Final report for MBEng Project

Title

**Author name**

Supervisor(s):

Submitted in partial fulfilment of the requirements for the award of MBEng in Biomedical Engineering from Imperial College London

June 2020 Word count: ……………

### Abstract

Up to 250 words.

Include all of background, aim, method, results, and discussion/conclusion. Could be one sentence each. As you see fit. It should be written for a general audience.

### Acknowledgements

This section is not required. It is, however, usual to thank those individuals who have provided particularly useful assistance, technical or otherwise, during your project.

Abstract and acknowledgments to not count towards the 6000-word limit.

# Introduction

**Some comments about the report overall**.

The report should be strictly **up to** **6000 words**, excluding references, title page, abstract, and acknowledgments (figure captions and tables are included). The word limit is a limit, not a target. As per your handbook, reports that do not comply with the word limit are unlikely to be given a mark higher than 59%.

As with your planning report, delete / overwrite my text in between headings and make it yours. You may change the format everywhere; just make sure that the necessary information and sections are there. Similarly, you are free to use a word processor of your liking.

A typical technical or research report will have the following sections, however, the work for some projects might be better disseminated with a different layout.

1. Introduction
2. Methods
3. Results
4. Discussion
5. References

**Specifically for this section** (introduction).

Include a clear aim (and maybe specific objectives) at the end of the introduction. For example, the overall aim was to do this and specific objectives were 1, 2, 3.

Your intro should lead to the aim: This is a problem. Something was done in the past (lit review), but not as well / enough (i.e. be critical). Therefore I am going to do something better / different → aim.

# Methods

Be as detailed as possible, in that one should be able to reproduce what you did. As always, don’t include unnecessary information. You should justify every decision you make or technique you use.

# Results

Be punchy and dry. You can tell us what your results mean in the discussion.

Reference tables and figures in the main text. For MS.Word users, use cross reference (only label and number). E.g. Figure 1 presents the ###. Data for ### can be seen in Table 1.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Table 1: ###. Add a caption. Make it as descriptive as possible | | | | | |
| ### | ### | ### | ### | ### | ### |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 2 | 3 | 4 | 5 | 9 |

As in the planning report, you will notice that the figures and their captions are in a table. I strongly suggest that you copy & paste the table (including the caption) when you want to add a new figure instead of inserting a new table or inserting a figure in between the text without it being in a table; it keeps it neat (aligned, centred, etc).

|  |
| --- |
| Diagram/ sketch / picture / graph Annotate / label well. Make sure all legends and fonts are legible. Think of the reader |
| Figure 1: Add a caption. Make it as descriptive as possible.  Since you are adding a caption, you don’t need to have a title on your graph(s). |

Figure 2a shows the ### and Figure 2b the ###.

|  |  |
| --- | --- |
| Diagram/ sketch / picture / graph Annotate / label well. Make sure all legends and fonts are legible. Think of the reader.  (a) | Diagram/ sketch / picture / graph Annotate / label well. Make sure all legends and fonts are legible. Think of the reader.  (b) |
| Figure 2: (a) ###. (b) ##. Add a caption. Make it as descriptive as possible.  Since you are adding a caption, you don’t need to have a title on your graph(s). | |

# Discussion

Start with a quick summary of what you’ve done and found, i.e. 1-2 sentences, then discuss them. What do your results mean? Derive conclusions off them, but make sure they are substantiated. Use expressions such as ‘it is likely’, ‘the results suggest that’ etc.

Compare your results with literature. Discuss any limitations of the study. Suggest improvements and how future work could deal with the problems you encountered.

Avoid words such as ‘very’, ‘good’, ‘little’; talk with numbers.

# Conclusion (if you want; it could be the last paragraph of the discussion instead of a separate section)

This study found that ###. Give us the take-home message and how your design / findings could be used / explored further. It should be 1 paragraph.

# References

Use any style you want, so long as it is consistent. You can pick one in Mendeley (or in whatever reference manager you are using) and it will do the job for you.

A style that you can use is the following.

Examples of referencing journal articles

1. Authors. Year. *Title*. Journal Volume(Issue), pages.
2. Woo SL-Y, Peterson RH, Ohland KJ, Sites TJ, Danto MI. 1990. *The effects of strain rate on the properties of the medial collateral ligament in skeletally immature and mature rabbits: a biomechanical and histological study*. J. Orthop. Res. 8, 712-721.
3. Crisco J J, Moore DC, McGovern RD. 2002. *Strain rate sensitivity of the rabbit MCL diminishes at traumatic loading rates*. J. Biomech. 35, 1379–1385.
4. Nelder JA and Mead R. 1965. *A simplex method for function minimisation*. Comput. J*.* **7**, 308-313.

Example of referencing a whole book

1. Daniels K, Patterson G, Dunston Y. 2014. *The ultimate student teaching guide*. 2nd ed. Los Angeles. SAGE Publications, 150-167.

Example of referencing a book chapter

1. Cooke DJ and Philip L. 2001. *To treat or not to treat? An empirical perspective*. In: Hollin, C.R. ed. *Handbook of offender assessment and treatment*. Chichester: Wiley, 3-15.

# Annex(es)

Use this space for any additional information. Refer to the annex in the main text, else the reader is not going to have a reason to look at it. You could have more than one annex, as appropriate.

The annexes contain information which is not essential for the ‘story’ to be told, but helpful to the reader that might want to dig into the detail or take your work forward. Information typically included here are things like program listings, complex circuit diagrams, tables, proofs, additional results, graphs or any other material which would break up the theme of the text if it appeared in the main body. Large program listings or actual files may be submitted with the report, although it is preferable either to provide them to your supervisor on a pen drive, or to cite their web path name in the report.