

Report Writing

Report writing is an important skill for all engineers. It is covered in some detail here and in many excellent books in the library. This document sets out reasonable expectations of your impending Engineering report. Your lecturer may also have other specific requirements.



Overall Structure

Your report is a guide to the client to all the good work that you have done. It is very unlikely that s/he has time to read every word that you write. Consequently, your report must be structured to allow them to find your recommendations quickly, without being overwhelmed by the details of your analyses. The following structure is suggested:

Title page	Title of project, subject, lecturer/tutor, date, your name and student ID, etc.
Executive Summary	One page that sets the problem in context, that draws a boundary around what you have done and that provides your key outcomes and recommendations . A reader should not have to read more than the Summary to get your message.
Table of Contents	<i>Word</i> will generate this automatically for you if you use <i>Heading</i> styles. See how to do this with Word .
Introduction	A more complete introduction to the problem than you provided in the Summary: perhaps half to one page.
Detail sections	<p>One or more sections that provide a detailed walkthrough of your analysis. Keep it simple, with only key charts and equations.</p> <p>You will want to review demonstrate that your work is based on authoritative references. In larger, reports, chapter 2 is often a Literature Review. In briefer reports, the references will be included in the discussion of the methodologies you have used.</p> <p>For more detail, refer the reader to the relevant Appendix where more detail, such as sample calculations, can be provided.</p> <p>These detail sections should be about 3-7 pages.</p>
Conclusion	A summary of what has been done plus your key recommendations . This should be about a page.
References	A list, in a standard form , of books and web sites that you have referred to in your report. See The Learning Centre for guidelines for correct referencing standards.
Appendices	Location of your original data and detailed analyses. Keep your Appendices as short as possible and make sure that they are not just a dumping ground for every spreadsheet and chart you have developed. The reader will need a guide to what is there.

Detail

The key questions that you need to answer before you write your report are:

- Why am I writing this?
- Who will read this?
- What do they need to know? What do I want to tell them? What is the message?
- How will I convey it (the message)?

The suggested structure, above, will help somewhat with the last point. However, you will need to plan how you will convey the detail of what you have done.

Start by writing some headings of the key stages in your analysis and the key findings that you have developed. Keep it simple. Put detail in the Appendices. Mindmaps are good ways of planning your report structure, but you can also use *Word's* outlining capabilities.

Once you have the sequence of main headings right, subdivide them into further detail or write what the main message will be for each heading.

When these messages are clear in your mind, write connected prose to join the sections together.

Add sufficient charts and tables to illustrate your main points.

Write the Conclusions and Recommendations.

Write the Summary. Could I read the Summary (and nothing else) and get the main message and conclusions of your report? If not, it needs more work!

Proofing

You now have a first draft of your final report. It will need rereading and careful editing before it becomes readable. Leave time to do this. Make sure that the story flows from beginning to end. Make sure that your recommendations are clear. Remove extraneous material that does not contribute to your overall recommendations. Move it to an Appendix if it is sufficiently relevant.

Give your report to one of your group members for comment. Proofread their report and make comments.

More information

Project Handbook components (<http://project-handbook.pbworks.com/>):

- **Making the most of [Microsoft Word](#)**
- **[Referencing](#)**
- **Writing Reports** (the extended version) available at:
<http://project-handbook.pbworks.com/f/Writing+reports+-+longer+version.pdf>

See also:

- **CQ University's Academic Learning Centre** (at their Moodle site)
- **The University of Melbourne's LLSU's AIRport** (<https://airport.unimelb.edu.au/gate1/writing/>)
- **RMIT's LSU Learning Lab** (<https://emedia.rmit.edu.au/learninglab/content/writing-skills>)
- **USyd's WRiSE – Writing Reports in Science and Engineering** (<http://learningcentre.usyd.edu.au/wrise/>)