



Lib4RI Training Series
Searching & Managing Scientific Information
Module 5 – L^AT_EX for Scientific Writing
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1 Software installation

1.1 Required software

A working L^AT_EX(<https://www.latex-project.org/>) installation is required to attend the course. In addition, we suggest the installation of T_EXstudio (<https://www.texstudio.org/>), a GUI (Graphical User Interface) to the L^AT_EX system with editing, preview and other features. It is available for GNU/Linux, Mac OS X and Windows.

1.2 Installing L^AT_EX

1.2.1 GNU/Linux

Install T_EXLive from the repository of your distribution.

Alternatively:

1. Go to: <http://www.tug.org/texlive/acquire-netinstall.html> and download the `install-tl-unx.tar.gz` file.
2. Follow the installation instructions: <http://www.tug.org/texlive/quickinstall.html>.

1.2.2 Mac OS[©]

1. On macOS High Sierra or higher download the proper package (<https://miktex.org/download>) and follow the installation instructions (<https://miktex.org/howto/install-miktex-mac>).
2. On older versions of macOS install MiK_TE_X via the Homebrew package manager (<https://brew.sh/>):

```
brew tap miktex/miktex  
brew install miktex
```

Alternatively, the installer at 1) can be built from source following the instructions from <https://miktex.org/howto/build-mac> (this requires that *Xcode* is installed).

1.2.3 Windows[©]

1. Go to: <https://miktex.org/download> and download the Basic MiK_TE_X Installer (choose the 64- or 32-bit version depending on your system).
2. Run the downloaded file and follow the installation instructions: <https://miktex.org/howto/install-miktex>.

1.3 Installing $\text{T}_{\text{E}}\text{X}$ studio

1.3.1 GNU/Linux

Option 1: Install $\text{T}_{\text{E}}\text{X}$ studio from your distributions repository.

Option 2: Download the suitable package for your system from <https://www.texstudio.org/#download> and install it.

Option 3: Option 3: From the same page download the *AppImage* package (https://github.com/texstudio-org/texstudio/releases/download/2.12.14/texstudio-2.12.14-x86_64.AppImage), make it executable and run it. This package contains all the required dependencies.

1.3.2 Mac OS[©]

From <https://www.texstudio.org/#download> download the *dmg* file and run the application. (OS X 10.10+ is required).

1.3.3 Windows[©]

Option 1: From <https://www.texstudio.org/#download> download the suitable installer version, install and run the application. In case $\text{T}_{\text{E}}\text{X}$ studio does not appear in the list of the installed applications and in the application search, manually add here `C:\Users\cantinfe\AppData\Roaming\Microsoft\Windows\Start Menu\Programs` a shortcut to the executable file here `C:\Users\cantinfe\AppData\Roaming\Microsoft\Windows`

Option 2: Option 2: Download from the same page the *portable* version, unzip it and run the application.

1.3.4 On-line tools

If, for any reason, the local installation is not an option, use one of the following on-line tools:

1. Overleaf: <http://overleaf.com/>
2. Share LaTeX: <https://www.sharelatex.com/>

2 Useful resources

2.1 General L^AT_EX info, documentation and resources

- LaTeX Project homepage: <https://www.latex-project.org/>
- TeX related material and software (including additional packages): <https://ctan.org/>
- The renowned not so short intro to LaTeX: <https://tobi.oetiker.ch/lshort/>
- The LaTeX wikibook, a comprehensive guide to LaTeX: <https://en.wikibooks.org/wiki/LaTeX>
- TeX Users Group: <https://www.tug.org/>
- TeX stack exchange: <https://tex.stackexchange.com>
- A collection of templates: <https://www.latextemplates.com/>

2.2 T_EX distributions

- TeX live: <https://www.tug.org/texlive/>
- MikTeX: <https://miktex.org/>
- MacTeX: <http://www.tug.org/mactex/>

2.3 GUIs

- TeXstudio: <http://texstudio.sourceforge.net/>
- TeXmaker: <http://www.xmlmath.net/texmaker/>
- Lyx: <https://www.lyx.org/>

2.4 On-line editors/systems

- Overleaf: <http://overleaf.com/>
- Share LaTeX: <https://www.sharelatex.com/>
- Authorea: <https://www.authorea.com/>

2.5 More about bibliography and citations

- Using BibTeX: <http://ctan.math.illinois.edu/biblio/bibtex/base/btxdoc.pdf>
- Designing BibTeX styles: <http://mirrors.rit.edu/CTAN/biblio/bibtex/base/btxhak.pdf>
- NatBib:
 - <https://gking.harvard.edu/files/natnotes2.pdf>
 - <http://mirrors.concertpass.com/tex-archive/macros/latex/contrib/natbib/natnotes.pdf>
 - <http://ctan.math.utah.edu/ctan/tex-archive/macros/latex/contrib/natbib/natbib.pdf>
- BibTeX style examples: <https://verbosus.com/bibtex-style-examples.html>
- Choosing a BibTeX style: <https://www.reed.edu/cis/help/LaTeX/bibtexstyles.html>
- DOI to BibTeX citation: <https://doi2bib.org/>