

Regulation concerning the doctoral program in Robotics, Control and Intelligent Systems (EDRS)

Please note that only the French version is legally binding.

Dated March 15, 2020 (*date of entry into force*)

The EDRS doctoral program Committee,

taking into account art. 3 al. 3 and 6 al. 2 of the Ordinance on the Doctorate conferred by the Ecole Polytechnique Fédérale de Lausanne of January 26, 1998¹ and 2 al. 4 ch. 3 of the Directives concerning doctoral studies at the Ecole Polytechnique Fédérale de Lausanne of November 21, 2005²,

decrees:

1. Field of Application

The regulation concerning the doctoral program in Robotics, Control and Intelligent Systems (hereinafter: EDRS program) sets forth the rules relating to the study plan of the EDRS program as well as the candidacy exam for the formal admission to start the doctoral thesis in the EDRS program of the EPFL. Furthermore, it reiterates and details the application of certain essential rules concerning the doctorate at the EPFL.

2. Study Plan

- 2.1 The study plan of the EDRS program requires **12 ECTS credits** (European Credit Transfer and Accumulation System).
- 2.2 Among the 12 ECTS credits requested:
 1. at least **4 ECTS credits** must be obtained during the first year of doctoral studies;
 2. at least **4 ECTS credits** must be obtained by taking EPFL doctoral courses;
 3. at least **4 ECTS credits** must be chosen from the EDRS program course offer or from the corresponding list of suggested courses available on the EDRS website (see EDRS Course book).
- 2.3 Up to **4 ECTS credits** – but not those required for the first year – can be chosen by the doctoral candidate from all EPFL doctoral program's course lists (including transferable skills) without the approval of neither the program Committee nor the thesis Director (Doctoral commission decision, Cdoct 107, May 2015).

¹ RS 414.133.2

² EPFL LEX 2.4.1

- 2.4 The ECTS credits may be obtained by passing EPFL courses at the Doctoral, Master or even Bachelor level (the latter requiring a motivation letter duly approved by the EDRS program Director). For courses passed at another Swiss or foreign university, the credit equivalence is determined on a case-by-case basis by the EDRS program Director. The credits acquired outside EPFL are among the 8 ECTS credits, which require the approval of the thesis Director. Finally, in the absence of an assessment to validate the external credits, the EDRS doctoral program Committee will organize an assessment at EPFL.

3. Candidacy Exam

- 3.1 To be formally admitted to start a doctoral thesis at the EPFL, the doctoral candidate must successfully pass the candidacy exam at the end of the 1st year of doctoral studies (art. 6 and 8 al. 1 let. a of the Ordinance on the Doctorate and art. 8 al. 1 and 2 of the Directive concerning doctoral studies at the EPFL). The candidacy exam involves prior submission of the research plan (guidelines for the research plan are available on the EDRS website) as well as an oral presentation of approximately 30 minutes about the research proposal, followed by questions from the jury. The candidate must demonstrate the originality of the thesis subject, the objectives and methods envisaged, as well as the hypotheses and related scientific arguments, including the general context of the thesis subject, the state of the art of research in the area, the position of the planned work within the research area, the plan and the methodology for the research project as well as the timeframe for its completion. The progress achieved during the first year must be included in the research plan as well.
- 3.2 The jury of the candidacy exam is composed of the following members:
1. The jury President, Professor or MER affiliated to the EDRS program and external to the laboratory of the candidate;
 2. The thesis Director of the candidate and co-Director, if applicable;
 3. An expert, Professor or MER of EPFL, external to the laboratory of the candidate;
 4. An additional expert is allowed by the EDRS program. This optional expert must have a doctorate and be external to the laboratory of the candidate.
- The jury proposal must be approved by the EDRS program Director.
- 3.3 The jury deliberations process takes place without the candidate. The jury President aims at obtaining a unanimous consensus around the decision. If the decision is not unanimous, a vote is requested and the majority vote wins. If the vote results in a tie, the jury President takes the final decision. All jury members must vote, abstentions are not accepted. After deliberations, the President verbally informs the candidate of the result of the candidacy exam. An electronic copy of the signed evaluation form, including the decision and possible recommendations, is transmitted to the candidate and to the jury members by the EDRS program upon reception from the jury President. The candidate finally receives from the EPFL, a decision to formally accept or refuse the start of a doctoral thesis at the EPFL (art. 8 al. 2 of the Ordinance on the Doctorate).
- 3.4 In case of failure at the first candidacy attempt, the candidate has the possibility to represent himself or herself to the exam. The jury composition of the re-take exam is in principle the same as that of the first attempt; however, the jury President of the re-take exam must be a committee member of the EDRS program. If this is not the case at the first attempt, an EDRS committee member will replace the original jury President, who then will become a second expert. In this case, no additional optional expert is accepted. The jury proposal of the re-take exam must be approved by the EDRS program Director as well.

4. Annual Report

During the doctoral studies, the doctoral candidate has the obligation to submit each year an annual report, the first time during the year following the candidacy exam, on the work progress to the thesis Director (and co-Director, in case of a co-directed thesis), who in turn provides written input and reports to the EDRS program Director within a deadline of one month (art. 10 al. 3 and al. 4 of the Ordinance on the Doctorate). The instructions of the EDRS program must be followed upon the annual call for reports. The most recent template for the annual report can be found on the EDRS website.

5. Mentoring

An EDRS mentor is appointed by the EDRS program administration for each doctoral candidate upon registration. The role of the mentor is to mediate between the doctoral candidate and his/her thesis Director, other faculty, or the administration. A doctoral candidate may directly contact the EDRS mentor, who will make suggestions to resolve possible issues.

6. Final Provisions

The present regulation shall take effect on March 15, 2020, and replaces any prior EDRS doctoral program regulation.

For the EDRS doctoral program Committee:
Prof. Dimitrios Kyritsis
Program Director
École polytechnique fédérale de Lausanne



For the Doctoral School:
Prof. Pierre Vandergheynst
Vice-President for Éducation
École polytechnique fédérale de Lausanne