School of Civil Engineering

Information Booklet for

Research Thesis (CIVL4580/CIVL4582)

&

Research Project (CIVL4560)

Semesters 1 & 2
1. Introduction

This booklet contains information on the courses CIVL4580/CIVL4582 (Research Thesis) and CIVL4560 (Research Project). These courses are designed to have students develop and improve their ability to perform research tasks. CIVL4580 (commencing in semester 1) and CIVL4582 (commencing in semester 2) are 4-unit courses that run over 2 semesters, whilst CIVL4560 is a 2-unit course that runs over 1 semester (first or second).

1.1 Steps You Should Take

- Read carefully the information provided in this booklet.

- Decide which course suits you and complete your enrolment:

  For CIVL4560, you may enrol directly.

  To enrol in CIVL4580/CIVL4582, you must have a GPA > 4.8, and must contact the School of Civil Engineering [enquiries@civil.uq.edu.au] to have your eligibility checked and your enrolment enabled.

- Make sure that you are on the enrolment list and your email address is correctly set on SI-net. Course communication will be via email.

- Choose your research group. Groups normally comprise at least two and at most three students.

- Decide on the topic and supervisor. A list of topics is available on the School of Civil Engineering website: http://www.civil.uq.edu.au/current-undergraduate. However it is important to note that other research projects may be available. You are advised to discuss this with the academic staff members in your area of interest.

- Print out and complete the Thesis/Project Topic and Supervisor Form given at the end of this booklet, have it signed and dated by your Supervisor, and deliver it to the Civil Engineering Office for the attention of Dr Badin Gibbes, to have your details recorded.

- The Course Coordinator is Dr Badin Gibbes, email: b.gibbes@uq.edu.au.

- Assessment details are given on the Course Profile.
2. Assessment

2.1 Library Information Skills Workshop
Students must contact the Civil Engineering Library Liaison Officer, at the Dorothy Hill Physical Sciences and Engineering Library to register their name for one of the Library Information Skills Workshops scheduled (more detail on the timing of these workshops are available in the Course Profile). These are usually held in 2nd to 4th week of semester, and are followed by two assessments:

**Information Skills Assignment**
Each student should submit an individual written report (i.e., this is not a group task) via the Faculty Central Submission System to the attention of Dr Gibbes. The report is typically only a few pages (2-3 pages) long and includes the following information:

- An outline of your subject area (i.e., your topic / field of study);
- Relevant sources of information to the subject area (i.e., key journals, databases, etc.);
- Relevant key words used in your literature searches; and
- At least three annotated references (i.e., generally 1 book, 1 journal article and another source of your choice relating to your topic).

The format of the report can vary from topic to topic (not set format) but students generally use standard report headings. For example:

1. Introduction – Overview of subject area / topic;
2. Methodology - Sources of information, relevant keywords;
3. Results - Summary of search results and annotated references; and
4. Summary or conclusions – A summary of what could be done to improve future searches.

This report will be marked by your supervisor and the course coordinator. Further details on the timing, report requirements and Details are given in the Course Profile of the requirements, and submission deadlines and penalties.

**Literature Review and Research Plan**
Each student should submit an individual written report (i.e., this is not a group task) via the Faculty Central Submission System to the attention of Dr Gibbes. The report is typically only a few pages (2-4 pages) long and includes the following information:

- An introduction to your research subject;
- A preliminary review of relevant sources of information to the subject area;
- A preliminary discussion of strengths and weaknesses of past research including identification of research gaps; and
• An overview of the research gaps that will be addressed by your project including your specific research questions and/or hypotheses.
• A timeline or schedule of tasks that are required to complete your research project (including preparation and submission of your final report).

This report will be marked by your supervisor and the course coordinator. Further details on the timing, report requirements and Details are given in the Course Profile of the requirements, and submission deadlines and penalties.

2.2 Thesis and Project Documents
It is a requirement that each student submit their own individual Thesis or Project Report, which must be their own work and their interpretation of the literature and research data. Students should discuss with their supervisors which, if any, common items (e.g. graphs, tables, figures) can be “shared” within the group.

Refer to the Course Profile for further details, and submission deadlines and penalties (late submission penalty of 10% for each day).

Thesis and Project Reports should be typed and heat bound (available at the Co-op Bookshop). Two hard copies with an appropriate cover sheet and one electronic copy (on a CD or USB drive in .pdf format) must be submitted to the School of Civil Engineering Office. In addition to the submission of an electronic copy of the Thesis/Project Report, your supervisor may request electronic copies of data, graphs, etc produced in Excel, and a Word document version of your report.

Thesis and project documents are assessed by your supervisor and an expert second reader on the basis of: writing and presentation; project definition and scope; presentation and review of background information; research approach and execution; and overall conclusions and findings. A copy of the indicative marking criteria that is used for the written thesis and project documents is attached to this document.

For guidance on writing style and report layout, content and typical length, students may peruse copies of thesis from previous years held in the Library on CD-ROM.

Formatting and submission guidelines can be found at: http://www.eait.uq.edu.au/coversheets
The Thesis/Project Report typically contains the following:

**TITLE PAGE**  
including Topic, Student name and no., Course code, Supervisor, and Submission date

**LETTER OF SUBMISSION**  
addressed to Head of School of Civil Engineering, and including your Declaration of originality

**TABLE OF CONTENTS**  
including Chapters and Sections, List of Tables, and List of Figures, including photographs

**EXECUTIVE SUMMARY**

**INTRODUCTION**  
including hypothesis, scope and layout of Thesis/Project Report

**LITERATURE REVIEW**  
including background literature on the topic, work done by others, and your critique of this work, leading to your research methodology

**RESEARCH METHODOLOGY**

**RESEARCH RESULTS**

**DISCUSSION OF RESULTS**

**CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER WORK**

**ACKNOWLEDGEMENTS**  
beyond those mentioned in the Letter of Submission

**REFERENCES**

**APPENDICES**  
Information not directly referred to in the text but included for completeness, e.g. computer code or computer input/output, survey forms, etc.

**2.3 Seminars**

For CIVL4580/CIVL4582, oral seminars are presented by Thesis Groups, usually in the 12\textsuperscript{th} week of the second semester of study (refer to the Course Profile). The time and place will be announced via email. Each group will have 15 minutes (including 3 minutes for questions from the floor) to present their research findings.

Students should have PowerPoint files of their presentations available on a memory stick at the start of the allocated presentation day. Due to time limitations, laptops cannot be changed between presentations. If you are unsure whether your presentation will work, you should trial it prior to the presentation day. The seminars will be marked by the Academic Staff in attendance on the basis of your content, presentation methods and skills, conclusions, and answers to questions. Students presenting in groups will be assessed individually.
Thesis/Project Topic and Supervisor Nomination Form

Course: (Please tick) CIVL4580/ CIVL4582/ CIVL4560

Topic: ..........................................................................................................

Students in Group: (Full names please, in capitals)

1) ..........................................

Email: ..........................................

2) ..........................................

Email: ..........................................

3) ..........................................

Email: ..........................................

Supervisor’s name: ..................................................

Supervisor’s signature: ........................................Date: …/…/……..
Student Name:
Course Code:
Supervisor:
Submission Date:

A thesis submitted in partial fulfillment of the requirements of the Bachelor of Engineering degree program in the field of Civil Engineering

School of Civil Engineering
Faulty of Engineering, Architecture and Information Technology
### Mark sheet: Project/Thesis Report

<table>
<thead>
<tr>
<th>Grade Band</th>
<th>Writing and presentation (10%)</th>
<th>Project definition and scope (10%)</th>
<th>Background (20%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Excellent</strong></td>
<td>Excellent logical structure, physical layout and appropriate attention to detail. The work is presented in an accurate, concise and coherent fashion. Scientific and technical style. No spelling mistakes or grammar errors. Appropriate referencing to a correctly formatted bibliography. Appropriately acknowledges the work of others.</td>
<td>Excellent, clear definition of project topic, problem and/or hypothesis (including statement of purpose and relevance) and scope (including context, boundaries and assumptions). The abstract accurately yet concisely captures the project topic, methods and outcomes.</td>
<td>10 Extensive, relevant and logically organised review, analysis, discussion of background material, both specific research and general theory, helps the reader understand the rest of the document, and demonstrates clear mastery of the material in the topic area and ability to synthesize and abstract knowledge.</td>
</tr>
<tr>
<td><strong>Very Good</strong></td>
<td>Very good logical structure, physical layout and attention to detail. The work is presented in an accurate and coherent fashion. Scientific and technical style. No spelling mistakes or grammar errors. Appropriate referencing to a correctly formatted bibliography. Appropriately acknowledges the work of others.</td>
<td>Very good definition of project topic, problem and/or hypothesis (including statement of purpose and relevance) and scope (including assumptions). The abstract accurately captures the project topic, methods and outcomes.</td>
<td>8 Relevant and logically organised review, analysis, discussion of background material, both specific research and general theory, helps the reader understand the rest of the document, and demonstrates mastery of the material in the topic area and ability to synthesize and abstract knowledge.</td>
</tr>
<tr>
<td><strong>Good</strong></td>
<td>Good structure, physical layout. Some inaccuracies in presentation of work. Neat, occasional spelling mistakes or grammar errors. Occasional errors in referencing. Appropriately acknowledges the work of others.</td>
<td>Good definition of project topic, problem and/or hypothesis (including statement of purpose) and scope (including assumptions). The abstract captures the project topic and outcomes.</td>
<td>7 Good review/discussion of background material, with both specific research and general theory, and shows good understanding of the material in the topic area and ability to synthesize and abstract knowledge.</td>
</tr>
<tr>
<td><strong>Satisfactory</strong></td>
<td>Acceptable structure and physical layout; Some inaccuracies or lack of detail in presentation of work. Neat, some spelling mistakes or grammar errors. Some errors in referencing or bibliography formatting. Appropriately acknowledges the work of others.</td>
<td>Satisfactory definition of project topic, problem and/or hypothesis and scope. The abstract satisfactorily captures the project topic and outcomes.</td>
<td>6 Acceptable coverage of background material, with both specific research and general theory, and shows basic understanding of the material in the topic area.</td>
</tr>
<tr>
<td><strong>Poor</strong></td>
<td>Structure and physical layout detract; many inaccuracies or considerable lack of detail in presentation of work. Numerous spelling mistakes or grammar errors. Several errors in referencing or bibliography formatting. Occasional failures to appropriately acknowledge the work of others.</td>
<td>Poor or incomplete definition of project topic and scope. The abstract is not clear about the project topic and its outcomes.</td>
<td>4 A limited coverage of background material, which perhaps does not cover both specific research and general theory. Flaws in the basic understanding of the material in the topic area are evident.</td>
</tr>
<tr>
<td><strong>Very Poor</strong></td>
<td>Structure and physical layout very poor; presentation of work is inaccurate and incomplete. Numerous spelling mistakes or grammar errors. Several errors in referencing or bibliography formatting. Many failures to appropriately acknowledge the work of others.</td>
<td>Project topic and scope are very unclear. The abstract does not summarise the project topic and its outcomes.</td>
<td>2 An extremely limited coverage of background material. A lack of understanding of the material in the topic area is clear.</td>
</tr>
</tbody>
</table>
# Mark Sheet: Special Topic – Project Report

<table>
<thead>
<tr>
<th>Grade Band</th>
<th>Approach and execution (50%)</th>
<th>Conclusion (10%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Excellent (85-100%)</strong></td>
<td>A clearly set out plan with goals and methods systematically follows from the background research. The approach highlights your creativity and innovation and includes an evaluation of alternative approaches. The actual execution of work shows the application of knowledge gained from background research, possibly in different contexts leading to the generation of new knowledge.</td>
<td>The analysis of the work conducted highlights your comprehension and shows insight into the significance of the results. The project report has a critical review of the main results and findings of your project report against the stated plan. The project report concludes with a clear concise summary of the outcomes – in context of specified project definitions and literature – and brings recommendations for continuation and improvement of the project.</td>
</tr>
<tr>
<td><strong>Very Good (75-84%)</strong></td>
<td>A clearly set out plan with goals and methods systematically follows from the background research. The approach shows innovation and includes an evaluation of alternative approaches. The actual execution of work shows the application of knowledge gained from background research, possibly in different contexts.</td>
<td>The analysis of the work conducted shows comprehension and some insight into the significance of the results. The project report has a critical review of the main results and findings of your project against the stated plan. The project report concludes with a clear summary of the outcomes – in context of specified project definitions and literature – and brings recommendations for continuation and improvement of the project.</td>
</tr>
<tr>
<td><strong>Good (65 – 74%)</strong></td>
<td>A plan of work follows from the background research. The approach is systematic and includes some consideration of alternative approaches. The actual execution of work shows the application of knowledge gained from background research.</td>
<td>The analysis of the work conducted shows comprehension of the work but limited insight into the significance of results. The project report has a critical review of the main results and findings of your project report. The project report concludes with a summary of the outcomes and brings recommendations for continuation of the project.</td>
</tr>
<tr>
<td><strong>Satisfactory (50-64%)</strong></td>
<td>A satisfactory plan of work is offered. The approach is reasonably systematic. The actual execution of work shows reasonable understanding via some application of prior knowledge and some background research.</td>
<td>The analysis of the work conducted demonstrates some comprehension. The project report has a critical review of the main results and findings of your project. The project report concludes with a summary of outcomes.</td>
</tr>
<tr>
<td><strong>Poor (25-49%)</strong></td>
<td>The plan of work offered is incomplete or unclear. The approach is not well considered, and does not logically flow from the background research presented. The actual execution of work shows flawed understanding and little application of the either background research or prior knowledge.</td>
<td>The analysis of the work conducted demonstrates limited comprehension. The project report concludes with a poor summary of outcomes.</td>
</tr>
<tr>
<td><strong>Very Poor (0-24%)</strong></td>
<td>The plan of work, if offered, is not sensible. The approach is haphazard, and has no logical basis. The actual execution of work shows very little understanding or application of the either background research or prior knowledge.</td>
<td>There is a very poor review of the work and no real comprehension demonstrated. The project report concludes fails to explain what was achieved.</td>
</tr>
</tbody>
</table>

**Initial Mark** /100

**Late penalty**

**Final Mark** /100

**Comments:**

**Marker’s Signature**

**Date:**