

**Guidelines for writing, formatting, and defending the bachelor's, master's, or final thesis**

- starting with the examination period June-July 2021 -

**I. Structure of the thesis**

* The bachelor's/master's thesis must be written and defended in the language of the specialization followed by the graduate or in a language of great international circulation.
* The cover sheet includes (in the language of the specialization followed by the graduate and in Romanian): university, faculty, the field of study (top), bachelor’s/master’s/final thesis, the title of the thesis (middle), academic supervisor, graduate’s name, year (bottom) - please follow the cover sheet template attached at the end of this document.
* Abstract: an abstract in English with a brief presentation of the content by chapter, highlighting the own contributions and originality.
* Table of Contents
* Introduction: the objective of the paper and a brief description of the chapters, presentation of the topic, presentation of own contribution or original results, and (if applicable) mentioning of the session at which the paper was presented or the journal in which it was published.
* Content of the paper:
* Overview of the field and the subfield.
* History, prominent individuals with results in the field, results obtained to date.
* References within the paper (for parts taken from other works, please cite the source)
* Emphasis on the original contributions (these include: an original structure of the work, own results obtained within the scope of the topic presented, own applications, numerical methods presented)
* Bibliography

In the bibliography, sources should be listed in alphabetical order by the first author’s name with symbols of the form [1] or [Berens2000].

* For books (authors, book title, publisher, place of publication, year of publication):

[1] DeVore, R.A., Lorentz, G.G.: Constructive Approximation, Springer, Berlin, 1993.

* For articles (authors, title of article, name of journal, number of the journal, year of publication, pages):

[Berens1972] Berens, H., Lorentz, G.G.: Inverse theorems for Bernstein polynomials, Indiana Univ. Math. J., 21 (1972), 693-708.

* For Internet sources (author's first and last name, course title, and Internet address):

[Wong] Wong P: Fixed Point Theory and Applications, http://abacus.bates.edu/ pwong/research/mini-course.pdf.

* For electronic documentation:

[2] \*\*\* Floating point controller board DS1102 documentation, dSPACE Company, Paderborn, Germany, 1996

The thesis will be accompanied by a listed document containing a summary in English [Abstract] with a brief presentation of the contents by chapter, emphasizing the student's contributions and originality.

**II. Requirements for writing and formatting the thesis**

* The length of the thesis should be between 30 and 60 pages.
* Format: A4, font 12pt, line spacing 1.5.
* The pages must be numbered.
* Each new chapter should start on a new page.

**III. Content of the thesis**

* As a document attesting to the candidate's competencies, the bachelor’s/master’s/final thesis must be a product of independent work reflecting the candidate's own view of the subject (even if it does not contain original results).
* The bachelor’s/master's/final thesis may contain information from the literature (publications) or other sources (Internet, software, etc.) only if the bibliographic sources of this information are explicitly stated. This is the sole responsibility of the candidate, who must respond to any suspicion of plagiarism.
* A bachelor’s/master's/final thesis may also include results obtained by the candidate in collaboration with other persons (supervisor of the work, colleagues, etc.), provided that the contribution of each member is explicitly highlighted.
* Two or more bachelor’s/master's/final papers may contain some common parts (such as paragraphs, software applications, etc.) if they are the result of teamwork, but only with the joint approval of the supervisors of all the candidates involved.
* The thesis must be scientifically sound. The bachelor’s/master's/final thesis may be failed if the paper contains serious errors in the interpretation of theoretical concepts or results, if certain methods, algorithms, etc. are incorrectly applied, or if the software application is not functional.
* The bachelor’s/master's/final thesis containing a software application designed by the candidate must illustrate all major phases of the application life cycle (analysis, design, testing) through its implementation and practical realization.
* Elements of scientific novelty (introduction of new concepts and their justification, obtaining new theoretical results, developing original proofs of known results, constructing non-trivial examples or counterexamples, developing a software application based on new principles, not just simply adapting existing applications from one context to another, etc.) must be emphasized and declared as original by the candidate in the text of the bachelor’s/master's/final paper.
* The topic of the master's thesis must be consistent with the candidate's master's degree program and the academic supervisor's area of expertise.

*Particular importance is attached to intellectual property rights. Violations will be punished according to the laws and regulations in force. To this end, all bibliographic sources (including data, figures, and tables) are used in accordance with Romanian legislation and international copyright conventions and are cited in the text of the paper and the bibliography:*

* *Citations are submitted following the rules outlined in these instructions and according to the procedure described in the Declaration of Authorship (Appendix 5)*
* *All cited sources should be numbered in the text; numbers (or abbreviations) should be mentioned in the bibliography of the paper*
* *Citation rules apply to all tables (or the information contained in them, even if the table has been reformatted) that are from another source, i.e., all figures not drawn by the graduate student, including photographs not taken by the graduate student.*

**IV. The defense of the thesis**

* **Part 1:**
* Concise presentation of the content of the thesis (slides, PDF, PowerPoint, etc.), with emphasis on the graduate's own and original contributions and execution of the application, presented (mandatory for the field of Computer Science).
* Duration of the presentation: maximum 15 minutes
* **Part 2:**
* The commission members ask the candidate questions. These can be questions about the topic of the thesis (related to the concepts and methods used), questions about the applications, research perspectives, generalizations of the topic addressed, changes in the application code, etc.
* Time for questions and answers: maximum 5 minutes.

*Important Note: For Master's theses, a requirement for a grade of 10 is that the thesis contains relevant contributions by the author that have been presented in a lecture meeting or at a scientific conference, presented in professional competitions, or published in professional journals. This requirement is considered only a recommendation for a bachelor’s thesis. An exception is made for the programs of the German or Hungarian line, where this requirement is necessary for both the bachelor's and master's thesis.*

UNIVERSITATEA BABEŞ-BOLYAI CLUJ-NAPOCA

FACULTATEA DE MATEMATICǍ ŞI INFORMATICǍ

SPECIALIZAREA …

LUCRARE DE LICENŢĂ/ DISERTAŢIE/ABSOLVIRE

[titlul]

Conducător ştiinţific

[se va completa şi gradul didactic şi titlul conducătorului ştiinţific]

Absolvent

**2022**

BABEŞ-BOLYAI UNIVERSITY CLUJ-NAPOCA

FACULTY OF MATHEMATICS AND COMPUTER SCIENCE

SPECIALIZATION …

DIPLOMA/ DISSERTATION THESIS

[title]

Supervisor

[se va completa şi gradul didactic şi titlul conducătorului ştiinţific]

Author

**2022**

BABEŞ-BOLYAI UNIVERSITÄT CLUJ-NAPOCA

FAKULTÄT FÜR MATHEMATIK UND INFORMATIK

INFORMATIK IN DEUTSCHER SPRACHE

BACHELORARBEIT

[TITEL]

Betreuer

[se va completa şi gradul didactic şi titlul conducătorului ştiinţific]

Eingereicht von

**2022**

BABEŞ–BOLYAI TUDOMÁNYEGYETEM, KOLOZSVÁR

MATEMATIKA ÉS INFORMATIKA KAR

… SZAK

SZAKDOLGOZAT/ MAGISZTERI DOLGOZAT

[cím]

Tudományos irányító

[be kell írni a témavezető oktatói fokozatát, pl. Dr. N.N. egyetemi docens]

Végzős hallgató

**2022**