Engenius Latex Template
How to use it!

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version 0.1.0

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Abstract

The **abstract** is supposed to be a brief resume where you write about what the report will be about and the objectives. If this document is an update to a older report from were you were not part of that must be referenced here and in the Revisions section in order to check the progress of the team through the years and give credit to the previous team members.

1 How to write well

In this template we created some commands that provide to a non LaTeX user an easy write without any knowledge about TeX or LaTeXtechnologies.

1.1 Document Information

Before start writing you should complete the preamble with your information. Don't forget to insert your department identification in \documentclass[your department]{engenius} as described in the comments.

1.1.1 Authors

Fill the authors information and choose a common way of identifying your department. There are 3 options you can choose: not identifying at all, identifying as showed in Author2 (\depofepower)or with your department color and exemplified in Author3 (\depofbusinesscolor). As authors we prefer the second option, but feel free to use whatever you like the most.

1.1.2 Versions

Versions are important since they can evaluate the progress of the work. A version is composed by 3 integers, *version N1.N2.N3*. N1 increases when a complete modification of the previous work is implemented, N2 increases when are made big changes in the current work, N3 increases when small changes like updates are done or added.

1.2 Writing the document

An introduction is optional since the main objective is a compact study and discussion of the development process. Next will be showed good practices when writing with this template.

1.2.1 Equations

To use equations you can make them inline like this $x = y + z$ or you can do them like this:

$$\int_0^{tp_{HL}} dt = tp_{HL} = -C_L \int_{V_{dd}}^{V_{dd}/2} \frac{1}{I_{DSN}} dV_O \qquad (1)$$

And you can reference the equation like this \ref{eq:timehtol}, **e.g** equation \ref{eq:timehtol}, appearing like in the bold text **equation 1**. It will automatically change if you other equations are inserted before, so this way you don't need to worry about equation numbering.

1.2.2 Lists

Making lists is very simple. Check the code bellow that makes the list showed in this section. Understand the code and change to your needs.

Code to make lists

```
\begin{itemize}
   \item item 1
   \item group 1
   \begin{itemize}
      \item item 2
      \item item 3
   \end{itemize}
   \item item 4
\end{itemize}
```

- item 1
- group 1
  - item 2
  - item 3
- item 4

1.2.3 Images

Images are placed like the example bellow. You can tune the width to make it fit your needs, it can take any units (cm, in, em ...). To reference an image you can follow the same approach as in equations: \ref{img:engeniuslogo}, image 1. To change the image just replace the **url** in *includegraphics*. Don't forget that you can change the label! Is this label that you need to reference when you want to do so.

Figure 1: Engenius Image Example

1.2.4 Code

Raw code can be inserted inline like this `print("Hello world !")`, or in a box like the one bellow. Check our code to see how to do it.

Example Code

```
#include <stdio.h>
int main()
{
  // printf() displays the string inside quotation
  printf("Hello, World!");
  return 0;
}
```

1.2.5 References and Revision

References must be used when you use information from external fonts. There is no shame in referencing everything, it gives you credibility. Your bibliography must be in the file ./biblio.bib structured like the examples already there. To cite something just use \cite{name}, that will show like this [1]. The reference will then appear in the references section.

The revision section is used to tell which report are you updating/revising in case you have one. This section exist in order to give credits to the people that worked before you, they must not be forgotten :) . You also need to put in your document all revisions that were in the document you are updating and don't forget to versioning accordingly.

2 Questions, Bugs and Suggestions

This template was created by Diogo Correia and João Santos. Original Repository here.

We spent a good amount of time creating this template and we are open for collaborators and suggestions :) .

If you find any bugs please make us know so we can fix then. If you have any question or you need help just contact us.

All of that can be done in github's issues section at the following link: here.

References

[1] Albert Einstein. Zur Elektrodynamik bewegter Körper. (German) [On the electrodynamics of moving bodies]. *Annalen der Physik*, 322(10):891–921, 1905.

Revisions

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