Minor thesis & research report structure

What is it?
Your minor thesis (sometimes called research report) is a description of your research project based on:

- research question(s) and/or
- problem(s).

Your thesis tells the story of your research questions/problems and how you found answers to them.

Purpose:
Although it may make a contribution to your broader academic field, the main purposes of a minor thesis or research report are to demonstrate:

- a critical awareness of the previous work in your field exploring some additional questions (a minor thesis may reproduce a previous study in a new context or with modifications)
- an understanding of basic research theory and techniques

Start writing
Begin the writing early; just making a start is a big hurdle. The more work you've done at proposal stage the easier it will be. Set up a folder which will contain separate documents for each chapter (or section). Here are some questions to help you think about some sections you might need.

Audience and voice
You need to know whether it is common to use the first person (I) in your writing or you need to be more objective (third person – the writer). This varies according to different discipline areas. You need to image someone who is well-educated in your broad area but does not know about your SPECIFIC research. You will need to define and clarify some terminology and examples.

Questions That Relate to Thesis Structure

<table>
<thead>
<tr>
<th>What is the research about?</th>
<th>Introduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is already known in this area?</td>
<td>Lit. Review</td>
</tr>
<tr>
<td>What do I expect to find?</td>
<td>Research question</td>
</tr>
<tr>
<td>How you went about your research?</td>
<td>Methodology</td>
</tr>
<tr>
<td>What you found?</td>
<td>Results/Findings</td>
</tr>
<tr>
<td>What do the results/findings mean?</td>
<td>Discussion</td>
</tr>
<tr>
<td>So what? What contributions?</td>
<td>Research significance</td>
</tr>
<tr>
<td>What recommendations?</td>
<td>Recommendations</td>
</tr>
</tbody>
</table>
**Major Parts to your thesis or report**

Not all of the above sections need to be written as discrete sections. In some areas, where the review of the literature is short, this section might be embedded in the Introduction. Conversely, there may be two or more separate Literature Review chapters dealing with different aspects of the research project. Also, in many (probably most) theses, it is appropriate to combine Results/Findings and Discussions sections. It is also possible, particularly in some types of qualitative research, to merge sections.

However, in all theses you need to **introduce** the thesis, identify what is already known about your topic in the **literature**, let the reader know what **methodology** you used, state the **results** and **discuss** them, identify the **conclusions**.

**The main sections in more detail**

The following order of sections is used for most science-based discipline areas as well as arts-based areas.

**Abstract** (also called **Synopsis** or **Summary**) approx 300 words.

This should be a very brief overview of the WHOLE report covering 4 main areas:

- What you did (the topic)
- How you did it (methodology)
- What you found out (results – major only)
- What was the significance (conclusion/recommendations)

**Introduction:**

- Provide contextual information to the problem/questions, identifying the gap of research in this area
- Introduce the objectives
- Identify the specific research questions

*The following are optional (check what is generally done in your discipline area):*

- Introduce how the objectives will be achieved (methodology, briefly)
- Introduce the main findings and conclusions.
- Indicate the structure of the rest of the report

**Literature Review:**  **(see literature review resource for more detail)**

- Review previous work relating to research problem/questions (to define, explain, justify), and show (in greater detail than the introduction) the gap that the present research will be filling.
  - Should be structured thematically
  - May have a number of sub-sections to identify themes
  - Research should be integrated and combined highlighting areas of similarity and difference
- Review previous work relating to methodology (to define, explain, justify)
  - NOTE: It may be more appropriate to put this in the Methodology section
- Review previous work relating to results (particularly reliability, etc)
  - NOTE: As above, this may be more appropriate in the Methodology section

**Methodology:**

- Perhaps discuss your epistemology and theoretical perspectives (this may depend on your area and style of thesis)
- Use the literature (theory) to help you justify why you chose this methodology (if not done above)
  - e.g. if you are doing a survey explore the theory of survey design, types of questions and delivery and advantages and disadvantages of different modes
- Explore the scope and limitations of your chosen methodology
- Explain how data was collected/generated
- Explain how data was analysed
- Explain any methodological problems and their solutions or effects
- Perhaps include a model of how to read and/or interpret the data
Results:
- Present the results (using graphs, tables, etc where appropriate)

Discussion:
- Interpret and discuss the results
- Compare with results of previous research (link to the Literature Review)
- Discuss the effects of methods used on data obtained.
- Discuss the shortcomings of the research, or the research methodology?

Conclusions:
- Return to the research questions and suggest whether they've been answered or "solved".
- Return to the objectives and whether they have been achieved?
- Indicate what has been learnt from the study and how it can be applied
- Indicate improvements for the research and future possibilities

Sample table of contents
Note some of the features in the sample

<table>
<thead>
<tr>
<th>Title: Oztop Stock Inventory Management: a new system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contents</td>
</tr>
<tr>
<td>Abstract</td>
</tr>
<tr>
<td>Acknowledgements</td>
</tr>
<tr>
<td>Declaration</td>
</tr>
<tr>
<td>List of Figures</td>
</tr>
<tr>
<td>List of Tables</td>
</tr>
<tr>
<td>Chapter 1. Introduction</td>
</tr>
<tr>
<td>1.1 Overview of Oztop Company</td>
</tr>
<tr>
<td>1.2 Project objectives and research questions</td>
</tr>
<tr>
<td>1.3 Project scope and limitations</td>
</tr>
<tr>
<td>1.4 Project benefits</td>
</tr>
<tr>
<td>Chapter 2. Literature Review</td>
</tr>
<tr>
<td>2.1 Introduction to inventory management</td>
</tr>
<tr>
<td>2.2 Pareto analysis</td>
</tr>
<tr>
<td>2.3 Material requirements planning</td>
</tr>
<tr>
<td>2.3.1 Planning input</td>
</tr>
<tr>
<td>2.3.2 Planning output</td>
</tr>
<tr>
<td>2.4 Safety stock…etc</td>
</tr>
<tr>
<td>Chapter 3. Methodology</td>
</tr>
<tr>
<td>3.1 Inventory management methodologies</td>
</tr>
<tr>
<td>3.1.1</td>
</tr>
<tr>
<td>3.1.2 etc</td>
</tr>
<tr>
<td>3.2 Company survey</td>
</tr>
<tr>
<td>3.3 Data collection</td>
</tr>
<tr>
<td>Chapter 4. Results</td>
</tr>
<tr>
<td>Chapter 5. Conclusion and recommendations</td>
</tr>
<tr>
<td>References</td>
</tr>
<tr>
<td>Appendices</td>
</tr>
</tbody>
</table>
The order of the pages

The pages of your thesis usually follow order:

- Title page which states:
  - the full title of the thesis
  - the full name and degrees of the candidate
  - the name of the School associated with the research (and ‘RMIT University’)
  - the month and year when the thesis is submitted

- Declaration stating that:
  - except where due acknowledgement has been made, the work is your own
  - the work has not been submitted previously, in whole or in part, to qualify for other assessment
  - the content of the thesis is the result of work which has been carried out since the official commencement date of the approved research program
  - any editorial work, paid or unpaid, carried out by a third party, including Study and Learning Advisers is acknowledged

- Acknowledgements, if any

- Table of contents and, where applicable, lists of diagrams, tables, etc.

- Abstract (summary) of the research – usually around 300 words.

- Main text of the thesis, divided into chapters

- Reference list conforming to the style common to your discipline.

- Appendices (if appropriate)

Other stylistic features (see also report writing www.dlsweb.rmit.edu.au/lsu)

- Figures, tables, etc must carry a number and a caption and be fully referenced if from other sources.

- Heading styles and numbering systems should be consistent throughout, matching those of your Contents page.

- Each chapter should begin on a new page.

- Italics are usually used for foreign language words and genus or species names.

- If you use footnotes for extra information, they must be on the same page as the information to which they refer. Alternatively you could us endnotes, which generally should be placed at the end of each chapter. Remember to use a consistent numbering system.

- Your thesis title should be well thought-out, generally no more than 20 words, and should make the topic and research field clear to the reader.

- Headings should use parallel structures (the same grammatical form)
  
  e.g.  
  
  Not parallel (mixed structures)  Parallel (all noun structures – things)
  
  Effectiveness of treatments  Effectiveness of treatments
  
  How to manage side effects  Management of side effects
  
  What are the costs?  Costs