

# The afterpack Package

## Personal settings and preferences

### Version 0.1

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#### Abstract

This bundle includes a personal pre-configuration package, which (selectively) loads package sets with the author pre-defined package options, and a few associated packages as “circuits libraries” (set’s of quests based on *tikzquests*).

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## 1 Introduction

This is what is left from “my personal packages”. I started, a few years ago (2022), to untangle the many personal packs/hacks that I was using, documenting them and publishing them at CTAN, and, finally, after almost 3 years (2025), this is what is left: Just an auxiliary package that pre-loads the packages I use the most, and define one single (well two) command(s). So, now, when I share a L<sup>A</sup>T<sub>E</sub>X file with a colleague, he/she won’t come back asking me how to compile it (because they lack “my hacks”).

## 2 Package Options

- showframe* For geometry/format “debugging”. This will just load the *showframe* package.
- showlabels* For geometry/format “debugging”. This will just load the *showlabels* package.
- english* Babel will be loaded with *english* option. Otherwise *brazilian*.
- beamer* This will suppress the loading of the *geometry*, *titlesec* and *listings* packages. It doesn’t loads *beamer*.
- xpacks* The packages *longtable*, *xpacks*, *csquotes*, *caption*, *supcaption*, *url*, *multirow* and *bigdelim* will be loaded.
- times* This will load the *mathptmx* package (times roman) instead of (default) *lmodern*.
- noquests* This will suppress the loading of the *tikzquests* package.
- tikz* This will load *tikz*, *circuitikz*, *tikzquads*, *tikzdotncross* and *tikzfxgraph* packages.
- graphicx* This will load the *graphicx* package.
- math* This will load the *amsmath*, *amsfonts*, *amssymb*, *amsthm*, *mathrsfs*, *mathtools*, *empheq*, *extarrows*, *steinmetz*, *mathfixs*, *siunitx* and *cases* packages.
- listings* This will load the *listings* package. (if *beamer* is false)

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\*<https://github.com/alceu-frigeri/afterpack>

### 3 Commands

`\cab` `\cab {⟨options⟩}`

This will typeset, in a new page, a typical exam header. `⟨options⟩` is a key=val list of:

<code>uni</code>	University's name. (default: Universidade Federal do Rio Grande do Sul)
<code>dept</code>	Department's name. (default: Escola de Engenharia / DELAE)
<code>class</code>	Class' name. (default: disciplina)
<code>classcode</code>	Class' code. (default: ENGcode)
<code>exam</code>	Exam text. (default: Verificação de Aproveitamento)
<code>sem</code>	Semester. (default: 202x/Y)
<code>name label</code>	Student's label. (default: Nome)
<code>id label</code>	Student's ID label. (default: Cartão)
<code>duo label</code>	Duo labe. (default: Dupla)
<code>simplegrad</code>	If true, the grad option box will be used, with a preset text. (default: false)
<code>duo</code>	If true then duo label will be added to identification line (default: false)
<code>nonames</code>	If true, the identification lines will be suppressed.

For example:

LaTeX Code:

```
\cab{
  class={Eletrônica I} , classcode=ENG10044 ,
  exam = {$1^a$ Verificação} , sem = {2025/1} , simplegrad
}
```

`\pgfmathparseFPU` `\pgfmathparseFPU {⟨math-expr⟩}`

This command is defined if, and only if, the `tikz` option is used. It will process `⟨math-expr⟩` with `\pgfmathparse` whilst the `/pgf/fpu` key is active, which greatly extends the TeX number's range. See the `fpu` library from `tikz` for more details.

### 4 Other Packages

This bundle includes a few companion “packages” : `CircMisc`, `CircTheoryI`, `CircTheoryII` and `ElectronicI`. Each of these defines sets of circuit-quests (based on `tikzquests` and `circuittikz`). It's possible to list all defined circuit-quests using the `\QuestionsList` command.