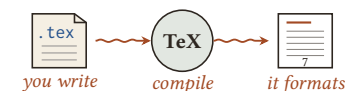


RPI Thesis Toolkit: the field guide



1 Your files

what each one is for

main.tex The file you compile. Lists the parts in order.
metadata.tex Title, name, degree, department, committee.
frontmatter/ Abstract and acknowledgment.
chapters/ One .tex file per chapter.
appendices/ Extra material, after the references.
references.bib Your sources, one entry each.
figures/ Images: PNG, JPEG or PDF.
preamble.tex Citation style and extra packages.
rpi-thesis.cls The formatting. Leave it alone.
assets/ The RPI seal: download it (see README).

```
% metadata.tex: change only the values after =
\thesissetup{
  title = {Your thesis title},
  author = {Your full name},
  degree = doctoral, % or masters, engineering-doctorate
  graduation-month = May, % May, August, December
  graduation-year = {2027},
}
\committeemember[Chair]{Your committee chair}
\committeemember[Committee member two]
```

- List every approved member, with `[Chair]` on one line. Front-matter pages begin `\frontchapter{ABSTRACT}`.
- New chapter? Start empty, not a copy; add it to `main.tex`.

2 Write

plain text, a few commands

```
\section{Research question}
\subsection{Context}
Ordinary sentences make a paragraph.

A blank line starts the next paragraph.
\emph{emphasis}, \textbf{bold}, \enquote{a short quote}
\begin{quote}
  A long quotation, set apart.
\end{quote}
\begin{itemize} % enumerate numbers: 1. 2. 3.
  \item First point
  \item Second point
\end{itemize}
```

Type % \& _ \\$ \# \{ \}
 to get % & _ \$ # { }

- % starts a private comment. Don't type heading numbers or add space with `\`. Use one capitalization style for headings and captions.

3 Refer

label it, then point at it

```
\label{fig:growth} % after \caption or \chapter
As Figure~\ref{fig:growth} shows, the trend
rises (Table~\ref{tab:x}, Equation~\ref{eq:x}).
```

- ~ keeps word and number together. Never type numbers by hand. Prefixes: `chap:` `sec:` `fig:` `tab:` `eq:`

4 Cite

one entry, one key

```
An earlier account~\parencite{lamport1994}.
\textcite{lamport1994} explain this. % author in sentence
\fullcite{lamport1994} % the whole entry, in text
```

```
@book{lamport1994,
  author = {Leslie Lamport},
  title = {{LaTeX}: A Document Preparation System},
  publisher = {Addison-Wesley},
  date = {1994}
}
@online{example-page,
  author = {(Name of the Organization)},
  title = {Title of the Web Page},
  url = {https://example.org/page},
  urldate = {2026-10-14}
}
```

- OGE wants an **access date for every URL** (not for DOIs): `urldate` is the day you read it. Check that it prints.
- Keys must be unique. Braces keep capitals: `{RPI}`.
- Agree on a style with your advisor first (`preamble.tex`); it decides what each command prints. The sample style is only an example. `\fullcite` needs setup in MLA and Chicago (see the [guide](#)).

5 Figure

caption below

```
\begin{figure}[htbp]
\centering
\includegraphics[width=\linewidth]{figures/x}
\caption{One full caption, in your heading style.}
\label{fig:x}
\end{figure}
```

- Tall image? Add `height=0.7\textheight,keepaspectratio`.
- `\label` goes *after* `\caption`. Never use `\caption[short]{long}`: the list of figures must match the caption.
- Someone else's figure, or one from your paper? Its caption needs the full citation and a permission or license statement.

6 Table

caption above

```
\begin{table}[htbp]
\centering
\caption{Caption goes above the table.}
\label{tab:x}
\begin{tabular}{lr} % l, c, r: column alignment
\toprule
Group & Value \\ % & next column, \\ end row
\midrule
A & 12 \\
\bottomrule
\end{tabular}
\end{table}
```

- `booktabs` gives `\toprule`, `\midrule`, `\bottomrule`.

7 Equation

every display is numbered

```
Inline maths uses dollar signs: $x = 2$.
\begin{equation}
y = mx + b.
\label{eq:line}
\end{equation}
\begin{equation}
\begin{split}
(a + b)^2 &= (a + b)(a + b) \\
&= a^2 + 2ab + b^2.
\end{split}
\label{eq:square}
\end{equation}
```

- Not `equation*` or `\[ \]`: only displays inside a lemma, theorem, proof or algorithm may go unnumbered.
- Number dropped below? The line is too long; break it with `split` (& aligns, `\` ends a line).

8 Published chapter

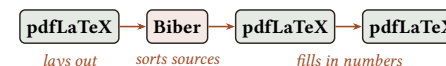
your own article

```
\chapter{RESEARCH AND FINDINGS}
\label{chap:research}
\chapterattribution{[Exact sentence from the
current OGE manual] \fullcite{my-article}.}
```

- **Copy the exact OGE wording** for your article's status (published, accepted or submitted). Co-authored? Also list it on the Declaration of Co-Contribution. Sole author of a published paper: attribution only. Sole-authored but submitted or under review? Unclear; check OGE's checklist or ask OGE.

9 Compile

or press Compile



- One click runs it all: **Recompile** on Overleaf, Build in your editor, or `python3 scripts/build.py` (Windows: `py`).
- Read the **first** error, with its file and line number; later errors are often side effects.

10 When stuck

errors are normal

Missing \$ inserted An unescaped `_`, or maths outside `$. . $`.
A key in bold Run BibTeX: compile again; check the key.
?? for a number Compile again; check the label's spelling.
Runaway argument A missing `}` near your last edit.

- Undo your last change and compile after every small edit. More help: paste the error into **Explain my error** on the toolkit's website, or see the guide's [Fixing problems](#) page (offline: `START-HERE.html`).