

# Writing Theses in L<sup>A</sup>T<sub>E</sub>X: Task Sheet

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## 1 Creating a document

- Create a new file called thesis.tex
- Create a new report document
- Select a fontsize (11pt)
- Select the type of page you want to write on (A4)
- Make the document double-sided
- Set the margins such that they are symmetric and over 1cm
- Test how it looks with some blindtext or other nonsense text
- Verify page numbers appear on each page

## 2 Line Spacing

- Use the “linespread” command to make the spacing for document 1.5 or 2 times
- Include a section of document with single line spacing
- Include a footnote with single-lined spacing

## 3 Title Page

- Make a title page you find aesthetically pleasing
- Ensure it follows all the requirements laid down by Imperial

## 4 Thesis Preamble

- Add a declaration of originality
- Add a copyright statement
- Add an abstract
- Use blindtext or other placeholder text for the content

## 5 Contents and Appendices

- Add some chapters, appendices sections and sub-sections to your document
- Add some tables and figures to your document
- Add a table of contents, list of figures and list of tables to your document
- Add a chapter to your table of contents named “Supplementary Materia” without creating a new chapter in your pdf

- Add a new table to the list of tables in this new chapter without the table appearing in your document
- Add a new figure to the list of figures in this new chapter without the figure appearing in your document

## 6 Splitting Your Document

- Put the content for each chapter and appendix in a different .tex file
- Use the “include” command to include each document in your thesis.tex file
- Experiment using the “includeonly” command to only compile some of your chapters

## 7 Hyperlinks

- Use the “hyperref” package to make your references dynamic hyperlinks
- Experiment with different colours for your links and choose one you like

## 8 Graphics Path

- Create a different directory for each chapter of your thesis
- Move your figures into the relevant directory
- Set the graphicspath so it includes each of these directories

## 9 Subfigures

- Find some pictures you like online (or use some from your research)
- Place them in them in the relevant directory for graphics
- Insert a subfigure into your document
- Give each subfigure a caption and a label
- Give the figure a caption and a label
- Reference the figure and a subfigure in some text

## 10 Custom Commands

- Create a custom command for a phrase you expect to often in your thesis
- Create a custom command for a mathematical expression. It should take at least one argument.
- Use both custom commands in your document

## 11 Bibliography Management

- Create a .bib file
  - If you use a reference management software, ask it to export your reference library as a .bib file
  - Otherwise, make up a few references by hand
- Cite a few of your references in your text
- Use “citet”, “citep” and, at least once, cite multiple references in a single command
- Choose a referencing style you like

## 12 Acronyms

- Define some acronyms relevant to your topic
- Use each acronym at least twice each in some sample text

## 13 Aligning Equations

- Define an alignat environment with at least three equations
- Use at least one alignment point each equation to cause them to line up