**English title**

*Spanish title*

*First Author[[1]](#footnote-1), Second Author[[2]](#footnote-2), Third Author[[3]](#footnote-3), Fourth Author[[4]](#footnote-4)*

**Abstract**

This document describes the instructions that are a guide to preparing papers –based on a research process- for the *CIECT XIX*. Use this document as a template for writing the article, then follow the order and spaces that suggest this format. The abstract should be presented in English and Spanish with a maximum of 180 words and should contain: 1) what the author has done, 2) as it did, 3) the main results, 4) the relevance of the results. Authors are fully responsible for the originality, unpublished nature and quality of their articles; the editorial committee, in the case of accepting the work for publication, will submit it to academic peer review, so that authors transfer their patrimonial rights of publication to the journal. The template can be downloaded from: https://comunidad.udistrital.edu.co/ciect19/

**Keywords:** put six to eight keywords in English, separated by commas and sorted alphabetically.

**Resumen**

En este documento se describen las instrucciones que constituyen una guía de preparación de artículos –basados en procesos de investigación- para el *CIECT XIX*. Utilice este documento como una plantilla para redactar el artículo, por lo que se sugiere surtir al pie de la letra el orden y los campos del formato. El resumen debe presentarse en inglés y español con un máximo de 180 palabras y debe contener: 1) lo que el autor ha hecho, 2) cómo lo hizo, 3) los resultados principales, 4) la relevancia de los resultados. Los autores son completamente responsables de la originalidad, el carácter inédito y la calidad de su artículo; el comité editorial, en el caso de aceptar el trabajo para publicación, lo someterá a evaluación por pares académicos, por lo que los autores ceden los derechos patrimoniales de la publicación a la revista. La plantilla se puede descargar como archivo de la página: https://comunidad.udistrital.edu.co/ciect19/

**Palabras clave:** keywords in Spanish separated by commas.

1. **Introduction**

The template is defined to maintain uniformity in the presentation of articles. To have a high quality and consistent format, you as an author must follow these instructions. The easiest way to do this is to download the template and replace the content with your own article. The template file contains predefined styles for each aspect of the overall design of the document, typographic families, and appropriate font sizes, which allows you to reduce your work when formatting the document. Do not change the font size or line spacing to enter more text on a limited number of pages.

In the Introduction, for example, it is shown in a concrete form: the problem, the objective of the work and the current state of the exposed topics. This section must be fully referenced, since the review of different approaches made by other researchers appears here and constitutes the starting point of your research.

The description of the current state of the subject, or state of the art, implies a review of the published literature or the background of your research problem. The references must be those that are strictly related to the subject of study. Do not include data or conclusions of the research work. This section must describe how the development of the topic, the research process and its practical implementation will be structured and may include: Theoretical framework, Modeling, Description of solution alternatives, Experimental development, Methods, Materials, Design, Implementation, Results, or, Analysis of the results.

* 1. **General Rules**

Articles must have a minimum length of 10 double-spaced pages and a maximum of 20 pages.

* 1. **Typefaces, Fonts and sizes**

Use Arial typeface. The recommended size for the body of the text is 12 points and for the Title of the article 14 points.

* 1. **Format**

When writing your article, use the format of Letter-sized paper (also known as US Letter), measuring 8.5˝ by 11˝. The document must be justified. Paragraphs must be written in double space. Paragraphs must have a maximum of 10 lines.

1. **Thematic structure**

The development of the thematic structure is presented in different sections. Each section is numbered with Arabic numerals, followed by a period (i.e., 1., 2., ...). The sections may contain subsections that are numbered from the section number and subsection number, each followed by a period. Each lower level introduces an additional Arabic number. (For example, subsection 3 of subsection 2 of section 4 would be numbered 4.2.3.). The subsection levels have no limit but it is recommended not to use more than three. The first chapter is the one that corresponds to the Introduction.

The article must also include the results obtained and their analysis. The results can be presented in Tables or Figures, referenced in the text. The results must include a discussion where they are examined and interpreted. The discussion around the results can serve as the basis for the conclusions section.

* 1. **Additional requirements**

In this section the editing instructions for the figures, tables, abbreviations and acronyms are presented.

* + 1. **Figures y Tables**

The title and description of the figures and tables must be located above them, indicating their source, if it is external you must put the number of the corresponding reference [1] and if it is elaborated by the authors you must indicate it below the figure or table. All diagrams, models, graphs, maps or other type of image used within the article will be treated as figures. The figures should appear in black ink or gray scale. The tables and figures must be clearly numbered and titled. In addition, they must be located in the place closest to where they are cited, that is, they must be referenced from the text of the article and not the other way around; and attach a folder to this file with all the images in .tiff format. Use the word Figure X, not abbreviated, to refer to a figure X and Table X to refer to a table. See examples in Table 1 and Figure 1.

**Table 1.** Explanation of the resolution of figures.

|  |  |  |
| --- | --- | --- |
|  | **Figures** | **Tables** |
| Article 1 | Tiff dpi | Normal |
| Article 2 | Tiff  | Formatted |

Source: own.

If the figures include axes, as in the Cartesian plane, they should be labeled appropriately. The labels must be complete words that define the quantities they represent. Do not use the units as labels but include the units in the labels. For example, if an axis represents a length in meters write on the label of the axis "Length (m)" and not "m" or "meters" or "meters". The multiples or submultiples of the units must be inside the parentheses enclosing the units; that is, "Length (Km)" or Length (103 m) ", do not write" Length (m) × 103 ". An example can be seen in Figure 1.

**Figure 1.** Detail of an electroencephalographic signal recorded during the sleep of a patient for diagnosis. The signal was recorded for several hours. [5]



* + 1. **Equations**

When the articles include equations, they must be elaborated in an appropriate equation editor. If you use Word, use either Microsoft Equation Editor or Math Type for the equations of your article. Number the equations consecutively, in order of appearance, with Arabic numerals in parentheses justified to the right margin, as in (1). Use parentheses to avoid ambiguities in the denominators. Put punctuation in the equations when they are part of a sentence. Specify comma (,) for decimal and do not use separation of thousands (100000 and 0.23).

 (1)

Make sure that the variables, constants, parameters, indexes, subscripts or superscripts, operators or, in general, the symbols of your equation have been previously defined. The reader should know about what quantities were being worked on in the development of the research. Italicize the symbols (T could refer to the temperature, but T is the tesla unit). Refer to "(1)" or equation (1) not "Ec. (1).

* + 1. **Units**

Use the International System as primary units. Other units can be used as secondary units (in parentheses). This applies to articles about data storage. For example, write "15 Gb / cm2 (100 Gb / in2)." It is considered an exception when English units are used as commercial identifiers, such as "3.5-inch disk drive." Avoid mixing International System units with the CGS System, such as current in amperes and magnetic field in oersteds. This often leads to confusion because the equations are not dimensionally comparable. If you must use mixed units, clearly specify the units for each quantity in the equation. The unit in the International System for magnetic field strength H is A / m. However, if you want to use T units, you can refer to magnetic flux density B or magnetic field strength symbolized as μ0H.

Use the centered point to separate composite units, that is, "A • m2." When writing decimal digits, the comma will be used, not the point.

* + 1. **Abbreviations and Acronyms**

Define abbreviations and acronyms the first time they are used in the text. Avoid using abbreviations in the title, unless it is essential.

1. **Conclusions**

Following the rules indicated will allow your work not only to stand out for its content, but also to be visually appealing

**Acknowledgments**

If there are, they should be located at the end of the work, just before the references. Indicates the entity that sponsors the research, or where the product of the research was implemented: model, software, prototype, simulation; or the entity, company or research group of which this article is the final product. This section will not have numbering.

**References**

The use of bibliographic references should be done in a numbered manner in the order in which the sources are cited in the text, as follows: [1], when several consecutive sources are used, [1-9], not consecutive [1, 2, 9]. If the same source is used again in another part of the document, the initially assigned number is retained. In the bibliography references are listed according to the order of appearance in the text. Use the standard IEEE. All references must be publicly accessible documents. Indicate the URL of all references that have. Finally, note that the title of this section is not numbered. Follow the list, omitting subtitles from periodicals, book chapters or books, for example, as they only serve as a guide.

*Periodicals (Journals)*

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[17] N. Wolfberg, “Storage and retrieval for image and video databases”, SPIE Proceedings, pp. 27-32, 1993

*Master's or doctoral thesis*

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[19] W. A. Díaz, O. Et al, “Tomografía Local usando Wavelets”, thesis MSc., Universidad EAFIT, Medellín, Colombia, 2012.

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*Manuals and catalogues*

[21] Company or Institution, Title of the manual or catalog, number of the manual or catalog, city, year.

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