The experimentally measured hoop stress will be compared with theoretical predictions (Young, 1989, p518) with a goal of achieving differences between theoretical predictions and experimental results of less than 5% of the theoretical value of stress. The experimental tests will be conducted using the existing laboratory rig and equipment in the School of mechanical Engineering. The experimental work will be completed by 15 June 2014, and the final report will be completed by 15 October 2014.

For further examples see web sites such as:

- <http://www.techrepublic.com/article/use-project-objectives-to-structure-the-project-and-validate-success/>
- <http://www.dummies.com/how-to/content/how-to-write-an-objective-statement-for-six-sigma.html>
- http://www.lehigh.edu/~inhro/documents/SMART_GoalsHandout.pdf
- http://www.uic.edu/depts/crwg/cwitguide/02_EvalGuide_STAGE1_steps.pdf

Justification Project Addresses Research Based Requirement: The AQF document describes research as (<http://www.aqf.edu.au/wp-content/uploads/2013/06/Research-Explanation.pdf>):

“Research comprises systematic experimental and theoretical work, application and/or development that results in an increase in the dimensions of knowledge.”

Please read the definition on the AQF web site and describe how your proposed project satisfies this requirement.

Appendix F: Mid-Project Report and Final Report Guidelines

The mid-project report and final report share essentially the same layout and template. The mid-project report reflects work in progress during a critical milestone of the project. Here, the mid-project report allows the student and supervisor to monitor progress, which indicates the likelihood of a successful project outcome. Students should regard the mid-project report as a useful tool that can be used for critical self-reflection of the project. The final report however, documents the concluded project journey.

Students are reminded that the structure of the project proposal, project definition statement and plan and mid-project report have been designed as building blocks for the formation of the final report.

F.1 Some Important Points to Remember

Project management description: timeline, key milestones, budget, discussion of any differences between the project execution and the original plan due to aspects such as technical difficulties/changes in project aims, discussion of other project management issues faced, how they were overcome and lessons learned. Again, this section may be quite short in the preliminary report, but should be covered thoroughly in the final report.

Conclusions: summary of key results from the project, possible future work, advice to students continuing project (if appropriate).

References: use of other people's research and work must be properly and accurately acknowledged. This means including a complete reference list and indicating within the text where use has been made of items in the reference list. A large part of our knowledge is taken as known standard work for which references are not expected - be guided by the actual use you make of published work. Use the format suggested in page 238 of D. Beer and D. McMurrey.

Appendices: These give information which may be useful for reference purposes and may include items like copies of key reference papers, datasheets, experimental data, full circuit diagrams, software listings, detailed analytical derivations, mechanical drawings etc.

F.2 General Comments

The project report will be assessed not only on its technical content, but on its effectiveness in communicating information. The standard of written expression, including sentence construction, grammar, spelling, organisation into paragraphs, as well as the overall arrangement of the subject matter will be taken into account.

The above information covers general project reports. As each project is different, it is recommended that you discuss the particular reporting requirements of your project with your supervisor. It is often helpful for you to draft out a table of contents showing the chapter titles and sections and check this with your supervisor.

The captions for figures should be placed below the figure and the captions for tables should be placed above the table.

Appendix G: Additional Guidelines for Preparation of your Seminar

In preparation for the seminar, the following criteria need to be taken into consideration by students. The criteria include presentation structure and content, media quality and presentation style.

<p><u>PRESENTATION STRUCTURE AND CONTENT</u></p> <p><i>The Topic was clearly stated</i></p> <ul style="list-style-type: none"> • <i>Brief background to the topic provides context for the project research</i> • <i>Point of view is clearly expressed through the aim, objectives, problem statement and/or hypothesis</i> • <i>Outline of the main issues to be discussed in the presentation is clearly expressed</i> <p><i>Middle of Presentation</i></p> <ul style="list-style-type: none"> • <i>Issues are presented in a logical sequence</i> • <i>Analysis/interpretation of issues is clearly and articulately expressed</i> • <i>Figures and illustrations are well integrated into discussion of issues</i> • <i>Relevant sources are integrated throughout</i> <p><i>Conclusion</i></p> <ul style="list-style-type: none"> • <i>Main points are summarised</i> • <i>Summary is clearly linked back to the aim, objectives or problem statement</i> • <i>Presentation is well timed</i> 	<p><u>MEDIA QUALITY</u></p> <ul style="list-style-type: none"> • <i>Format is clear and easy to read</i> • <i>Font is sufficiently large</i> • <i>Figures and drawings are clear and easy to follow</i> • <i>Information is succinct, not too detailed</i> • <i>Grammar and spelling is accurate</i> • <i>Citation of source material is provided in-text</i> <p><u>STYLE</u></p> <p><i>During Presentation Speaker:</i></p> <ul style="list-style-type: none"> • <i>Uses appropriate semi-formal spoken language</i> • <i>Uses appropriate body language</i> • <i>Maintains eye contact with audience</i> • <i>Does not read from notes</i> • <i>Speaks at reasonable volume</i> • <i>Speaks at reasonable pace</i> <p><i>Discussion and handling of questions</i></p> <ul style="list-style-type: none"> • <i>Understands questions and handles them well</i> • <i>Shows a deep understanding of issues</i>
---	---

Appendix H: Expectations in Masters by Coursework Project

Name: _____ Supervisor: _____

Project: _____

Read each pair of statements below and then estimate your position on each. For example with statement 1, if you believe very strongly that it is the supervisor's responsibility to draw up a project specification you would put a ring round '1'. If you think that both the supervisor and student should equally be involved you put a ring round '3' and, if you think it is definitely the student's responsibility to draw up a specification, put a ring round '5'.

1.	It is the supervisor's responsibility to draw up the project specification	1 2 3 4 5	The student is responsible for drawing up the project specification
2.*	It is the supervisor's responsibility to communicate with a sponsor	1 2 3 4 5	It is the student's responsibility to communicate with a sponsor
3.	It is the supervisor who decides which theoretical framework or methodology is most appropriate	1 2 3 4 5	Students should decide which theoretical framework or methodology is most appropriate
4.	The supervisor should develop an appropriate program and timetable of project tasks and milestones for the student	1 2 3 4 5	The supervisor should leave the time management of the project to the student
5.	The supervisor should assign project related tasks to students working in a team	1 2 3 4 5	The supervisor should leave the team management of the project to students
6.	The supervisor is responsible for ensuring that the student is introduced to services and facilities of the school	1 2 3 4 5	It is the student's responsibility to locate all relevant services and facilities
7.	It is the supervisor's responsibility to organise purchase of materials and components for the project	1 2 3 4 5	It is the student's responsibility to organise purchase materials and components for the project
8.	It is the supervisor's responsibility to prepare work requests, and to communicate with the workshop	1 2 3 4 5	It is the student's responsibility to communicate with the workshop
9.	The supervisor should insist on regular meetings with the student to check that the student is working consistently and on task	1 2 3 4 5	The student should work independently and decide when to meet with the supervisor
10.*	The sponsor should participate in regular project meetings	1 2 3 4 5	The sponsor should be included in the project meetings only if required
11.	The supervisor is responsible for providing emotional support & encouragement to the student	1 2 3 4 5	Personal counselling and support are not the responsibility of the supervisor
12.	The supervisor should insist on seeing all student's work to ensure that the student is on the right track	1 2 3 4 5	Students should show their work only when they want constructive criticism from the supervisor
13.	The supervisor should assist in the writing of project reports if necessary	1 2 3 4 5	The writing of reports should only ever be the student's own work
14.	The supervisor is responsible for ensuring that the project aims are achieved	1 2 3 4 5	The student is responsible for ensuring that the project is successful

* - only relevant for industrially sponsored projects.

Adapted from M Kiley & K Cadman, Advisory Centre for University Education, The University of Adelaide, and from an earlier work by I Moses, Centre for Learning & Teaching, University of Technology, Sydney 2.1.97.

Appendix I: Student Project Participation Agreement

MEMORANDUM

TO «NAME»
POSTGRADUATE COORDINATOR
«FACULTY»

FROM PROFESSOR MARGARET SEDGLEY
ACTING DEAN OF GRADUATE STUDIES

SUBJECT ADMINISTRATION OF INTELLECTUAL PROPERTY AGREEMENTS

DATE 13 December 2004

Postgraduate Coordinators are requested to discuss the University policy on Intellectual Property ("IP") and Student Project Participation Agreements (SPPA) with new postgraduate students at induction. To facilitate the process please find attached a revised SPPA form, which supersedes previous versions.

In the absence of an employment relationship between the University and its students, students own IP generated by their research. However, these results are frequently the product of a complex interaction between third parties, supervisor(s), the student and other student(s) as part of a research team.

For the protection of the rights of all participants who may be engaged in research the University requires that higher degree students engaged in research with the potential to result in outcomes which are of possible commercial interest, assign to the University their intellectual property rights arising from that research by signing the *Student Project Participation Agreement* (SPPA). This ensures that students who sign an SPPA share in any benefit in the same way as does University staff. Not all students will need to sign an SPPA.

It is believed that the University, with its available resources, expertise and appropriate mechanisms in place for the commercialisation of intellectual property (through Adelaide Research & Innovation Pty Ltd), will be in a better position to protect and service the students' interests.

The following is a brief outline of procedures for the administration of Intellectual Property agreements together with more detailed attachments regarding the necessary procedures.

Details of the Intellectual Property Policy are available at the following web address: <http://www.adelaide.edu.au/ari/researchers/ipmanage.html>. It provides a formula for the sharing of the benefits between Adelaide Research & Innovation Pty Ltd, the University researcher's school/department and the researcher and the student.

The policy also requires that where a student's research project may generate outcomes which are of possible commercial interest that the student signs a Student Project Participation Agreement. This agreement should

include all conditions relating to the project including conditions that might restrict disclosure or affect the extent to which communication with colleagues is possible during the course of the research project and its completion. Specific requirements or preferences of outside funding bodies or employers may also need to be addressed contractually either with the assignment of Intellectual Property or separately. At times the outside funding body or employer will need to be a party to the agreement. These issues need to be addressed at the onset of the student's research or as soon as the possible generation of Intellectual Property becomes apparent. Adelaide Research & Innovation Pty Ltd will provide advice to a supervisor regarding the legal requirements of such agreements but as Adelaide Research & Innovation Pty Ltd represents the University it cannot provide advice to the student who needs to seek independent legal advice.

You are referred to the documents, "Higher Degree students and Intellectual Property Guidelines" and "Roles of Graduate Centre and Adelaide Research & Innovation Pty Ltd in the Administration of Intellectual Property". These documents together with the "Student Project Participation Agreement" are available on the Graduate Centre website: <http://www.adelaide.edu.au/graduatecentre/poladmin.html>

Postgraduate Coordinators should ensure that both supervisors and the student have discussed Intellectual Property issues, the possibility of signing the SPPA and/or the potential involvement of any person, institution, private company, agency (government or quasi/government) or centre (e.g. CRC) who may require a student to sign another agreement. These issues should be discussed before any agreements or documents are signed. In some situations Adelaide Research & Innovation Pty Ltd may determine that a "Joint Ownership Agreement" is required. A sample of this document is also available on the Graduate Centre website: <http://www.adelaide.edu.au/graduatecentre/poladmin.html>

Where a Student Project Participation Agreement is required, the Graduate Centre forwards a request to the student to complete three copies of this agreement. A copy of this letter is forwarded to all supervisors as well as the Postgraduate Coordinator. The Principal supervisor is required to sign the SPPA before it is submitted to the Graduate Centre. After the execution of the SPPA, one is retained for the student file, one copy is forwarded to the student and one copy is forwarded to the School/Department for record purposes. Note that students and supervisors should understand that a sponsor (funding body) might have specific requirements with respect to the presenting and the publishing of data/results of funded research. Clause 7 of the SPPA states that students must obtain written clearance from the University to present or publish confidential information or confidential material. Students and supervisors should contact Adelaide Research & Innovation Research Branch regarding the clearance.

If an outside person or organisation such as CSIRO, DSTO, ACPFG requires a student to sign an agreement before commencing work in the area, the supervisor and student may wish to discuss the agreement with Adelaide Research & Innovation Pty Ltd or seek outside legal advice. If and when any such agreement is finalised a copy should be forwarded to the Graduate Centre to be attached to the student file.

All supervisors and Postgraduate Coordinators should discuss the implications and ramifications of any proposed agreement with legal advisers at Adelaide Research & Innovation Pty Ltd before an agreement is signed.

Students and supervisors should be aware (unless it is otherwise agreed by all supervisors and other interested third parties) that an automatic embargo of twelve months from the date of submission is placed on publication of the material in the theses of students who have signed the SPPA. The thesis will be examined but examiners will be asked to treat the thesis as confidential and not to discuss it with, or make it available to, any other party. At the end of the embargo period, The Board of Research Education and Development will determine, on advice from Adelaide Research & Innovation Pty Ltd whether the embargo should be continued. It is the responsibility of all supervisors to advise the Graduate Centre if an embargo should not be placed on the thesis upon submission. Supervisors should forward a written request with reasons supporting the lifting of the embargo to

the Graduate Centre. It is also the responsibility of the supervisors to obtain a clearance from all interested third parties and forward any such clearances with the request to lift the embargo.

I appreciate your assistance in the administration of intellectual property agreements. Should you desire any further information regarding completion of the SPPA please do not hesitate to contact Diane McInnes on 08 8313 5697.

PROFESSOR MARGARET SEDGLEY
Acting Dean of Graduate Studies

Encs: Student Project Participation Agreement (SPPA)

Undergraduate/Honours/Masters By Coursework Students Information Sheet

In the absence of an employment relationship between the University and its students, students own intellectual property generated by their research. However, these results are frequently the product of a complex interaction between third parties, supervisor(s), the student and other student(s) and university researchers as part of a research team.

For the protection of the rights of all participants who may be engaged in research, it is university policy that students engaged in research which is the subject of obligations to a Third Party Sponsor under a separate agreement, or with the potential to result in outcomes which are of possible commercial interest, or which will contribute to the development of existing University Intellectual Property, assign to the University their intellectual property rights arising from that research by signing the *Undergraduate/Honours/Masters Student Project Participation Agreement* (UHM SPPA). Vesting all intellectual property rights in the University will enable the University to manage the intellectual property and its commercialisation effectively on behalf of all interested parties and to deliver on its obligations to third parties. In addition, this ensures that students who sign an UHM SPPA share in any benefit in the same way as do University staff (under the University's IP Policy inventors share collectively one third of net income received from commercialisation of the IP). Not all students will need to sign an UHM SPPA. However, where a student is requested to sign an SPPA and does not agree to do so then the University will find an alternative project for the student to undertake. This is because the University cannot jeopardise the research project and its relationship with the third party by not being able to deliver on any contractual commitments it has entered into with the third party or frustrate the commercialisation of research in which it has invested considerable resources.

Students and supervisors should be aware that for commercial and/or confidential projects, an embargo may be placed on publication of the material in the report/thesis of students who have signed the UHM SPPA. While the embargo is in place the report/thesis will be examined but examiners will be asked to treat the report/thesis as confidential and not to discuss it with, or make it available, to any other party. The embargo may be removed at the request of the Student, subject to the consent of the Third Party Sponsor and the University.



The UHM SPPA must be completed and signed by the student, witnessed and submitted to:

The relevant School Office, the University of Adelaide SA 5005.

PLEASE DO NOT COMPLETE THE UNIVERSITY SECTION

This section will be completed by the School. After the appropriate endorsement, the original agreement will be retained by the RMO at the University, a photocopy will be forwarded to the student, the Principal Supervisor, the School and Adelaide Research & Innovation Pty Ltd for record purposes.

WARNING: THIS AGREEMENT MUST BE RETURNED PRIOR TO COMMENCEMENT OF A PROJECT.

N.B. If the University/student/supervisor(s) has/have already signed any agreement relating to intellectual property, the supervisor(s) should discuss the situation with legal advisors at Adelaide Research & Innovation Pty Ltd prior to the student signing an UHM SPPA. The student will be advised to seek independent legal advice.

Appendix J: Laboratory Access and Space Requirements

Please read the conditions below then sign the bottom of this document if you agree upon completion, please return to info@mecheng.adelaide.edu.au. Students who do not sign this form will be denied access to all Laboratories.

I understand and will comply with the following:

- I will not consume food or drink in the Lab.
- I will keep my work area clean and tidy at all times.
- I will place all Items I bring to the Lab under or on my prescribed working area and not in the path of others or left in areas where they become an obstacle or hazard.
- I will not touch, tamper with, remove or disrupt Items on other people's work stations.
- I will make and receive phone calls outside of the lab to minimise disruption to others.
- I will not allow unauthorised persons to enter the lab under any circumstances.
- I will comply with OHS&W regulations and obey all signs around the Lab.
- I will keep noise levels to a minimum.
- I will not use the Lab after the prescribed times, nor will I sleep in the Lab under any circumstances.
- I will comply with the University's published IT Acceptable Usage and Security Policies (<http://www.adelaide.edu.au/technology/policies/>) when using University IT resources.
- I will use University-owned electrical and electronic equipment and resources solely for the purposes for which they are provided, and will not tamper with, damage or loan any such equipment or resources without first obtaining proper authorisation.

I have read and understood the above-mentioned conditions and will comply with them. I understand that failure to do so may result in having my access to the Lab removed, either temporarily or permanently, and that I may be responsible for finding my own work space.

Project Number:

Supervisor:

Room (tick applicable): S326b/c
 S237
 Vibrations Lab
 Sports Lab
 Other (insert Lab Name here)

TOTAL NUMBER OF STUDENTS IN YOUR PROJECT? _____

1. Student ID: _____ Print Name: _____ Sign: _____ Date: _____
2. Student ID: _____ Print Name: _____ Sign: _____ Date: _____
3. Student ID: _____ Print Name: _____ Sign: _____ Date: _____
4. Student ID: _____ Print Name: _____ Sign: _____ Date: _____
5. Student ID: _____ Print Name: _____ Sign: _____ Date: _____
6. Student ID: _____ Print Name: _____ Sign: _____ Date: _____

Appendix L: Electronic Media Submission

It is a requirement that electronic copies of all assessed deliverables are provided to the School, via the principal supervisor. At a minimum this needs to include:

1. Project Definition and Statement Plan,
2. Mid Project Report,
3. Final Report,
4. Seminar Slides.

Best practice would be a complete back up of all related work including the following:

1. CAD files
2. Software
3. Models
4. Documents
5. Photographs
6. Video
7. References
8. Data

When saving to DVD or CD it's best to add a short README.txt in the root directory to assist individuals locating files.