

Regulation concerning the Doctoral Program in Materials Science and Engineering (EDMX)

Please note that only the French version is legally binding.

Effective April 10, 2014

The EDMX 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, 2005,²

decrees:

1. Field of Application

The regulation concerning the EDMX doctoral program (hereinafter: EDMX program) sets forth the rules relating to the study plan of the EDMX program as well as the candidacy examination for the formal admission to start the doctoral thesis in the EDMX 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 EDMX program requires **12 ECTS credits** (European Credit Transfer and Accumulation System).
- 2.2 At least **4 ECTS credits of these 12 credits** must be obtained during the first year of doctoral studies. These credits must be acquired by successfully passing courses offered in the EDMX-course book or available in any other doctoral program or Master program. The courses may be followed within the EPFL or any other Swiss or foreign University, with the approval of the thesis director and the director of the EDMX doctoral program.

¹ RS 414.133.2

² EPFL LEX 2.4.1

- 2.3 The **total credit requirement** may be obtained by successfully passing doctoral courses and Master courses (max. 4) at EDMX, the EPFL, or at a Swiss or foreign University with the approval of the thesis director and the EDMX program director. No credits are accepted for Bachelor courses.

3. Candidacy Exam

- 3.1 To be formally admitted to start a doctoral thesis at the EPFL, the candidate must successfully pass the candidacy examination at the end of his/her 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 Directives concerning doctoral studies at the EPFL). The candidacy examination consists of an oral presentation of approximately thirty minutes by the candidate about his/her research proposal. It is followed by questions from the jury. The candidate must demonstrate the originality of his/her thesis subject, the objectives and methods envisaged, as well as the hypotheses and related scientific arguments, including the general context of the thesis subject, state of the art of research in the area, positioning of his/her work within the research area, plan and methodology for the research project as well as the timeframe for its completion.
- 3.2 The jury of the candidacy exam is composed of the thesis director and the thesis co-director (if applicable), the jury president (member of the EDMX committee), as well as a professor, senior research scientist (MER) or other EPFL collaborator authorized to fulfil the function of thesis director at the EPFL and approved by the EDMX program director.
- 3.3 The jury evaluates the candidate's potential ability to conduct research leading to a Ph.D. degree on the basis of the following principal criteria:
- Pertinence and originality of the thesis subject
 - Quality of scientific argumentation
 - Clarity and rigour of the research plan
 - Language skills, reporting, communication
 - Candidate's responses to the jury's questions
- 3.4 After jury deliberations, the thesis director verbally informs the candidate of the result of the candidacy exam. A written protocol is established for every candidacy exam. Possible jury recommendations are communicated to the candidate in writing by the jury president. The candidate then receives from the EPFL a decision to formally admit or refuse the start of a doctoral thesis at the EPFL (art. 8 al. 2 of the Ordinance on the Doctorate).

4. Annual Report

- 4.1 Every year, that is the first time one year after the candidacy exam, the doctoral candidate has the obligation to submit an annual report on the progress of his/her work to the thesis director, for approval and signature. The report is then transmitted to the EDMX program director for approval (art. 10 al. 3 and al. 4 of the Ordinance on the Doctorate).
- 4.2 A confidential form is added both for the thesis director and the Ph.D. student. It indicates independently and confidentially if there is any problem on either side, and if so, the nature of the problem. The respective forms are joined with the annual report by the administrator and transmitted to the EDMX program director.

Action is taken by the program director if there is a serious problem or if either the Ph.D. candidate or the thesis director so wishes.

- 4.3 Within two months after depositing the annual report, the Ph.D candidate makes an oral presentation of the progress of his/her work in front of a committee composed of the members of the candidacy exam, in order to discuss the scientific and organizational aspects of the thesis.

5. Mentoring

A mentor is appointed by the EDMX program director for all doctoral students with the role to mediate – if necessary - between the doctoral student and the thesis director, other faculty, or the administration. A doctoral student may directly contact the EDMX mentor, who will make suggestions to resolve possible issues.

6. Final Provisions

The present EDMX-regulation shall take effect on April 10, 2014, and replaces any prior EDMX doctoral program regulation.

For the EDMX doctoral program commission:
Prof. Heinrich Hofmann
Program Director
École polytechnique Fédérale de Lausanne



For the doctoral school:
Prof. Cathrin Briskin
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