

Regulation concerning the Doctoral Program in Physics (EDPY)

Please note that only the French version is legally binding.

1 September 2008 (status as of 1 July 2022)

The Committee of the Doctoral Program in Physics (EDPY),

taking into account art. 3 par. 3 and 6 par. 2 of the Ordinance on the doctorate conferred by the École polytechnique fédérale de Lausanne (hereinafter: EPFL) of January 26, 1998¹ and 2 par. 4 point 3 of the Directives concerning doctoral studies at the EPFL of November 21, 2005,²

decrees:

1. Field of application

The present regulation concerning the EPFL Doctoral Program in Physics (hereinafter: the program) sets forth the rules relating to the study plan as well as the candidacy exam. Furthermore, it details the application of rules concerning the annual progress reports and the mentoring.

2. Study plan

- 2.1 The doctoral candidate enrolled in the program must acquire a minimum of **12 ECTS credits** (European Credit Transfer and Accumulation System) during the doctoral studies, of which at least 4 ECTS credits during the first year.
- 2.2 The candidate chooses courses he she will attend with the prior approval of the thesis director, who ensures the coherence of the study plan.
- 2.3 Credits may be obtained through the courses of the EPFL Doctoral School. Master level courses of the EPFL Physics Section may also be taken for a total not exceeding 4 ECTS credits. In all other cases, a motivated request must be addressed to the program before the beginning of the course. The Program Committee authorizes the validation of the credits and sets the conditions on a case-by-case basis.
- 2.4 Up to **4 ECTS credits** but not those required for the first year can be chosen by the candidate among all the EPFL doctoral course books (including the transferable skills courses) without the approval of neither the Program Committee nor the thesis director (Doctoral Commission decision, Cdoct 107, May 2015).
- 2.5 Candidates who have been admitted with conditions may need to acquire additional credits during the first year (art. 5 al. 2 and 5 of the Ordinance on the doctorate).

¹RS 414.133.2

² EPFL LEX 2.4.1

3. Research plan and candidacy exam

To be formally admitted for the preparation of a thesis, the doctoral candidate must write a research plan and successfully pass the candidacy exam at the latest 12 months after the enrolment (art. 6, 7 and 8 par. 1 of the Ordinance on the doctorate). The candidate must also have fulfilled any additional conditions set at the time of the admission to the doctoral studies (art. 2.5).

3.1 **Composition of the jury:** The jury is composed of a president, an expert, the thesis director and the co-director (if applicable). The president is chosen by the program director from among the members of the Program Committee. The expert is proposed by the thesis director and approved by the program director.

The president and the expert will not be members of the same research unit (chair, laboratory) as the thesis director and the co-director (if applicable). All jury members must hold the title of PhD.

- 3.2 **Organization of the exam:** The thesis director organizes the exam. At least 3 weeks before the exam, he she provides to the program and to the members of the jury with the following information:
 - the composition of the jury
 - the date, location and time of the exam
 - The research plan written and signed by the candidate
- 3.3 **Exam format:** The jury president chairs the exam. It includes an oral presentation, of approximately 30 minutes, and is followed by questions from the jury members. The presentation will consist primarily of:
 - The general context of the thesis subject
 - the state of his research work
 - The plan and research methodology of the thesis project

The candidate will emphasize the originality of the thesis subject, the objectives and methods envisaged, as well as the related scientific arguments.

Members of the laboratory and people invited by the thesis director may attend the exam.

- 3.4 **Evaluation criteria:** The jury deliberates in the absence of the candidate. They formulate an evaluation based on the following principal criteria:
 - pertinence and originality of the thesis subject
 - quality of scientific argument
 - candidate's ability to conduct research
 - clarity and rigor of the research plan
 - candidate's response to the questions of the jury

The jury decides by majority if the exam is passed or failed. In absence of majority, the exam is failed. In absence of majority at the second attempt, the thesis director will be decisive.

- 3.5 **Record of the exam:** The jury president completes the record of the exam (prepared by the program's office), including the following points:
 - the assessment of the exam according to the criteria set out above and, if applicable, the rationale for failure
 - the result ("Passed" or "Failed") of the exam
 - the signatures of the jury members

The record is confidential.

3.6 **Communication of the result:** The record of the exam and the final version of the research plan must be submitted to the program's office within 5 days after the exam. If the research plan is approved, the thesis director and the thesis co-director (if applicable) sign it.

The candidate may, on request, consult the record.

3.7 **Possibility to retake the exam:** In case of failure, the candidate may ask to be evaluated a second and last time. The jury decides whether the candidate must submit a new version of the research plan. This second exam must take place within 15 months after the date of the enrolment.

The composition of the jury stays the same as for the first attempt and the procedure described in articles 3.2 to 3.6 applies again.

4. Annual report

After the definitive admission, the doctoral candidate submits each year a report on the progress of the work, as well as a point-by-point self-evaluation, to the thesis director, who in turn provides written input and reports to the program director within a deadline of one month (art. 10 par. 3 and par. 4 of the Ordinance on the doctorate).

- 4.1 The thesis director reads the report and completes a similar assessment of the work progress. The co-director (if applicable) does the same.
- 4.2 After a joint discussion, the report is co-signed by the candidate and the thesis director (and the co-director if applicable).
- 4.3 Once the candidate and the mentor have met and confirmed it in the annual report, the program director validates the report.

5. Mentoring

A mentoring system offers guidance to the doctoral candidates regarding academic or career choices, as well as the resolution of any possible difficulties met within the context of their training, particularly regarding the preparation of their thesis or a conflict (art. 2 par. 4 ch. 5 of the Directives concerning doctoral studies).

- 5.1 The program appoints, among the members of the Program Committee, a mentor for each candidate soon after the enrolment. The candidate may change the mentor with the agreement of the program director.
- 5.2 The mentor remains anonymous with respect to the thesis director to ensure confidentiality. It is up to the candidate to keep this anonymity or not.
- 5.3 The mentor reads the annual reports. He she has an individual interview with the candidate after the submission of each annual report. He she gives a feedback in general terms during a meeting of the Program Committee, respecting confidentiality.
- 5.4 In agreement with the candidate, the mentor informs the program director in writing of any important issues.
- 5.5 It is recommended that the candidate's mentor does not participate in nor presides over the jury for either the candidacy or the oral exam.

6. Final provisions

The present regulations, which came into force on 1 September 2008, were revised on 20 April 2010, on 1 November 2014, on 1 April 2017 and on 1 July 2022.

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