Annex to the Doctoral Regulations of Université catholique de Louvain

Special provisions for the Doctoral Schools of the domains (CDD)
« Sciences » and « Veterinary Sciences »,
« Agronomic Sciences and Biological Engineering»,
« Engineering Sciences and Technology" and Art of Building and Urban Planning »

Foreword : The text in blue (indicated as "note") is not part of the special provisions of the doctoral regulations; it is intended to specify the implementation of these provisions.

1. Pre-admission and Admission

Pre-admission will only be authorized if the candidate demonstrates that it is necessary for the completion of administrative and social formalities prior to starting the thesis, such as obtaining a visa or a scholarship which required it.

The diploma selected for accessing the PhD must have been obtained with at least a "distinction" (or equivalent mention).

Diplomas awarded by an institution of the French Community of Belgium (CFB) which can give access to a PhD in the fields "Sciences" / "Veterinary Sciences" / Agronomic Sciences and Biological Engineering" / "Engineering Sciences and Technology" / " Art of Building and Urban Planning" are the following:

- Without additional conditions: master's degrees "finalité approfondie" of at least 120 credits relating to one of the fields described above;

  For PhDs in "Sciences" and "Veterinary Sciences," these are the master's degrees with "finalité approfondie".

  For PhDs in "Agronomic Sciences and Biological Engineering," these are the master's degrees in Bioengineering and the master's degrees in Agricultural Sciences and Life Sciences Industries.

  For PhDs in "Engineering Sciences and Technology," these are the master's degrees in Civil Engineering.

  For PhDs in " Art of Building and Urban Planning," the relevant degree is a master's degree in Civil Engineering Architecture, a master's degree in Architecture, and a master's degree in Urban Planning and Territorial Development.

- Subject to additional conditions where applicable: diplomas similar to those mentioned above issued by a higher education institution of the French Community, namely master's degrees in Sciences and Veterinary Sciences "finalité spécialisée" and "finalité didactique" as well as master's degrees in industrial engineering sciences.

- Subject to additional conditions where applicable: diplomas or certificates of the second cycle which do not give access to the PhD under the preceding paragraph subject to the valuation, by the CDD, of the whole higher studies, passed with success, for at least 300 credits.

The diplomas awarded by an institution outside the French Community of Belgium (CFB) that can give access to the PhD are:

- Without additional conditions: foreign diplomas recognized as equivalent to a master's degree 120 "finalité approfondie" of the CFB in accordance with the decree of November 7th 2013, with a European directive, with an international convention or with another legislation under the same conditions;

- Subject to additional conditions where applicable: diplomas or certificates of the second cycle which do not give access to the PhD under the preceding paragraph subject to the valuation, by the CDD, of the whole higher studies, passed with success, for at least 300 credits.

- Subject to additional conditions where applicable: foreign diplomas or certificates which, in the education system of origin, give a direct access to doctoral training or studies and works related to the preparation of a PhD thesis, even if the studies recognized by these titles or grades are not organized in separate cycles or in at least five year.

2. Supervisor, supervisory panel and jury

In the case of a single supervisor, the supervisor must be qualified to supervise a PhD thesis (as defined by article 4 of the UCLouvain Doctoral Regulations) and must be an assigned or affiliated member of:

- one of the institutes of the Science and Technology Sector of UCLouvain;
- the LIDAM institute (Louvain Institute of Data Analysis and Modeling in economics and statistics) of UCLouvain.

In the case of a co-supervision, the number of supervisors will be limited to two, at least one of whom must meet the above conditions.

The supervisory panel is made up of the supervisor(s) and at least two other members. The total number of panel members will be limited to 4, including the supervisor(s), except in special cases such as joint supervision (co-tutelle) or access to emeritus status. In the absence of a formal notion of a research team (Art. 2.2.3 of the Doctoral Regulations), the CDD will appreciate the complementary scientific culture offered by the supervisory panel as a whole.

With the exception of joint thesis supervisions, at least one member of the jury must be a member of UCLouvain in addition to the promoter(s) and the president of the jury. The jury must include at least one member whose scientific independence is justified in the proposal for the composition of the jury proposed to the President of the Institute, based on arguments similar to the conditions of independence required to be an evaluator of scientific articles in the journals in the field of thesis. The President of the Institute, in possible collaboration with the President of the jury that he appoints, assesses this independence before validating the composition of

the jury.

3. Additional training

When the CCD imposes an additional training to the PhD student, the CDD carries out the validation of the program and requires the success of the courses that make up this program. The certificate of achievement must be submitted by the PhD student to the CDD on the date fixed by the CDD or, in the absence of instructions to that effect, at the latest at the time of the thesis confirmation.

4. Doctoral training

A statement confirming that the applicant has read and understood the credit calculation rules must be signed and included in the application file. The statement is available at https://www.uclouvain.be/fr/sst/admission-doctorat

The doctoral training comprises 4 types of activities:

- **Scientific training** (advanced and interdisciplinary courses, participation to conferences and seminars);
- **Scientific communication.** As such, the success of the thesis confirmation, of the private defense and of the public defense is valued on a lump-sum basis with 5, 10 and 5 credits respectively;
- **Teaching ;**
- **Other activities.**

Note : The doctoral training must total at least 60 credits at the end of the thesis. Any activity corresponding to the criteria of doctoral training carried out (as part of a diploma or professional activity) after obtaining the second cycle diploma that led to admission to the PhD programme can be proposed for inclusion in the doctoral training.

A tentative doctoral training programme of 40 credits (excluding confirmation, private defense and public defense) must be included in the application for admission to the PhD programme. During the PhD programme, activities that are achieved must be submitted to the CDD for validation. It is recommended to submit these requests once a year, and it is mandatory to do so at least once before the thesis confirmation and once at the end of the thesis, when the PhD work is completed. Requests for credit validation must be signed by the supervisor.

At the time of the confirmation, if 15 credits (excluding thesis confirmation itself) have not yet been accumulated, a detailed proposal for the remaining credits to be accumulated must be attached to the confirmation file.

The final verification of the credits will be carried out by the CDD before the private defense of the thesis. The whole doctoral training will be officially validated by the jury at the private defense.

4.1. *Scientific training*

The scientific training must total at least 15 credits. It comprises participation to courses and

conferences.

✎ *Disciplinary courses (no more than 30 credits)*

This includes courses in line with the research being conducted. These courses are a priori postgraduate courses (3rd cycle). Courses included in a graduate program (2nd cycle) may be authorized, but for a maximum of 5 credits (except exceptional circumstances). Language courses may be considered (for a maximum of 5 credits), provided that the use of the language in question is necessary for the scientific objectives of the PhD.

Note : Disciplinary courses are valued as follows:

- *3rd cycle courses: the number of credits awarded to the course, if any, otherwise 1 credit per full day of participation. The request for valuation must be accompanied by a document attesting the participation, issued by the organizer of the activity.*
- *2nd cycle course: the number of credits awarded to the course. The request for evaluation must be accompanied, for a Master course, by the standard certificate signed by the course holder*

Holders of a master's degree "finalité approfondie" in the same field (or a non-CFB degree or diploma deemed similar by the CDD) can benefit from a maximum of 5 credits (graduate, 2nd cycle, courses) within their doctoral training. This valuation is in no way automatic and it is up to the PhD student to introduce a request to the CDD as part of their first application of credit valuation.

✎ *Congresses, seminars and interdisciplinary courses*

This includes passive participation to congresses and summer/winter schools, participation to seminars, excluding internal seminars or research group meeting, and excluding courses not directly linked to the PhD discipline(s).

Note : Participation to congresses and seminars is valued as 1 credit for 8 hours or one full day of participation. For courses: the number of credits awarded to the course, otherwise 1 credit for 8 hours or one full day of participation.

4.2. *Scientific communication*

Scientific communication **must total at least 15 credits in addition to the 20 credits allocated for the confirmation, private defense and final defense**. It includes oral communication, the writing of scientific articles, as well as the production and presentation of posters.

✎ *Communication*

This refers to communications made by the PhD student during a congress or a postgraduate (3rd cycle) course.

Note : In the case of an oral communication, the number of credits will be approximately between 2 and 4 for an international conference and between 1 and 2 for a national conference. Posters produced and presented by the PhD student will be valued at 2 credits when presented at an international conference and at 1 credit at a national meeting.

The request for credit valorization must be accompanied by proof of acceptance of the communication or article. A copy of the slides or poster does not constitute proof.
Scientific communications carried out during 3rd cycle courses recognized as such, internal or external (example: summer school), can be valued.
Communications made during internal seminars or in front of the research group of the PhD student are not included in the doctoral training.

✎ *Writing of scientific papers*

This refers to articles, for which the PhD student is actually one of the authors, accepted for publication in a journal or conference proceedings with a peer review committee.

Note : The number of credits will be approximately 1 to 5 depending on the level of the publication, its scale and the involvement of the PhD student.

At the last request for credit validation (corresponding to the end of the PhD work), credits may be proposed for papers that have been submitted but whose acceptance decision is still pending.

Note : The drafting of requests for funding and reports from FNRS, FRIA, or other funding sources is considered as part of the standard course of a PhD thesis, and is already largely included in the credits allocated for the thesis confirmation, private defense and public defense; it cannot therefore be the subject of an additional request for credits.

4.3. *Teaching*

Didactic supervision covers any supervision activity linked or not to courses organized at UCLouvain. A maximum of 6 credits over the entire thesis can be valued for didactic supervision.

Note : As an indicative guide, the valorization can be done at the rate of 1 credit for 25 to 30 hours of educational activities for the Sciences CDD and Agricultural Sciences and Biological Engineering CDD, and at the rate of 1 course = 1 credit for the Engineering Sciences and technology and Art of building and urban planning CDD.

4.4. *Other activities*

Possibility of valorization of activities of research and supervision of young researchers according to the specificities related to the sub-field such as :

- Consultancies
- Supervision of master thesis or internships (maximum 2 credits per year of PhD on average)
- Research stays abroad outside joint supervision (co-tutelle) (maximum 5 credits per stay).
- Participation in the development of the scientific program for an event (maximum 1 credit per PhD year)

Note : it is not necessary to provide proof for the supervision of master theses or internships, but the name of the person supervised and the start and end dates of the supervision must be clearly indicated. For research stays abroad, outside joint supervision (co-tutelle), 3 credits for a stay of 5 work-days can be requested, with 1 additional credit per additional week (maximum 5 credits per stay).

5. Thesis confirmation

It is expected that the thesis confirmation makes it possible to assess the following points:

- The thesis topic is clearly defined.
- Any recommendations that have been made by the supervisory panel since the start of the thesis have been taken into account.
- Mastery of the methods and tools necessary to address the questions raised in the thesis is demonstrated.
- Initial research results are highlighted, which show the ability of the candidate to conduct original research.
- A convincing strategy has been established, showing how work will be continued towards the completion of the thesis.

6. Thesis defense

The private defense and the public defense of the theses will, except in exceptional circumstances to be assessed by the CDD, be organized according to the first formula of the Doctoral Regulations of UCLouvain, namely with a minimum delay of one month between the two events.