

The Seldon Plan — *A socioeconomic and anthropological analysis of long-term consequences of the current astropolitical policies across the Galactic Empire*

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Abstract

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How to use this template

1.1 Requirements and typesetting

This document is made to be compiled using $\text{Xe}_{\text{L}}\text{A}_{\text{T}}\text{E}_{\text{X}}$ or $\text{Lua}_{\text{A}}\text{T}_{\text{E}}\text{X}$ and $\text{L}_{\text{A}}\text{T}_{\text{E}}\text{X} 2_{\epsilon}$. Do not compile it using $\text{pdf}_{\text{L}}\text{a}_{\text{T}}\text{e}_{\text{X}}$ or very old $\text{L}_{\text{A}}\text{T}_{\text{E}}\text{X}$ versions, it will not work! The bibliography is generated with $\text{bib}_{\text{L}}\text{a}_{\text{T}}\text{e}_{\text{X}}$ using the biber backend. If you work with the command line you need to execute the following commands:

```
$ xelatex Main.tex
$ biber Main.tex
$ xelatex Main.tex
```

Though this will generate a lot of auxiliary files everywhere so I recommend using $\text{clut}_{\text{L}}\text{t}_{\text{E}}\text{X}$ instead:

```
$ cluttex -e xelatex --biber Main.tex
```

Which will run $\text{Xe}_{\text{L}}\text{A}_{\text{T}}\text{E}_{\text{X}}$ (or $\text{Lua}_{\text{A}}\text{T}_{\text{E}}\text{X}$) the right number of times and produce just a single PDF, while storing the auxiliary files somewhere else in a temporary directory.

1.2 Directory structure

The structure of this template in the filesystem is as follows:

```
$ tree --charset ascii Thesis
Thesis
|-- Main.bib
|-- Main.pdf
|-- Main.tex
|-- appendix
|-- figures
|   '-- galactic-empire.png
|-- parts
|   |-- abstract.tex
|   '-- howto.tex
'-- tex
    |-- docmacros.sty
    |-- hsrthesis.cls
    '-- titlepage.tex
```

There are two files called **Main** that may be renamed to something more pertinent to your thesis, though note that the new name cannot contain spaces. The **tex** directory only contains the “code”, that means styling, macros and other special sources such as the title page. The content of your thesis should be stored under the **parts** directory, **Main.tex** should not contain any text except for the title, date and the authors. You are free to split your text into however many files you like, though I recommend one file per chapter. The **figures** folder and **appendix** are rather self explanatory, they contain the figures and the content of the appendix respectively.

1.3 The document macros file

In the style file **tex/docmacros.sty** there are a few help macros might be useful to electrical engineers. Feel free to look and tweak it to your liking. For now I have included:

- Probability operators $\backslash E\{X}$ $\backslash \Pr\{X}$ $\backslash Var\{X}$ ($E\{X}$ $\Pr\{X}$ $Var\{X}$).
- Special functions $\backslash sinc$ $\backslash argmax$ $\backslash argmin$ (sinc arg max arg min).
- Redefined the imaginary and real operator $\backslash Re\{z}$ $\backslash Im\{z\}$ ($\text{Re}\{z\}$ $\text{Im}\{z\}$) to look “normal”, i.e. not with Fraktur font.
- Linear operators $\backslash laplace$ $\backslash fourier$ $\backslash hilbert$ ($\mathcal{L}\mathcal{F}\mathcal{H}$).
- Redefined vector notation $\backslash vec\{u\}$ (**u**) to use a bold font, and a new unit vector macro $\backslash uvec\{u\}$ (**û**).
- Bold notation for the dot product $\backslash dotp$ (\cdot) and cross product $\backslash crossp$ (\times), to distinguish them from $\backslash cdot$ (\cdot) and $\backslash times$ (\times).
- Bold upright matrix notation $\backslash mx\{A\}$ (**A**).