The coppe document class
Version 3.4

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Abstract

In this work, it is described the coppe document class as well as other files distributed by the CoppeTeX project. This class is suitable for writing academic dissertations, thesis and qualifying exams according to the formatting rules of the Alberto Luiz Coimbra Institute for Graduate Studies and Research in Engineering. The minimalist set of macro commands allows its users to concentrate most of their efforts on text composition rather than on the document layout.

1 Introduction

Writing documents in LaTeX may be a laborious task when the authors have to prepare their manuscripts rigorously respecting formatting rules imposed by publishers. Regardless of difficulty, a lot of thesis presented to the Coordination of Graduate Studies and Research in Engineering of the Federal University of Rio de Janeiro (COPPE/UFRJ) is typeseted in LaTeX. This demand motivated the creation of the CoppeTeX project, which tries to facilitate and encourage the use of LaTeX within the COPPE/UFRJ scope.

The coppe document class is the main product of CoppeTeX. It was designed to be clear and succinct. It enables the creation of dissertations, qualifying exams and thesis in a simple and automatic way. The main goal of the coppe class is to maintain authors strictly focused on text composition without worrying about margins sizes, line spacing, paper size, vertical and horizontal alignment, etc. The CoppeTeX project comprehends also BibTeX and MakeIndex style files for creating lists of references, symbols and abbreviations. Although there aren't official guidelines to write qualifying exams, we provide this option just for convenience, as this exam is a requisite to obtain the DSc degree and, for some of the programs, the MSc degree.

In which follows, it is described the user interface of the coppe class. Some details about using the style files cited above are also given. We use the term *thesis* to generally refer to dissertation, qualifying exam, and thesis itself.

2 License

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copying, distributing or modifying the source code, among other acts covered by this license.

To see the full text of the GNU GPL license, go to the `COPYING` file attached to this package.

3 Support

We maintain a mailing list where users can send questions, comments, and bugs to. More details can be found here.

However, as the project maintenance was transferred to a new repository, bug reports, as well as new feature requests, should be directed to https://github.com/COPPE-UFRJ/CoppeTeX.

4 User interface

`\frontmatter` `\mainmatter` `\backmatter`

A thesis to be approved by the Academic Registry at COPPE/UFRJ must contain three-parts: *front*, *main* and *back* matters [1]. Each one of these parts is started by calling its corresponding macro `\frontmatter`, `\mainmatter` or `\backmatter`. The front matter of a thesis consists of front cover and face, cataloging page, dedication, acknowledgments, abstracts, table of contents, and lists of tables, algorithms, symbols and abbreviations. The main matter is just composed by chapters, while the back matter usually consists of bibliographic references, appendices and index.

You must invoke the `\frontmatter` macro immediately after the `\maketitle` one. The `\mainmatter` command comes right before the first chapter, and `\backmatter` must be typed before the list of references.

Front cover

This element was recently introduced by the Academic Registry. It is automatically constructed by the `\maketitle` command.

Front face

The front face is unnumbered. There, it is not allowed to use hyphenation [1]. It is constructed by calling `\maketitle`. Next, it is described the commands used to enter the information required to create it.

`\author` The `\author` command was redefined. Here, it takes two arguments: the author's first names and surname, e.g., `\author{First Names}{Surname}`. The words should be typed with only first letters in uppercase.

`\title` `\foreigntitle` The macros `\title` and `\foreigntitle` are used to enter the titles of your monograph in the current and foreign languages. The default languages are Brazilian Portuguese and English. The `babel` package is automatically loaded by `coppe.cls`, so you do not need to load it again. The Brazilian Portuguese is the main language and the English is only required for the foreign abstract.

`\advisor` `\examiner` Every COPPE student is coordinated by at least one advisor. M.Sc. and D.Sc. students can have at most 2 and 3 advisors, respectively. Their names must be provided by issuing the command `\advisor` as below:

```
\advisor{Title}{Advisor's Name}{Surname}{Degree}
```

```
\advisor{Title}{Second Advisor's Name}{Surname}{Degree}
\advisor{Title}{Third Advisor's Name}{Surname}{Degree}
```

The advisors are not necessarily members of the thesis examination board. Thus, it is required to enter the names of all examiners using the `\examiner` macro. The examiners' names are entered differently:

```
\examiner{Title}{First Examiner's Name Surname}{Degree}
\examiner{Title}{Second Examiner's Name Surname}{Degree}
...
\examiner{Title}{N-th Examiner's Name Surname}{Degree}
```

Remember that all names must be given before calling `\maketitle`.

`\department` The Alberto Luiz Coimbra institute is divided into 12 academic units: Biomedical Engineering (PEB), Civil Engineering (PEC), Electrical Engineering (PEE), Mechanical Engineering (PEM), Metallurgical and Materials Science Engineering (PEMM), Nuclear Engineering (PEN), Ocean Engineering (PENO), Energy Planning (PPE), Production Engineering (PEP), Chemical Engineering (PEQ), Systems Engineering and Computer Science (PESC), and Transportation Engineering (PET). You must specify your department using one of the above abbreviations, e.g., `\department{PEC}`.

`\date` This macro is used to set the month and year of defense. This information is required to create the front face, cataloging details page and abstracts. For example, October 2007 should be entered as `\date{10}{2007}`.

`\keyword` The keywords should describe the concentration areas of your work. You must provide them as follows:

```
\keyword{First Keyword}
\keyword{Second Keyword}
...
\keyword{N-th Keyword}
```

Usually, six words are enough.

Cataloging details

This page contains cataloging information useful for librarians. Fortunately, it is automatically generated from the data you entered at the time you call `\maketitle`. It is not needed in qualifying exams, though.

Dedication (optional)

`\dedication` This macro was added for convenience. The input text is placed at the right bottom of a blank page. It is emphasized and in normal size.

Abstracts

`abstract` (*env.*) `foreignabstract` (*env.*) As stated by the Academic Registry [1], abstracts must be in one page each, with at most 250 words. We recommended that they should be only one paragraph long. They must be defined inside the environments `abstract` and `foreignabstract`.

Lists of symbols and abbreviations (optional)

\abbrev
\symbl

The lists of symbols and abbreviations are optional, although highly recommended. It is a good practice to define a symbol/abbreviation in its first occurrence in the text. To define a symbol use `\symbl[alphabetic symbol]{Symbol}{Symbol Definition}`, and for abbreviations `\abbrev[alphabetic symbol]{Abbreviation}{Abbreviation Definition}`. These commands are called *dummy*, since they don't output anything at the place they are executed, just an entry in the correspondent list.

\makeloabbreviations
\makelosymbols
\printloabbreviations
\printlosymbols

These lists are lexicographically sorted by using the MakeIndex program, which is part of any LaTeX implementation. For `\symbl`, if the optional parameter is provided, it will used as sort key. This was later, in 2024, implemented also for `\abbrev`, otherwise `Symbol`, or `Abreviation` will be used as sort key, what can result in an undesirable order if it contains LaTeXcommands, mathematical symbols, or mix of uppercase and lowercase. MakeIndex needs two commands to create a final sorted list: one which generates a list of entries and the other that indicates the position where the list will be printed out. To generate the lists of symbols and abbreviations, the `coppe` class provides the commands `\makeloabbreviations` and `\makelosymbols`, respectively. They must be called in the document preamble. The commands `\printlosymbols` and `\printloabbreviations` have to be invoked at the point where you want these lists appear, e.g., following the list of tables as showed in the example. Once you call `latex`, it will be created two files with extensions `abx` and `syx`, which contain MakeIndex input data. They must be processed with `makeindex` in order to get the lists correctly produced, redirecting the output to files with extension `lab` and `los` respectively:

```
makeindex -s coppe.ist -o example.lab example.abx
makeindex -s coppe.ist -o example.los example.syx
```

Note the `-s` option for specifying the style `coppe.ist`. Now, rerun `latex` twice to get the references solved and you are done.

References

It is well known that bibliography databases can be easily maintained with the aid of BibTeX. Thus, the CoppeTeX project designed two BibTeX styles, `coppe-plain.bst` and `coppe-unsrt.bst`. The `coppe-plain.bst` creates a list of references alphabetically sorted. The later is a numbered style, which sorts references by the order of citation. To use them, you have to select either `coppe-plain` or `coppe-unsrt` as the BibTeX style and include your BibTeX references without the `bib` extension, as in the following example:

```
\bibliographystyle{coppe-unsrt}
\bibliography{example}
```

As of May 4th, 2023, there are new bibliograhic styles for english, `en-coppe-plain.bst` and `en-coppe-plain.bst`, that uses other string constants, such as "Technical Report" instead of "Relatório Técnico".

Run in sequence LaTeX, BibTeX, and twice again LaTeX to resolve reference. These styles are `natbib` compatible. This means that you can freely issue the commands `\citet` and `\citep`, as well as any other `natbib` feature.

5 Class options

There are some options users can specify in order to customize the appearance of the output produced by the `coppe` class. These options can be passed to `coppe` as follows: `\documentclass[option1, option2]{coppe}`. In which follows, we give a brief description of all supported options.

`dsc, msc, dscexam, mscexam` The `coppe` class is able to produce thesis, dissertations, and qualifying exams, which are enabled by the `dsc`, `msc`, `mscexam`, and `dscexam` options, respectively.

`doublespacing` The default line spacing is one-and-a-half. For enabling double spacing between lines, use the `doublespacing` option.

`numbers` The default citation style is the author-year scheme, which must be followed by the use of its corresponding BibTeX style, namely, the `coppe-plain.bst` file. For numbered citations, specify the option `numbers` to the `coppe` class. In this case, it is mandatory the use of `coppe-unsrt.bst`, as the bibliography style.

5.1 Changing document identification

`\freeconfig` The user could *optionally* use the command `freeconfig` to modify the parameters that print the document identification. The command `freeconfig` needs all those paramerters, which are degree initials, degree name, title, foreign title, local doctype, and foreign doctype as in the following example:

```
\freeconfig{Dr.}{Philosophiae Doctor}{PhD}{Doutor}{Dissertation}{Tese}
```

6 Quick, useful tips

Pictures. The default picture format of LaTeX is the Encapsulated PostScript (EPS). If you use pdfLaTeX, the default format becomes the PDF, but you can equally load PNG files. For such, you must enter the name of your image file without extension, e.g., `\includegraphics{filename}`, and `pdflatex` will firstly look for a file called `filename.pdf` and after for file `filename.png`. For producing high quality pictures with embedded fonts we recommend the Ipe drawing software available here.

Fonts. The default font in LaTeX is the Computer Modern. If you would like to try its enhanced version, consider using the `lmodern` package. To use Times, it is recommended to load the package `mathptmx`, rather than the deprecated `times`. There is also an enhanced Times version available with the `tgtermes` package. You can still use the Arial font face with the package `uarial`.

Hyperref. When working with PDF's, there is the possibility to add extra information to the file as the author's name, document title, subject, keywords, etc. This is easily done with the `hyperref` package. It is also useful to enable hyperlinks. Fortunately, the `coppe` class will do this automatically if `hyperref` is loaded.

Printing. To get your work correctly printed, you must ensure that any page scaling option (e.g., fit or shrink to printable area) isn't enabled. This kind of option often comes in print dialogs of document visualization softwares.

`longquote` **Quotation** To quote text larger than three lines, according to ABNT, you must increase the left margin to 4 cm, do not use quotation marks, and use a smaller font. The `coppe` class provides the `longquote` environment to easily make these adjustments.

7 A simple example

```
⟨*example⟩
\documentclass[dsc]{coppe}

\usepackage{booktabs}% tabelas mais bonitas
\usepackage{rotating}% rodando coisas, como tabelas
\usepackage{longtable} % tabelas longas
\usepackage[most]{tcolorbox} % caixas de texto
\usepackage{amsmath,amssymb}
\usepackage{hyperref}



\makelosymbols
\makeloabbreviations

\begin{document}
  \title{Título da Tese}
  \foreigntitle{Thesis Title}
  \author{Nome do Autor}{Sobrenome}
  \advisor{Prof.}{Nome do Primeiro Orientador}{Sobrenome}{D.Sc.}
  \advisor{Prof.}{Nome do Segundo Orientador}{Sobrenome}{Ph.D.}
  \advisor{Prof.}{Nome do Terceiro Orientador}{Sobrenome}{D.Sc.}

  \examiner{Prof.}{Nome do Primeiro Examinador Sobrenome}{D.Sc.}
  \examiner{Prof.}{Nome do Segundo Examinador Sobrenome}{Ph.D.}
  \examiner{Prof.}{Nome do Terceiro Examinador Sobrenome}{D.Sc.}
  \examiner{Prof.}{Nome do Quarto Examinador Sobrenome}{Ph.D.}
  \examiner{Prof.}{Nome do Quinto Examinador Sobrenome}{Ph.D.}
  \department{PESC}
  \date{01}{2024}

  \keyword{Primeira palavra-chave}
  \keyword{Segunda palavra-chave}
  \keyword{Terceira palavra-chave}

  \maketitle

  \frontmatter
  \dedication{A alguém cujo valor é digno desta dedicatória.}

  \chapter*{Agradecimentos}
```

```
42
43  Gostaria de agradecer a todos.
44
45  \begin{abstract}
46
47  Apresenta-se, nesta tese, ...
48
49  \end{abstract}
50
51  \begin{foreignabstract}
52
53  In this work, we present ...
54
55  \end{foreignabstract}
56
57  \tableofcontents
58  \listoffigures
59  \listoftables
60  \printlosymbols
61  \printloabbreviations
62
63  \mainmatter
64  \chapter{Introdução}
65
66
67
68  Segundo a norma de formatação de teses e dissertações do
69  Instituto Alberto Luiz Coimbra de Pós-graduação e Pesquisa de
70  Engenharia (COPPE), toda abreviatura deve ser definida antes de
71  utilizada.\abbrev{COPPE}{Instituto Alberto Luiz Coimbra de Pós-gradua{\c
72  c}\~ao e Pesquisa de Engenharia}.
73
74  Do mesmo modo, é imprescindível definir os símbolos, tal como o
75  conjunto dos números reais $\mathbb{R}$ e o conjunto vazio $\emptyset$.
76  \symbl{$\mathbb{R}$}{Conjunto dos números reais}
77  \symbl{$\emptyset$}{Conjunto vazio}
78
79  Para as listas de abreviaturas e símbolos funcionarem é necessário rodar o \verb|latexmkrc
80
81 \section{Citações}
82
83 Citações curtas podem ser feitas \quote{o comando quote} ou direto com ‘‘duas crases e dois
84
85  \begin{longquote}
86  Um exemplo de citação longa nas regras da ABNT (4cm de recuo e fonte menor)
87  feita com o ambiente  \verb=longquote= The primary objective of this
88  investigation was to determine the feasibility of detecting corrosion in
89  aluminum Naval aircraft components with neutron radiographic interrogation
90  and the use of standard corrosion penetrameters. Secondary objectives
91  included the determination of the effect of object thickness on image quality,
92  the defining of minimum levels of detectability and a preliminary investigation
93  of a means whereby the degree of corrosion could be quantified with neutron
94  radiographic data. \cite{article-example}
95  \end{longquote}
```

```
96
97 \chapter{Floats}
98
99 Segundo a norma da ABNT, as legendas \verb|\caption| das figuras e quadros ficam em baixo de
100
101 Quadros são opcionais. Quando usados, tabelas passam a só conter números, enquanto quadros c
102
103 Vamos ver uma tabela padrão, como a \autoref{tab:exemplo_numeros}.
104
105 \begin{table}[ht]
106 \centering % Centraliza a tabela
107 \caption{Exemplo de Tabela de Números}
108 \label{tab:exemplo_numeros}
109 \begin{tabular}{ccc} % Define a quantidade de colunas
110 \toprule % Linha superior
111 \textbf{Coluna 1} & \textbf{Coluna 2} & \textbf{Coluna 3} \\ % Cabeçalhos
112 \midrule % Linha média
113 1 & 2 & 3 \\ % Primeira linha de dados
114 4 & 5 & 6 \\ % Segunda linha de dados
115 7 & 8 & 9 \\ % Terceira linha de dados
116 10 & 11 & 12 \\ % Quarta linha de dados
117 \bottomrule % Linha inferior
118 \end{tabular}
119 \end{table}
120
121 Já a \autoref{fig:exemplo_figura} é uma figura padrão, com controle da largura.
122
123 \begin{figure}[ht]
124 \centering % Centraliza a figura
125 \includegraphics[width=0.5\textwidth]{coppe-logo.pdf} % Inclui a imagem com metade da largur
126 \caption{Exemplo de Figura com Legenda Abaixo} % Legenda da figura
127 \label{fig:exemplo_figura} % Etiqueta para referência cruzada
128 \end{figure}
129
130
131 \section{Tabelas Longas ou Largas}
132
133 Se sua tabela é muito longa ou larga, existem várias opções.
134 \begin{itemize}
135     \item alterar o tamanho da letra
136     \item Usar o longtable
137     \item rodar a tabela, fazendo ela em \textit{landscape}
138     \item fazer a tabela dentro de um minibox
139 \end{itemize}
140
141 A \autoref{tab:tabela_largafns} é larga demais, e nela isso é resolvido diminuindo a fonte p
142
143 \begin{verbatim}
144 \begin{table}[ht]
145 \centering % Centraliza a tabela
146 \caption{Exemplo de Tabela Larga com Fonte Menor}
147 \label{tab:tabela_largafns}
148 \footnotesize % Aplica uma fonte menor para a tabela
149 \begin{tabular}{cccccccc} % Aumente o número de colunas conforme necessário
```

```
\toprule
\textbf{Coluna 1} & \textbf{Coluna 2} & \textbf{Coluna 3} & \textbf{Coluna 4} & \textbf{Colu
\midrule
Dado 1.1 & Dado 1.2 & Dado 1.3 & Dado 1.4 & Dado 1.5 & Dado 1.6 & Dado 1.7 & Dado 1.8 \\
Dado 2.1 & Dado 2.2 & Dado 2.3 & Dado 2.4 & Dado 2.5 & Dado 2.6 & Dado 2.7 & Dado 2.8 \\
Dado 3.1 & Dado 3.2 & Dado 3.3 & Dado 3.4 & Dado 3.5 & Dado 3.6 & Dado 3.7 & Dado 3.8 \\
\bottomrule
\end{tabular}
\end{table}

\end{verbatim}
\begin{table}[ht]
\centering % Centraliza a tabela
\caption{Exemplo de Tabela Larga com Fonte Menor}
\label{tab:tabela_largafns}
\footnotesize % Aplica uma fonte menor para a tabela
\begin{tabular}{cccccccc} % Aumente o número de colunas conforme necessário
\toprule
\textbf{Coluna 1} & \textbf{Coluna 2} & \textbf{Coluna 3} & \textbf{Coluna 4} & \textbf{Colu
\midrule
Dado 1.1 & Dado 1.2 & Dado 1.3 & Dado 1.4 & Dado 1.5 & Dado 1.6 & Dado 1.7 & Dado 1.8 \\
Dado 2.1 & Dado 2.2 & Dado 2.3 & Dado 2.4 & Dado 2.5 & Dado 2.6 & Dado 2.7 & Dado 2.8 \\
Dado 3.1 & Dado 3.2 & Dado 3.3 & Dado 3.4 & Dado 3.5 & Dado 3.6 & Dado 3.7 & Dado 3.8 \\
\bottomrule
\end{tabular}
\end{table}

O comando \verb|\resizebox{width}{height}{content}| permite ajustar o tamanho de qualquer co
\begin{verbatim}
\begin{table}[ht]
\centering
\caption{Exemplo de Tabela Redimensionada}
\label{tab:examplerb}
\resizebox{\textwidth}{!}{%
\begin{tabular}{llll}
\toprule
Coluna 1 & Coluna 2 & Coluna 3 & Coluna 4 \\
\midrule
Dados 1 & Dados 2 & Dados 3 & Dados 4 \\
Dados 5 & Dados 6 & Dados 7 & Dados 8 \\
\bottomrule
\end{tabular}%
}
\end{table}
\end{verbatim}

\begin{table}[ht]
\centering
\caption{Exemplo de Tabela Redimensionada}
\label{tab:examplerb}
\resizebox{\textwidth}{!}{%
\begin{tabular}{llll}
\toprule
Coluna 1 & Coluna 2 & Coluna 3 & Coluna 4 \\
```

```
\midrule
Dados 1 & Dados 2 & Dados 3 & Dados 4 \\
Dados 5 & Dados 6 & Dados 7 & Dados 8 \\
\bottomrule
\end{tabular}%
}
\end{table}


Para rodar uma tabela muito larga em 90 graus no LaTeX, você pode usar o pacote rotating. Es

Aqui está um exemplo de como usar o ambiente sidewaystable para girar uma tabela. Primeiro,

\begin{verbatim}
\begin{sidewaystable}
\centering
\caption{Sua Legenda Aqui}
\label{tab:sua_tabela}
\begin{tabular}{lll}
\toprule
Coluna 1 & Coluna 2 & Coluna 3 \\
\midrule
Item 1 & Item 2 & Item 3 \\
Item 4 & Item 5 & Item 6 \\
\bottomrule
\end{tabular}
\end{sidewaystable}
\end{verbatim}

\begin{sidewaystable}
\centering
\caption{Sua Legenda Aqui}
\label{tab:sua_tabela}
\begin{tabular}{lll}
\toprule
Coluna 1 & Coluna 2 & Coluna 3 \\
\midrule
Item 1 & Item 2 & Item 3 \\
Item 4 & Item 5 & Item 6 \\
\bottomrule
\end{tabular}
\end{sidewaystable}

Se a tabela for muito longa, o ambiente \verb|longtable| é o ideal. Ele fornece comandos par

% Exemplo de tabela longa que se estende por várias páginas
\begin{longtable}{|c|c|c|}
% primeiro cabeçalho (é o caption)
\caption{Exemplo de Tabela Longa}\label{tab:longa} \\
\hline \textbf{Coluna 1} & \textbf{Coluna 2} & \textbf{Coluna 3} \\ \hline
\endfirsthead
% cabeçalho normal
\multicolumn{3}{c}%
{{\tablename\ \thetable{} -- continuação da página anterior}} \\
```

```
\hline \textbf{Coluna 1} & \textbf{Coluna 2} & \textbf{Coluna 3} \\ \hline
\endhead
% pé normal
\hline \multicolumn{3}{|r|}{{Continua na próxima página}} \\ \hline
\endfoot
\hline
% último pé
\multicolumn{3}{|r|}{{Continua na próxima página}}\\
\hline \hline
\endlastfoot

% Conteúdo da tabela
1 & 2 & 3 \\
4 & 5 & 6 \\
1 & 2 & 3 \\
4 & 5 & 6 \\
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4 & 5 & 6 \\
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4 & 5 & 6 \\
1 & 2 & 3 \\
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1 & 2 & 3 \\
4 & 5 & 6 \\

% Repetir linhas semelhantes conforme necessário para estender a tabela por 3 páginas
\end{longtable}

  \chapter{Revis\~ao Bibliogr\'afica}

  Para ilustrar a completa ades\~ao ao estilo de cita{\c c}\~oes e listagem de
  refer\^encias bibliogr\'aficas, a Tabela~\ref{tab:citation} apresenta cita{\c
  c}\~oes de alguns dos trabalhos contidos na norma fornecida pela CPGP da
```

```
COPPE, utilizando o estilo numérico. Tirando do comando inicial o parâmetro opcional numér

\begin{table}[h]
\caption{Exemplos de cita{\c c}\~oes utilizando o comando padr\~ao
  \texttt{\textbackslash cite} do \LaTeX\ e
  o comando \texttt{\textbackslash citet},
  fornecido pelo pacote \texttt{natbib}.}
\label{tab:citation}
\centering
{\footnotesize
\begin{tabular}{|c|c|c|}
  \hline
  Tipo da Publicação & \verb|\cite| & \verb|\citet|\\
  \hline
  Livro & \cite{book-example} & \citet{book-example}\\
  Artigo & \cite{article-example} & \citet{article-example}\\
  Relatório & \cite{techreport-example} & \citet{techreport-example}\\
  Relatório & \cite{techreport-exampleIn} & \citet{techreport-exampleIn}\\
  Anais de Congresso & \cite{inproceedings-example} &
    \citet{inproceedings-example}\\
  Séries & \cite{incollection-example} & \citet{incollection-example}\\
  Em Livro & \cite{inbook-example} & \citet{inbook-example}\\
  Dissertação de mestrado & \cite{mastersthesis-example} &
    \citet{mastersthesis-example}\\
  Tese de doutorado & \cite{phdthesis-example} & \citet{phdthesis-example}\\
  \hline
\end{tabular}}
\end{table}

\begin{table}[h]
\caption{Exemplos de cita{\c c}\~oes utilizando o comando padr\~ao
  \texttt{\textbackslash cite} do \LaTeX\ e
  o comando \texttt{\textbackslash citet},
  fornecido pelo pacote \texttt{natbib}. Além disso, usando o booktabs.}
\label{tab:citation1}
\centering
{\footnotesize
\begin{tabular}{ccc}
  \toprule
  Tipo da Publicação & \verb|\cite| & \verb|\citet|\\
  \midrule
  Livro & \cite{book-example} & \citet{book-example}\\
  Artigo & \cite{article-example} & \citet{article-example}\\
  Relatório & \cite{techreport-example} & \citet{techreport-example}\\
  Relatório & \cite{techreport-exampleIn} & \citet{techreport-exampleIn}\\
  Anais de Congresso & \cite{inproceedings-example} &
    \citet{inproceedings-example}\\
  Séries & \cite{incollection-example} & \citet{incollection-example}\\
  Em Livro & \cite{inbook-example} & \citet{inbook-example}\\
  Dissertação de mestrado & \cite{mastersthesis-example} &
    \citet{mastersthesis-example}\\
  Tese de doutorado & \cite{phdthesis-example} & \citet{phdthesis-example}\\
  \bottomrule
\end{tabular}}
```

```
  \end{table}

\chapter{Alguns outros exemplo úteis}

\begin{tcolorbox}[title=Meu Textbox]
Este é o conteúdo do meu textbox. Você pode adicionar qualquer texto aqui, bem como incluir
\end{tcolorbox}

\begin{tcolorbox}
Este é o conteúdo do meu textbox sem título. Você pode adicionar qualquer texto aqui, bem co
\end{tcolorbox}

\begin{figure}[ht]
    \centering
    \begin{tikzpicture}
        \node[anchor=south west,inner sep=0] (image) at (0,0) {\includegraphics[width=0.5\te
        \begin{scope}[x={(image.south east)},y={(image.north west)}]
            % Definindo o textbox dentro da figura
            \node[anchor=north west, text width=0.3\textwidth, fill=white, opacity=0.7, text
                \begin{tcolorbox}[colback=red!5!white,colframe=red!75!black,title=Textbox de
                    Este textbox fala sobre como inserir um textbox dentro de uma figura usa
                \end{tcolorbox}
            };
        \end{scope}
    \end{tikzpicture}
    \caption{Figura com Textbox}
    \label{fig:figura_com_textbox1}
\end{figure}


\begin{figure}[ht]
    \centering
 \begin{tcolorbox}
Este é o conteúdo do meu textbox sem título. Você pode adicionar qualquer texto aqui, bem co
\end{tcolorbox}
    \caption{Figura com Textbox simples}
    \label{fig:figura_com_textbox}
\end{figure}

  \chapter{Método Proposto}
  \chapter{Resultados e Discuss\~oes}

  \section{Algumas Demonstra{\c c}\~oes}

  A  Lista de Símbolos precisa usar comandos específicos. Aqui vamos usar os símbolos $\alph
  \symbl[beta]{Beta}{A palavra Beta more e corrigida}
  \symbl[zzbeta]{$\beta$}{A letra $\beta$ corrigida}
  \symbl{beta}{A palavra beta}
  \symbl{alpha}{A palavra alpha}
  \symbl[alpha]{Alpha}{A palavra Alpha}
  \symbl[zzalpha]{$\alpha$}{A letra $\alpha$ corrigida}
  \symbl[marco]{Marco}{A palavra Marco corrigida}

  A Lista de Abreviações segue, a partir de 2024, a mesma regra, e aqui seguem alguns exempl
```

```
  \abbrev{GoT}{Game of Thrones}
  \abbrev[GOT]{GoT}{Game of Thrones ordenado como GOT}
  \abbrev[iot]{IoT}{IoT ordenado como iot}
  \abbrev[IoT]{IoT}{IoT ordenado como IoT}
  \abbrev[IOT]{IoT}{IoT ordenado como IOT}
  \abbrev{IoT}{IoT com ordenação default}
  \abbrev[ITU]{ITU}{ITU mesmo}



  \chapter{Conclus\~oes}

  \backmatter
  \bibliographystyle{coppe-unsrt}
  \bibliography{example}


\appendix

\chapter{Um apêndice}

Segundo a norma da ABNT (Associação Brasileira de Normas Técnicas), a definição e utilização

Apêndice: O apêndice é um texto ou documento elaborado pelo autor do trabalho com o objetivo


\renewcommand{\appendixname}{Anexo}
\appendix


\chapter{Um Anexo}
Segundo a norma da ABNT (Associação Brasileira de Normas Técnicas), a definição e utilização


Anexo: O anexo, por sua vez, consiste em um texto ou documento não elaborado pelo autor, que
\end{document}

⟨/example⟩
```

8 Implementation

8.1 The ‘coppe.cls’ file

```
⟨*class⟩
\def\filename{coppe.dtx}
\def\fileversion{v3.4}
\def\filedate{2024/01/24}
\NeedsTeXFormat{LaTeX2e}[1995/12/01]
\ProvidesClass{coppe}[\filedate\ \fileversion\ COPPE Dissertations and Thesis]
\LoadClass[12pt,a4paper,oneside]{book}
```

```
\RequirePackage[sort&compress]{natbib}
\RequirePackage{hyphenat}
\RequirePackage{lastpage}
\RequirePackage{ifthen}
\RequirePackage{graphicx}
\RequirePackage{setspace}
\RequirePackage{tabularx}
\RequirePackage{etoolbox}
\RequirePackage{eqparbox}
\RequirePackage{ltxcmds}
\RequirePackage[T1]{fontenc}
\RequirePackage[a4paper,bindingoffset=0.0cm,vcentering=true,%
top=2.5cm,bottom=2.5cm,left=3.0cm,right=3.0cm]{geometry}
\def\CoppeTeX{{\rm C\kern-.05em{\sc o\kern-.025em p\kern-.025em
p\kern-.025em e}}\kern-.08em
T\kern-.1667em\lower.5ex\hbox{E}\kern-.125emX\spacefactor1000}
\newboolean{maledoc}
\setboolean{maledoc}{false}
%
% Class options.
% If you are writing a text in English, you must turn ``English'' on.
% Otherwise, Portuguese is considered the main language.
\newif\if@english\@englishfalse
\DeclareOption{english}{\@englishtrue}
\DeclareOption{msc}{%
  \newcommand{\@degree}{M.Sc.}
  \newcommand{\@degreename}{Mestrado}
  \newcommand{\local@degname}{Mestre}
  \newcommand{\foreign@degname}{Master}
  \newcommand\local@doctype{Disserta{\c c}{\~ a}o}
  \newcommand\foreign@doctype{Dissertation}
}
\DeclareOption{dscexam}{%
  \newcommand{\@degree}{D.Sc.}
  \newcommand{\@degreename}{Doutorado}
  \newcommand{\local@degname}{Doutor}
  \newcommand{\foreign@degname}{Doctor}
  \setboolean{maledoc}{true}
  \newcommand\local@doctype{Exame de Qualifica{\c c}{\~ a}o}
  \newcommand\foreign@doctype{Qualifying Exam}
}
\DeclareOption{mscexam}{%
 \newcommand{\@degree}{M.Sc.}
  \newcommand{\@degreename}{Mestrado}
  \newcommand{\local@degname}{Mestre}
  \newcommand{\foreign@degname}{Master}
  \setboolean{maledoc}{true}
  \newcommand\local@doctype{Exame de Qualifica{\c c}{\~ a}o}
  \newcommand\foreign@doctype{Qualifying Exam}
}
\DeclareOption{dsc}{%
  \newcommand{\@degree}{D.Sc.}
  \newcommand{\@degreename}{Doutorado}
  \newcommand{\local@degname}{Doutor}
```

```
  \newcommand{\foreign@degname}{Doctor}
  \newcommand\local@doctype{Tese}
  \newcommand\foreign@doctype{Thesis}
}
\DeclareOption{numbers}{%
  \PassOptionsToPackage{numbers}{natbib}
}
```

Here is the default one-and-a-half line spacing. Users can change to double spacing by passing the `doublespacing` option.

```
\onehalfspacing
\DeclareOption{doublespacing}{%
  \doublespacing
}
\ProcessOptions\relax
\if@english
  \RequirePackage[english]{babel}
\else
  \RequirePackage[english,brazilian]{babel}
\fi
\addto{\captionsenglish}{%
  \renewcommand{\bibname}{References}
}
```

`\department` This macro is used to set the author's affiliation. There are twelve options which correspond to all academic units at COPPE/UFRJ. It defines the current and the foreign names of these units.

```
\newcommand\department[1]{%
  \ifthenelse{\equal{#1}{PEB}}
    {\global\def\local@deptname{Engenharia Biom{\' e}dica}
     \global\def\foreign@deptname{Biomedical Engineering}}{}
  \ifthenelse{\equal{#1}{PEC}}
    {\global\def\local@deptname{Engenharia Civil}
     \global\def\foreign@deptname{Civil Engineering}}{}
  \ifthenelse{\equal{#1}{PEE}}
    {\global\def\local@deptname{Engenharia El{\' e}trica}
     \global\def\foreign@deptname{Electrical Engineering}}{}
  \ifthenelse{\equal{#1}{PEM}}
    {\global\def\local@deptname{Engenharia Mec{\^ a}nica}
     \global\def\foreign@deptname{Mechanical Engineering}}{}
  \ifthenelse{\equal{#1}{PEMM}}
    {\global\def\local@deptname{Engenharia Metal{\' u}rgica e de Materiais}
\global\def\foreign@deptname{Metallurgical and Materials Engineering}}{}
  \ifthenelse{\equal{#1}{PEN}}
    {\global\def\local@deptname{Engenharia Nuclear}
     \global\def\foreign@deptname{Nuclear Engineering}}{}
  \ifthenelse{\equal{#1}{PENO}}
    {\global\def\local@deptname{Engenharia Oce{\^ a}nica}
     \global\def\foreign@deptname{Ocean Engineering}}{}
  \ifthenelse{\equal{#1}{PPE}}
    {\global\def\local@deptname{Planejamento Energ{\' e}tico}
     \global\def\foreign@deptname{Energy Planning}}{}
  \ifthenelse{\equal{#1}{PEP}}
    {\global\def\local@deptname{Engenharia de Produ{\c c}{\~ a}o}
```

```
    \global\def\foreign@deptname{Production Engineering}}{}
  \ifthenelse{\equal{#1}{PEQ}}
    {\global\def\local@deptname{Engenharia Qu{\' i}mica}
     \global\def\foreign@deptname{Chemical Engineering}}{}
  \ifthenelse{\equal{#1}{PESC}}
    {\global\def\local@deptname{Engenharia de Sistemas e Computa{\c c}{\~ a}o}
     \global\def\foreign@deptname{Systems Engineering and Computer Science}}{}
  \ifthenelse{\equal{#1}{PET}}
    {\global\def\local@deptname{Engenharia de Transportes}
     \global\def\foreign@deptname{Transportation Engineering}}{}
  \ifthenelse{\equal{#1}{PENT}}
    {\global\def\local@deptname{Engenharia de Nanotecnologia}
      \global\def\foreign@deptname{Nanotechnology Engineering}}{}
}
```

`\title` Used to enter the title in Brazilian Portuguese.

```
\renewcommand\title[1]{%
  \global\def\local@title{#1}%
}
```

`\foreigntitle` Used to enter the foreign title.

```
\newcommand\foreigntitle[1]{%
  \global\def\foreign@title{#1}%
}
```

`\advisor` Defines globally the title, name and academic degree of the advisors.

```
\newcount\@advisor\@advisor0
\newcommand\advisor[4]{%
  \global\@namedef{CoppeAdvisorTitle:\expandafter\the\@advisor}{#1}
  \global\@namedef{CoppeAdvisorName:\expandafter\the\@advisor}{#2}
  \global\@namedef{CoppeAdvisorSurname:\expandafter\the\@advisor}{#3}
  \global\@namedef{CoppeAdvisorDegree:\expandafter\the\@advisor}{#4}
  \global\advance\@advisor by 1
  \ifnum\@advisor>1
    \renewcommand\local@advisorstring{Orientadores}
    \renewcommand\foreign@advisorstring{Advisors}
  \fi
}
```

`\examiner`

```
\newcount\@examiner\@examiner0
\newcommand\examiner[3]{%
  \global\@namedef{CoppeExaminer:\expandafter\the\@examiner}{#1\ #2}
  \global\advance\@examiner by 1
}
```

`\author` It was redefined to allow the identification of the author's first names and surname.

```
\renewcommand\author[2]{%
  \global\def\@authname{#1}
  \global\def\@authsurn{#2}
}
```

\date This code makes easy to switch from dates in different languages.

```
\renewcommand\date[2]{%
  \month=#1
  \year=#2
}
```

\local@monthname

```
\newcommand\local@monthname{\ifcase\month\or
  Janeiro\or Fevereiro\or Mar{\c c}o\or Abril\or Maio\or Junho\or
  Julho\or Agosto\or Setembro\or Outubro\or Novembro\or Dezembro\fi}
```

\foreign@monthname

```
\newcommand\foreign@monthname{\ifcase\month\or
  January\or February\or March\or April\or May\or June\or
  July\or August\or September\or October\or November\or December\fi}
```

\keyword

```
\newcounter{keywords}
\newcommand\keyword[1]{%
  \global\@namedef{CoppeKeyword:\expandafter\the\c@keywords}{#1}
  \global\addtocounter{keywords}{1}
}
```

\freeconfig This command allows easy changing of core class parameters.

```
\newcommand\freeconfig[6]{%
 \providecommand\@degree{}
 \renewcommand\@degree{#1}
 \providecommand\@degreename{}
 \renewcommand\@degreename{#2}
 \providecommand\local@degname{}
 \renewcommand\local@degname{#3}
 \providecommand\foreign@degname{}
 \renewcommand\foreign@degname{#4}
 \providecommand\local@doctype{}
 \renewcommand\local@doctype{#5}
 \providecommand\foreign@doctype{}
 \renewcommand\foreign@doctype{#6}%
}
%   \end{macrocode}
% \end{macro}
%
% \begin{macro}{\frontmatter}
% The number of pages for both frontmatter and mainmatter printed
% in the cataloging details page is computed by means of simple
% \LaTeX\ labels.
%    \begin{macrocode}
\renewcommand\frontmatter{%
  \cleardoublepage
  \@mainmatterfalse
  \pagenumbering{roman}
  \thispagestyle{empty}
  \setcounter{page}{2}
  \makefrontpage
```

```
  \clearpage
  \pagestyle{plain}
  \ifthenelse{\boolean{maledoc}}{}{\makecatalog}%
}
```

\mainmatter

```
\renewcommand\mainmatter{%
  \coppe@mainBegin
  \cleardoublepage
  \@mainmattertrue
  \pagestyle{plain}
  \pagenumbering{arabic}}
```

\backmatter

```
\renewcommand\backmatter{%
  \if@openright
    \cleardoublepage
  \else
    \clearpage
  \fi}
%
```

\maketitle

```
\renewcommand\maketitle{%
  \pagenumbering{alph}
  \ltx@ifpackageloaded{hyperref}{\coppe@hypersetup}{}%
  \begin{titlepage}
  \begin{flushleft}
  \vspace*{1.5mm}
  \setlength\baselineskip{0pt}
  \setlength\parskip{1mm}
  \makebox[20mm][c]{\hspace{4.8cm}\includegraphics{coppe-logo}}
  \end{flushleft}
  \vspace{1.05cm}
  \begin{center}
  \nohyphens{%
    \if@english
      \MakeUppercase\foreign@title
    \else
      \MakeUppercase\local@title
    \fi}\par
  \vspace*{3cm}
  \nohyphens{\@authname\ \@authsurn}\par
  \end{center}
  \vspace*{2.1cm}
  \begin{flushright}
  \begin{minipage}{8.45cm}
  \frontcover@maintext
  \end{minipage}\par
  \vspace*{7.5mm}
  \nohyphens{%
  \begin{tabularx}{8.45cm}[b]{@{}l@{ }>{\raggedright\arraybackslash}X@{}}
    \local@advisorstring: &
    \count1=0
```

```
    \toks@={}
    \@whilenum \count1<\@advisor \do{%
    \ifcase\count1 % same as \ifnum0=\count1
      \toks@=\expandafter{\csname CoppeAdvisorName:\the\count1%
        \expandafter\endcsname\expandafter\space%
        \csname CoppeAdvisorSurname:\the\count1\endcsname\\}
    \else
      \toks@=\expandafter\expandafter\expandafter{%
        \expandafter\the\expandafter\toks@%
        \expandafter&\expandafter\space%
        \csname CoppeAdvisorName:\the\count1\expandafter\endcsname%
        \expandafter\space\csname CoppeAdvisorSurname:\the\count1\endcsname\\
      }%
    \fi
    \advance\count1 by 1}
    \the\toks@
  \end{tabularx}}\par
  \end{flushright}
  \vspace*{\fill}
  \begin{center}
  \local@cityname\par
  \local@monthname\ de \number\year
  \end{center}
  \end{titlepage}
  \global\let\maketitle\relax%
  \global\let\and\relax}

\newcommand\makefrontpage{%
  \begin{center}
    \sloppy\nohyphens{
      \if@english
        \MakeUppercase\foreign@title
      \else
        \MakeUppercase\local@title
      \fi}\par
    \vspace*{7mm}
    {\@authname\ \@authsurn}\par
  \end{center}\par
  \vspace*{4mm}
  \frontpage@maintext
  \vspace*{16mm}
  \nohyphens{%
  \noindent\begin{tabularx}{\textwidth}[b]{@{}l@{ }>{\raggedright\arraybackslash}X@{}}
    \local@advisorstring: &
    \count1=0
    \toks@={}
    \@whilenum \count1<\@advisor \do{%
    \ifcase\count1 % same as \ifnum0=\count1
      \toks@=\expandafter{\csname CoppeAdvisorName:\the\count1%
        \expandafter\endcsname\expandafter\space%
        \csname CoppeAdvisorSurname:\the\count1\endcsname\\}
    \else
      \toks@=\expandafter\expandafter\expandafter{%
        \expandafter\the\expandafter\toks@%
```

```
        \expandafter&\expandafter\space%
        \csname CoppeAdvisorName:\the\count1\expandafter\endcsname%
        \expandafter\space\csname CoppeAdvisorSurname:\the\count1\endcsname\\
      }%
    \fi
    \advance\count1 by 1}
    \the\toks@
  \end{tabularx}\par
  \vspace*{20mm}
  \noindent\begin{tabularx}{\textwidth}[b]{@{}l@{ }>{\raggedright\arraybackslash}X@{}}
    Aprovada por: &
    \count1=0
    \toks@={}
    \@whilenum \count1<\@examiner \do{%
    \ifcase\count1 % same as \ifnum0=\count1
      \toks@=\expandafter{\csname CoppeExaminer:\the\count1%
        \expandafter\endcsname\expandafter\\}
    \else
      \toks@=\expandafter\expandafter\expandafter{%
        \expandafter\the\expandafter\toks@%
        \expandafter&\expandafter\space%
        \csname CoppeExaminer:\the\count1\expandafter\endcsname%
        \expandafter\space\\
      }%
    \fi
    \advance\count1 by 1}
    \the\toks@
    \end{tabularx}}\par
  \vspace*{\fill}
  \frontpage@bottomtext}

\newcommand\coppe@hypersetup{%
\begingroup
  % changes to \toks@ and \count@ are kept local;
  % it's not necessary for them, but it is usually the case
  % for \count1, because the first ten counters are written
  % to the DVI file, thus you got lucky because of PDF output
  \toks@={}% in this special case not necessary
  \count@=0 %
  \@whilenum\count@<\value{keywords}\do{%
    % * a keyword separator is not necessary,
    %    if there is just one keyword
    % * \csname CoppeKeyword:\the\count@\endcsname must be expanded
    %    at least once, to get rid of the loop depended \count@
    \ifcase\count@ % same as \ifnum0=\count@
      \toks@=\expandafter{\csname CoppeKeyword:\the\count@\endcsname}%
    \else
      \toks@=\expandafter\expandafter\expandafter{%
        \expandafter\the\expandafter\toks@
        \expandafter;\expandafter\space
        \csname CoppeKeyword:\the\count@\endcsname
      }%
    \fi
    \advance\count@ by 1 %
```

```
  }%
  \edef\x{\endgroup
    \noexpand\hypersetup{%
      pdfkeywords={\the\toks@}%
    }%
  }%
\x
\hypersetup{%
  pdfauthor={\@authname\ \@authsurn},
  pdftitle={\local@title},
  pdfsubject={\local@doctype\ de \@degreename\ em \local@deptname\ da COPPE/UFRJ},
  pdfcreator={LaTeX with CoppeTeX toolkit},
  breaklinks={true},
  raiselinks={true},
  pageanchor={true},
}}
```

`\makecatalog` When the document has illustrations, it is required to insert ": il.;" between the number of pages of the textual part and the page dimension. We have created a label to flag the existence of lists of figures. It is checked to be undefined using the plain TEX command `\@isundefined` [7].

```
\newcommand\makecatalog{%
  \vspace*{\fill}
  \begin{center}
    \setlength{\fboxsep}{5mm}
    \framebox[120mm][c]{\makebox[5mm][c]{}%
      \begin{minipage}[c]{105mm}
      \setlength{\parindent}{5mm}
      \noindent\sloppy\nohyphens\@authsurn,
      \nohyphens\@authname\par
      \nohyphens{%
        \if@english
          \foreign@title%
        \else
          \local@title%
        \fi/\@authname\ \@authsurn. -- \local@cityname:
      UFRJ/COPPE, \number\year.}\par
      \pageref{front:pageno},
      \pageref{LastPage}
      p.\@ifundefined{r@cat:lofflag}{}{\pageref{cat:lofflag}} $29,7$cm.\par
      % There is an issue here. When the last entry must be split between lines,
      % the spacing between it and the next paragraph becomes smaller.
      % Should we manually introduce a fixed space? But how could we know that
      % a name was split? Is this happening yet?
      \nohyphens{%
      \begin{tabularx}{100mm}[b]{@{}l@{ }>{\raggedright\arraybackslash}X@{}}
        \local@advisorstring: &
        \count1=0
        \toks@={}
        \@whilenum \count1<\@advisor \do{%
        \ifcase\count1 % same as \ifnum0=\count1
          \toks@=\expandafter{\csname CoppeAdvisorName:\the\count1%
          \expandafter\endcsname\expandafter\space%
          \csname CoppeAdvisorSurname:\the\count1\endcsname\\}
```

```
        \else
          \toks@=\expandafter\expandafter\expandafter{%
            \expandafter\the\expandafter\toks@
            \expandafter&\expandafter\space
            \csname CoppeAdvisorName:\the\count1\expandafter\endcsname%
            \expandafter\space\csname CoppeAdvisorSurname:\the\count1\endcsname\\
          }%
        \fi
        \advance\count1 by 1}
        \the\toks@
      \end{tabularx}}\par
      \nohyphens{\local@doctype\ ({\MakeLowercase\@degreename}) --
      UFRJ/COPPE/Programa de \local@deptname, \number\year.}\par
      Refer{\^ e}ncias Bibliogr{\' a}ficas: p. \pageref{bib:begin} -- \pageref{bib:end}.\par
      \count1=0
      \count2=1
      \nohyphens{\@whilenum \count1<\value{keywords} \do {%
        \number\count2. \csname CoppeKeyword:\the\count1 \endcsname.
        \advance\count1 by 1
        \advance\count2 by 1}
      I. \csname CoppeAdvisorSurname:0\endcsname,%
      \ \csname CoppeAdvisorName:0\endcsname%
      \ifthenelse{\@advisor>1}{\ \emph{et~al.}{}}.
      II. \local@universityname, COPPE, Programa de \local@deptname.
      III. T{\' i}tulo.}
    \end{minipage}}
  \end{center}
  \vspace*{\fill}}
```

`\dedication`

```
\newcommand\dedication[1]{
  \gdef\@dedic{#1}
    \cleardoublepage
    \vspace*{\fill}
    \begin{flushright}
      \begin{minipage}{60mm}
        \raggedleft \it \normalsize \@dedic
      \end{minipage}
    \end{flushright}}
```

`abstract` (*env.*) This is a specialization of the abstract in the article standard class.

```
\newenvironment{abstract}{%
  \clearpage
  \thispagestyle{plain}
  \abstract@toptext\par
  \vspace*{8.6mm}
  \begin{center}
    \sloppy\nohyphens{\MakeUppercase\local@title}\par
    \vspace*{13.2mm}
    \@authname\ \@authsurn \par
    \vspace*{7mm}
    \local@monthname/\number\year
  \end{center}\par
  \vspace*{\fill}
```

```
  \noindent%
  \begin{tabularx}{\textwidth}[b]{@{}l@{ }>{\raggedright\arraybackslash}X@{}}
    \local@advisorstring: &
    \count1=0
    \toks@={}
    \@whilenum \count1<\@advisor \do{%
    \ifcase\count1 % same as \ifnum0=\count1
      \toks@=\expandafter{\csname CoppeAdvisorName:\the\count1%
      \expandafter\endcsname\expandafter\space%
      \csname CoppeAdvisorSurname:\the\count1\endcsname\\}
    \else
      \toks@=\expandafter\expandafter\expandafter{%
        \expandafter\the\expandafter\toks@
        \expandafter&\expandafter\space
        \csname CoppeAdvisorName:\the\count1\expandafter\endcsname%
        \expandafter\space\csname CoppeAdvisorSurname:\the\count1\endcsname\\
      }%
    \fi
    \advance\count1 by 1}
    \the\toks@
  \end{tabularx}\par
  \vspace*{2mm}
  \noindent\local@deptstring: \local@deptname\par
  \vspace*{7mm}}{\vspace*{\fill}}
```

`foreignabstract` (*env.*)

```
\newenvironment{foreignabstract}{%
  \clearpage
  \thispagestyle{plain}
  \begin{otherlanguage}{english}
  \foreignabstract@toptext\par
  \vspace*{8.6mm}
  \begin{center}
    \sloppy\nohyphens{\MakeUppercase\foreign@title}\par
    \vspace*{13.2mm}
    \@authname\ \@authsurn \par
    \vspace*{7mm}
    \foreign@monthname/\number\year
  \end{center}\par
  \vspace*{\fill}
  \noindent%
  \begin{tabularx}{\textwidth}[b]{@{}l@{ }>{\raggedright\arraybackslash}X@{}}
    \foreign@advisorstring: &
    \count1=0
    \toks@={}
    \@whilenum \count1<\@advisor \do{%
    \ifcase\count1 % same as \ifnum0=\count1
      \toks@=\expandafter{\csname CoppeAdvisorName:\the\count1%
      \expandafter\endcsname\expandafter\space%
      \csname CoppeAdvisorSurname:\the\count1\endcsname\\}
    \else
      \toks@=\expandafter\expandafter\expandafter{%
        \expandafter\the\expandafter\toks@
        \expandafter&\expandafter\space
```

```
        \csname CoppeAdvisorName:\the\count1\expandafter\endcsname%
        \expandafter\space\csname CoppeAdvisorSurname:\the\count1\endcsname\\
      }%
    \fi
    \advance\count1 by 1}
    \the\toks@
  \end{tabularx}\par
  \vspace*{2mm}
  \noindent\foreign@deptstring: \foreign@deptname\par
  \vspace*{7mm}}{%
  \end{otherlanguage}
  \vspace*{\fill}
  \global\let\@author\@empty
  \global\let\@date\@empty
  \global\let\foreign@title\@empty
  \global\let\foreign@title\relax
  \global\let\local@title\@empty
  \global\let\local@title\relax
  \global\let\author\relax
  \global\let\author\relax
  \global\let\date\relax}
```

\listoffigures

```
\renewcommand\listoffigures{%
    \coppe@hasLof
    \if@twocolumn
      \@restonecoltrue\onecolumn
    \else
      \@restonecolfalse
    \fi
    \chapter*{\listfigurename}%
      \addcontentsline{toc}{chapter}{\listfigurename}%
      \@mkboth{\MakeUppercase\listfigurename}%
              {\MakeUppercase\listfigurename}%
    \@starttoc{lof}%
    \if@restonecol\twocolumn\fi
    }
```

\listoftables

```
\renewcommand\listoftables{%
    \if@twocolumn
      \@restonecoltrue\onecolumn
    \else
      \@restonecolfalse
    \fi
    \chapter*{\listtablename}%
      \addcontentsline{toc}{chapter}{\listtablename}%
      \@mkboth{%
          \MakeUppercase\listtablename}%
         {\MakeUppercase\listtablename}%
    \@starttoc{lot}%
    \if@restonecol\twocolumn\fi
    }
```

\printlosymbols

```
\newcommand\printlosymbols{%
\renewcommand\glossaryname{\listsymbolname}%
\@input@{\jobname.los}}
```

\makelosymbols

```
\def\makelosymbols{%
  \newwrite\@losfile
  \immediate\openout\@losfile=\jobname.syx
  \newcommand\symbl[3][]{\@bsphack\begingroup
  \ifstrempty{##1}{\def\@tempsymbl{##2=}}{\def\@tempsymbl{##1=}}%
              \@sanitize%
              \@wrlos{\@tempsymbl}{##2}{##3}}\typeout%
  {Writing index of symbols file \jobname.syx}%
  \let\makelosymbols\@empty%
}%
\@onlypreamble\makelosymbols

\AtBeginDocument{%
\@ifpackageloaded{hyperref}{%
  \newcommand\@wrlos[3]{%
    \protected@write\@losfile{}%
      {\string\indexentry{#1[#2] #3|hyperpage}{\thepage}}%
    \endgroup%
    \@esphack}}{%
  \newcommand\@wrlos[3]{%
    \protected@write\@losfile{}%
      {\string\indexentry{#1[#2] #3}{\thepage}}%
    \endgroup%
    \@esphack}}}%
```

\printloabbreviations

```
\newcommand\printloabbreviations{%
\renewcommand\glossaryname{\listabbreviationname}%
\@input@{\jobname.lab}}
```

\makeloabbreviations

```
\def\makeloabbreviations{%
  \newwrite\@labfile
  \immediate\openout\@labfile=\jobname.abx
   \newcommand\abbrev[3][]{\@bsphack\begingroup
              \ifstrempty{##1}{\def\@tempsymbl{##2=}}{\def\@tempsymbl{##1=}}
              \@sanitize
              \@wrlab{\@tempsymbl}{##2}{##3}}\typeout
  {Writing index of abbreviations file \jobname.abx}%
  \let\makeloabbreviations\@empty
}
\@onlypreamble\makeloabbreviations

\AtBeginDocument{%
\@ifpackageloaded{hyperref}{%
  \newcommand\@wrlab[3]{%
    \protected@write\@labfile{}%
      {\string\indexentry{#1[#2] #3|hyperpage}{\thepage}}%
```

```
    \endgroup%
    \@esphack}}{%
  \newcommand\@wrlab[3]{%
    \protected@write\@labfile{}%
      {\string\indexentry{#1[#2] #3}{\thepage}}%
    \endgroup%
    \@esphack}}%
%%%% \AtBeginDocument{%
%%%% \@ifpackageloaded{hyperref}{%
%%%%   \def\@wrlab#1#2{%
%%%% \protected@write\@labfile{}%
%%%%       {\string\indexentry{[#1] #2|hyperpage}{\thepage}}%
%%%%     \endgroup
%%%%     \@esphack}}{%
%%%%   \def\@wrlab#1#2{%
%%%%     \protected@write\@labfile{}%
%%%%       {\string\indexentry{[#1] #2}{\arabic{page}}}%
%%%%     \endgroup
%%%%     \@esphack}}}
% Some macros used to generate cataloging information.
\AtBeginDocument{%
  \ltx@ifpackageloaded{hyperref}{
    \def\coppe@bibEnd{%
      \immediate\write\@auxout{%
        \string\newlabel{bib:end}{{}{\arabic{page}}{}{page.\arabic{page}}{}}}}%
    \def\coppe@bibBegin{%
      \immediate\write\@auxout{%
        \string\newlabel{bib:begin}{{}{\arabic{page}}{}{page.\arabic{page}}{}}}}%
    \def\coppe@mainBegin{%
      \immediate\write\@auxout{%
        \string\newlabel{front:pageno}{{}{\Roman{page}}{}{page.\roman{page}}{}}}}%
    \def\coppe@hasLof{%
      \immediate\write\@auxout{%
        \string\newlabel{cat:lofflag}{{}{:~il.;}{}{page.\roman{page}}{}}}}%
  }{%
    \def\coppe@bibEnd{%
      \immediate\write\@auxout{%
      \string\newlabel{bib:end}{{}{\arabic{page}}{}}}}%
    \def\coppe@bibBegin{%
      \immediate\write\@auxout{%
      \string\newlabel{bib:begin}{{}{\arabic{page}}{}}}}%
    \def\coppe@mainBegin{%
      \immediate\write\@auxout{%
        \string\newlabel{front:pageno}{{}{\Roman{page}}{}}}}%
    \def\coppe@hasLof{%
      \immediate\write\@auxout{%
        \string\newlabel{cat:lofflag}{{}{:~il.;}{}}}}%
  }%
}
\newdimen\bibindent%
\setlength\bibindent{1.5em}%
\renewenvironment{thebibliography}[1]%
     {\onehalfspacing%
```

```
      \chapter*{\bibname}%
      \addcontentsline{toc}{chapter}{\bibname}%
      \coppe@bibBegin
      \list{\@biblabel{\@arabic\c@enumiv}}%
           {\setlength{\labelwidth}{0ex}%
            \setlength{\leftmargin}{9.0ex}%
            \setlength{\itemindent}{-9.0ex}%
            \advance\leftmargin\labelsep%
            \@openbib@code%
            \usecounter{enumiv}%
            \let\p@enumiv\@empty%
            \renewcommand\theenumiv{\@arabic\c@enumiv}}%
      \sloppy%
      \clubpenalty4000%
      \@clubpenalty \clubpenalty%
      \widowpenalty4000%
      \sfcode`\.\@m}%
     {\def\@noitemerr%
       {\@latex@warning{Empty `thebibliography' environment}}%
       \coppe@bibEnd
      \endlist}
```

`longquote` (*env.*)

```
\newlength{\recuolongquote}%
\setlength{\recuolongquote}{4cm}%
\newenvironment*{longquote}[1][default]{%
 \list{}%
 \footnotesize%
 \addtolength{\leftskip}{\recuolongquote}%
 \item[]%
 \singlespacing%
 \ifthenelse{\not\equal{#1}{default}}{\itshape\selectlanguage{#1}}{}%
}{\endlist}%

\newenvironment{theglossary}{%
  \if@twocolumn%
    \@restonecoltrue\onecolumn%
  \else%
    \@restonecolfalse%
  \fi%
  \@mkboth{\MakeUppercase\glossaryname}%
  {\MakeUppercase\glossaryname}%
  \chapter*{\glossaryname}%
  \addcontentsline{toc}{chapter}{\glossaryname}
  \list{}
  {\setlength{\listparindent}{0in}%
   \setlength{\labelwidth}{1.0in}%
   \setlength{\leftmargin}{1.5in}%
   \setlength{\labelsep}{0.5in}%
   \setlength{\itemindent}{0in}}%
   \sloppy}%
  {\if@restonecol\twocolumn\fi%
\endlist}
%
```

```
\renewenvironment{theindex}{%
  \if@twocolumn
    \@restonecolfalse
  \else
    \@restonecoltrue
  \fi
  \twocolumn[\@makeschapterhead{\indexname}]%
  \@mkboth{\MakeUppercase\indexname}%
  {\MakeUppercase\indexname}%
  \thispagestyle{plain}\parindent\z@
  \addcontentsline{toc}{chapter}{\indexname}
  \parskip\z@ \@plus .3\p@\relax
  \columnseprule \z@
  \columnsep 35\p@
  \let\item\@idxitem}
  {\if@restonecol\onecolumn\else\clearpage\fi}
\if@english
  \newcommand\listabbreviationname{List of Abbreviations}
  \newcommand\listsymbolname{List of Symbols}
  \newcommand\glossaryname{Glossary}
\else
  \newcommand\listabbreviationname{Lista de Abreviaturas}
  \newcommand\listsymbolname{Lista de S{\' i}mbolos}
  \newcommand\glossaryname{Gloss{\' a}rio}
\fi
%
\newcommand\local@advisorstring{Orientador}
\newcommand\foreign@advisorstring{Advisor}
\ifthenelse{\boolean{maledoc}}{%
  \newcommand\local@approvedname{Examinado por}%
}{%
  \newcommand\local@approvedname{Examinada por}%
}
\newcommand\local@universityname{Universidade Federal do Rio de Janeiro}
\newcommand\local@deptstring{Programa}
\newcommand\foreign@deptstring{Department}
\newcommand\local@cityname{Rio de Janeiro}
\newcommand\local@statename{RJ}
\newcommand\local@countryname{Brasil}
%
\newcommand\frontcover@maintext{
  \sloppy\nohyphens{\local@doctype\ de \@degreename\
  \ifthenelse{\boolean{maledoc}}{apresentado}{apresentada}
  ao Programa de P{\' o}s-gradua{\c c}{\~ a}o em \local@deptname,
  COPPE, da \local@universityname, como parte dos requisitos
  necess{\' a}rios {\` a} obten{\c c}{\~ a}o do t{\' i}tulo de
  \local@degname\ em \local@deptname.}
}
%
\newcommand\frontpage@maintext{
  \noindent {\MakeUppercase\local@doctype}
  \ifthenelse{\boolean{maledoc}}{SUBMETIDO}{SUBMETIDA}
  \sloppy\nohyphens{AO CORPO DOCENTE DO INSTITUTO ALBERTO LUIZ COIMBRA
  DE P{\' O}S-GRADUA{\c C}{\~ A}O E PESQUISA DE ENGENHARIA DA
```

```
  UNIVERSIDADE FEDERAL DO RIO DE JANEIRO COMO PARTE DOS REQUISITOS
  NECESS{\' A}RIOS PARA A OBTEN{\c C}{\~ A}O DO GRAU DE
  {\MakeUppercase\local@degname} EM CI{\^E}NCIAS EM
  {\MakeUppercase\local@deptname.\par}}%
}
%
\newcommand\frontpage@bottomtext{%
  \begin{center}
  {\MakeUppercase{\local@cityname, \local@statename\ -- \local@countryname}}\par
  {\MakeUppercase\local@monthname\ DE \number\year}
  \end{center}%
}
%
\newcommand\abstract@toptext{%
  \noindent Resumo \ifthenelse{\boolean{maledoc}}{do}{da}
  \local@doctype\ \ifthenelse{\boolean{maledoc}}{apresentado}{apresentada}
  \sloppy\nohyphens{{\‘ a} COPPE/UFRJ como parte dos requisitos
  necess{\' a}rios para a obten{\c c}{\~ a}o do grau de
  \local@degname\ em Ci{\^ e}ncias (\@degree)}
}
\newcommand\foreignabstract@toptext{%
  \noindent \sloppy\nohyphens{Abstract of \foreign@doctype\ presented to
  COPPE/UFRJ as a partial fulfillment of the requirements for the
  degree of \foreign@degname\ of Science (\@degree)}
}
%
```

⟨/class⟩

⟨∗glossary⟩

```
actual '='
quote '!'
level '>'
%%%% delim_0   ", p. "
delim_0 "\\dotfill "
lethead_flag  0
headings_flag 0
preamble
"\n\\begin{theglossary}\n  \\makeatletter"
postamble
"\n  \\end{theglossary}\n"
```

⟨/glossary⟩

Acknowledgments

Thanks to all CoppeTeX users who have reported their experience with this class. We also thank to professor Fernando Lizarralde and Heiko Oberdiek for their helpful comments. The authors would like to thank the National Council for Scientific and Technological Development (CNPq) of Brazil.

References

[1] CPGP/COPPE/UFRJ. *Norma para a Elaboração Gráfica de Teses*. Rio de Janeiro, RJ, Brasil, Julho 2008. Revisada em 10/09/2010.

[2] Donald E. Knuth. *The TEXbook*. Addison-Wesley, Reading, MA, 1984.

[3] Leslie Lamport. *LATEX: A Document Preparation System*. Addison-Wesley, Reading, MA, 1986.

[4] Oren Patashnik. Bibtexing. Documentation for general BibTEX users, February 1988.

[5] Oren Patashnik. Designing bibtex styles. The part of BibTeX 's documentation that's not meant for general users, February 1988.

[6] William Strunk, Jr. and E. B. White. *The Elements of Style*. Macmillan, 3 edition, 1979.

[7] TEX Frequently Asked Questions.

Index

Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.

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Change History

v0.0

General: Creation Date. 1

v0.1

General: Documentation: bibliography fixed, title translation. 1

Sourceforge submission. 1

v0.2

General: Unification of the code for the list of symbols and abbreviations. 1

v0.3

General: Added 'draft' option. . . . 1

\maketitle: Added number of examiners test. 22

Generalization. 22

v0.4

General: Beta documentation. . . . 1

v0.5

abstract: Changed from macro to environment. 26

\backmatter: Added mainmatter pages counter. 21

foreignabstract: Changed from macro to environment. 27

v1.0

General: First CoppeTeX release. . 1

v2.0

General: CoppeTeX release 2.0. . . 1

v2.1

General: CoppeTeX release 2.1: Matching the new rules. 1

\advisor: Advisors, co-advisors, co-co-advisors, etc., all of them are simply considered advisors. 19

v2.2

General: Matching new guidelines, including new logo. 1

v2.2.2

General: Fixed some text constants in .bib and documented it here. 1

v3.0

General: Added support for monographs in English. 18

New approval page layout. . . . 23

\department: Added new course on Nanotechnology. 19

\examiner: Examiners expansion without degree. 19

v3.1

\department: Included a sort key in symbl 19

v3.2

General: Fixed version problem between cls and dtx. 1

v3.3

General: Extend abrev to work like symb and accept a sorting key . 1

v3.4

General: Some examples for figures, tables, longtables, etc. . 1