



REGULATIONS ON THE SUBMISSION OF ARTICLE- BASED THESES

Doctoral programme: Computing

- **Document approved by the Standing Committee of the Doctoral School on 20/06/2022. Agreement CP.ED/2022/05/08**

Previous versions:

Document approved by the Standing Comitee of the doctoral School on 12/01/2017

Preamble

Article 10.2 of the UPC's Academic Regulations for Doctoral Studies, which were approved by the Governing Council on 19 July 2016, establishes that the academic committee of each doctoral programme must draw up specific regulations that include specific criteria for the submission of article-based theses. It corresponds to the Standing Committee of the Doctoral School to approve these regulations.

Thus, the academic committees of the UPC's doctoral programmes in Artificial Intelligence and Computing drew up these regulations, which were approved by the Board of the Department of Computer Science, and by the Standing Committee of the Doctoral School on 20 June 2022.

1. Object

These regulations establish the criteria for approving applications to submit an article-based doctoral thesis, which essentially consists of a collection of reputable articles in which the doctoral candidate's participation has been significant.

2. Conditions for submitting an article-based thesis

Doctoral candidates wishing to submit an article-based thesis must satisfy the following requirements:

- a. The publications must be the direct result of the work carried out by the doctoral candidate on the doctoral programme.
- b. When the submission of an article-based thesis is applied for, the articles must have been published or definitively accepted for publication.
- c. The doctoral candidate's contributions to the publications may not be submitted as part of other doctoral theses.
- d. The candidate must have published at least three articles of a high quality that have a common theme and contain significant contributions by the doctoral candidate in journals or international congresses in the areas of the UPC's research groups associated with the programmes. These groups are the following:
 - Natural Language Processing Group (GPLN), Knowledge Engineering and Machine Learning Group (KEMLG), Logic and Programming (LOGPROG) and Soft Computing (SOCO) in the doctoral programme in Artificial Intelligence.
 - Algorithms, Bioinformatics, Complexity and Formal Methods (ALBCOM), Engineering Informatics Group (GIE), Logic and Programming (LOGPROG) and Visualisation, Virtual Reality and Graphics Interaction Research Group (ViRVIG) in the doctoral programme in Computing.
- e. The articles must be research articles, and reviews, opinion pieces, etc. will not be considered under any circumstances. Because they are legal and not scientific documents, patents, which may be written by persons other than the inventors, may not be included in the collection.

3. Application

The doctoral candidate must submit a reasoned application, the entry of which will be registered, to the academic committee of the doctoral programme, explaining the reasons to submit the thesis as a compendium of publications and provide the following information:

- a. A list of the articles, including the complete reference to the publication, the corresponding quality indices (impact factor, quartile, international visibility, number of citations, etc.) and the line of research.
- b. Authorisation of the thesis supervisor for the submission of an article-based thesis.
- c. If any of the articles have been co-authored, the following will be necessary:
 1. The thesis supervisor must clearly establish the extent of the doctoral candidate's participation and also whether any of the article's co-authors has used the article in his or her doctoral thesis or plans to do so in the future.
 2. Written authorisation of the co-authors of the articles, if other than the supervisor, for their submission as part of an article-based thesis.
 3. If there are co-authors who are not doctorate holders, a waiver of the right to submit the contributions of the doctoral candidate as part of their doctoral thesis.

4. Review and resolution

The resolution shall be communicated to the doctoral candidate in writing within 10 working days. If the ruling is favourable, the candidate will be able to start the review process, submitting the required documentation to the review manager at the Department of Computer Science. The review process will be conducted following the standard procedure established in the programme's regulations.

5. Content of the thesis

The thesis, attached with the rest of the documentation required by the regulations of the doctoral programme for the review process, must include the following:

- a. Cover featuring the title, author, supervisors, doctoral programme and, in a clearly visible place, the phrase "Article-based thesis".
- b. Abstract in English and Spanish or Catalan.
- c. Table of contents.
- d. An introduction whose features and length must be similar to that of conventional theses and that must include the following: 1) a summary of the research objectives, 2) introductions to the works, 3) a justification of the common theme, 4) an indication of the context in which the research has been carried out and 5) a discussion of the state of the art.
- e. A final chapter whose features and length must be similar to those of chapters in standard theses, including the main results, a discussion of the results and the final conclusions.
- f. A list of references and sources used to carry out the research.
- g. Full text of the postprints of the articles in the collection or of the versions accepted for publication, if any of the articles have not been published when the thesis is submitted.
- h. Optionally, copies of articles that are not part of the collection or that have been submitted for publication but have not yet been accepted may be added as an appendix if they make the thesis easier to understand. Under no circumstances shall these articles be considered an integral part of the collection whose appropriateness must be assessed by the academic committee.

6. Thesis submission

Once the review process has been completed, the doctoral candidate may proceed to submit the thesis with any corrections suggested by the reviewers and/or the academic programme committee. The thesis must be submitted in accordance with the standard procedure outlined in the Academic Regulations for Doctoral Studies. The administrative unit will add the resolution of the academic committee that is authorising the submission of the article-based thesis to the academic record and inform the Doctoral School.

7. First additional provision: interpretation and regulations

It corresponds to the academic committee of the doctoral programme to apply these regulations and to update this agreement in view of the Academic Regulations for Doctoral Studies and/or on the proposal of the Standing Committee.

8. Second additional provision: composition of the committee

The composition of the examination committee will be subject to the same regulations as standard theses, which are approved by the academic committee and the Catalan University Quality Assurance Agency when it validates the programme.

9. Final provision: entry into force

These regulations shall enter into force the day after their approval by the Standing Committee of the Doctoral School.