Australian National University

# ENGN4200 Individual Project

# Thesis Report Guidelines

Value: 65% of course total

## SUBMISSION

The thesis submission consists of a single PDF file named:

U1234567_ Firstname _ Surname _Thesis_ENGN4200.pdf

## FORMAT

- 50-page limit, excluding title page, declaration of originality, acknowledgements, abstract, table of content, list of figures, list of tables, glossary/abbreviations, references/bibliography and appendices
- Font size should be 12-point, with the line spacing between 1.2 and 1.5
- The left margin at least 3 cm, and right, top, and bottom margin of at least 2 cm

## NOTES

- A thesis template (Microsoft Word) is provided on Wattle only as an example to students. You are encouraged to apply your own template or writing style, including using other writing software such as LaTex or LibreOffice. Please closely follow the official layout of the template and keep the elements of the title page and declaration page in your thesis (ANU logo, degree, year, etc).
- Consult your supervisor regarding the contents, structure, and formatting of your thesis. Different project types may require a different thesis structure.
- Ensure your thesis is easy to read, clear, correct, concise, and has a logical flow of structure.
- Your thesis body should not exceed 50 pages. The appendices should be used for less relevant or less important information, and these are generally not assessable.
- Works attributed from others should be clearly referenced, including work by your supervisor, other students in the same research group, or published article. Lack of references or acknowledgement of others' contributions are unprofessional and could lead to plagiarism.
- Note that you are also marked for grammar and formatting. Consider having your thesis proof-read by others before submitting your thesis draft to your supervisor.

Australian National University

## MARKING CRITERIA

| Element | Criteria | Benchmark |
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| **Professional Skills (10%)** | • communication of work and outcomes<br>• appropriate and consistent formatting, spelling, layout and grammar<br>• the thesis is written for a non-expert, technically knowledgeable audience<br>• the body of the thesis does not exceed 50 pages<br>• the body font is not smaller than 12 point, minimum 1.2 line spaced<br>• all figures and tables are clearly labelled and referred to in the text, and those from external sources are referenced appropriately<br>• appendices are used appropriately | Consistent formatting and layout. Very few or no spelling, grammar or formatting errors. Reads and flows well. Clear, logic thesis structure. |
| **Project Scope (15%)** | • clear research question stated in the introduction<br>• the scope is appropriate for course requirements and expectations (12 unit individual project)<br>• the student understands the scope<br>• broader project context outlined<br>• research question and context linked to real-world problems and challenges<br>• assumptions and exclusions stated | A clear, appropriate research question provided. The broader context outlined and a clear link made to the research question. Assumptions and exclusions stated, and the student clearly understands these and their impacts on the work. |
| **Research Skills (20%)** | • a critical analysis of the body of work and literature were undertaken appropriate for the project scope<br>• the student has identified and outlined the theory that underpins the project subject matter<br>• relevant background material, literature, data and key sources identified and incorporated<br>• research well summarised in students' own words, not excessive quotations<br>• range of sources used<br>• sources critical evaluated, limitations or bias with sources or research identified<br>• all sources correctly referenced<br>• references and bibliography completed and appropriately structured and ordered<br>• research supports the research question and relevance of project | Critical analysis of the relevant existing body of work identifying limitations and possible bias of previous work provided, not just a summary. Multiple sources used to support and build key arguments, no reliance on one author, journal, conference or source. Research to support and provide data, background material and approaches. A consistent referencing method used throughout. |
| **Engineering Skills (25%)** | • mastery demonstrated of relevant engineering and/or scientific skills from undergraduate material in the project area for the given problem | The student has applied their existing knowledge, synthesised with new research to develop an appropriate approach to answer |

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| | • the student is familiar with the theory, methods, approaches and skills that underpin the subject matter<br>• an appropriate problem-solving approach selected, and limitations of that approach given if relevant<br>• appropriate engineering tools used to generate results<br>• elegant engineering solutions and methods are developed and used | their research question. The student has developed new, elegant or innovate approaches, techniques or tools for their project. Statements defended appropriately. |
| **Project Results and Analysis (20%)** | • clear which are student results and which are background material<br>• the results are presented in a manner that makes them verifiable<br>• the student provides an insightful discussion of the results and an intuitive explanation for their consistency or plausible explanation for their inconsistency<br>• a comparison with similar published or existing results is provided if such results exist<br>• implications of results are explained | Results are new and well presented. They are evaluated, possible sources of errors provided, and if possible validated. Outcomes are compared and contrasted to existing research and results. Implications of results explained, particularly with reference to the context of the project. |
| **Conclusions and Future Work (10%)** | • an answer to the research question provided<br>• evaluation of overall results given<br>• what worked well in the research and the problem-solving approach<br>• recommendations made on actions or next steps | Suggestions for future work may include approaches or methodologies to use. Limitations of approach, methodology, data or research outlined in addition to the potential impact on results. |

If you are the lead supervisor, also consider the following non-assessable element. This should be included in the comments, and it will be considered if a student is borderline between grade bands.

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| **Student Performance** | • how well was the student performance during the research project<br>• did they attend meetings, response to emails and other communication<br>• did they ask relevant questions and seek advice when required but display and use initiative<br>• did they manage time with the supervisor in terms of meeting notes, making times, … | Students displayed initiative and were proactive. They were well organised during the project, come to meetings on time and well-prepared. The questions they asked were well thought out and relevant. They knew the requirements of the course and deadlines. |