

# Regulation concerning the doctoral program in Microsystems and Microelectronics (EDMI)

Please note that only the French version is legally binding.

Date of entry into force: 17th June, 2022

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

# 2. Study Plan

- 2.1 The study plan of the EDMI program requires **12 ECTS credits** (European Credit Transfer and Accumulation System), of which at least 4 ECTS credits must be taken in the courses offered by the EDMI program.
- 2.2 At least **4 ECTS credits of these 12 ECTS credits** must be obtained during the first year of doctoral studies.
- 2.3 The **remainder of the 8 ECTS credits** may be obtained by successfully passing maximum 4 ECTS credits of EPFL Master courses, maximum 8 ECTS credits in any other EPFL doctoral program courses and maximum 4 ECTS credits at a Swiss or foreign university with the approval of the EDMI program Director and in accordance with the terms established by the EDMI program. As a general rule, a credit equivalence of up to a maximum of 4 ECTS credits is granted for doctoral courses passed at a Swiss university (including ETHZ). For doctoral

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<sup>&</sup>lt;sup>1</sup> RS 414.133.2

<sup>&</sup>lt;sup>2</sup> EPFL LEX 2.4.1

courses passed at a foreign university, the credit equivalence is determined on a case-by-case basis. Any courses other than doctoral courses (e.g. summer school) must also be approved by the EDMI program Director. For the credit(s) recognition, the equivalence courses, including the summer schools, must all have some kind of an examination at the end of the course (oral presentation, written report, etc.).

2.4 Up to **4 ECTS credits** – but not those required for the first year – can be chosen by the doctoral candidate from all EPFL doctoral course books (including transferable skills courses) without the approval of neither the program Committee nor the thesis Director (Doctoral Commission decision, Cdoct 107, May 2015).

# 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 1<sup>st</sup> 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 exam is a closed (non-public) oral presentation of approximately twenty minutes by the candidate about the research proposal. It is 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 hypothesis and related scientific arguments, including the general context of the thesis subject, state of the art of research in the area, position of the doctoral candidate's 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 a thesis Director and a thesis co-Director (in case of a co-direction), an external member to the candidate's laboratory, who is qualified to be thesis Director at EPFL, and a member affiliated with the EDMI doctoral program who acts as the jury President.
- 3.3 After jury deliberations, the thesis Director verbally informs the candidate of the result of the candidacy exam. Possible jury recommendations are communicated in writing thereafter. 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

During the thesis work, the doctoral candidate has the obligation to submit an annual progress report each year, starting one year after the candidacy exam. The candidate submits a summary of the work progress, as well as a point-by-point self-evaluation. In parallel, the thesis Director (and co-Director when applicable) complete an analogous assessment of the work progress. After a joint discussion the report is cosigned by the candidate and the thesis Director (and co-Director when applicable). The candidate then also discusses the progress and wider context with the mentor and they confirm to have met in the annual report, without reporting the content of the discussion which is confidential. Finally, the program Director will add his her signature to the report. The candidate ensures that the above process is finalized within one month (art. 10 al. 3 and al. 4 of the Ordinance on the Doctorate at the EPFL).

# 5. Mentoring

- 5.1 Within 3 months after enrolment, the doctoral program assigns a mentor from its pool to each doctoral candidate. The candidates may change 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). The mentor offers guidance to candidates regarding academic or career choices, as well as the resolution of any difficulties met within the context of their training, in particular regarding the preparation of their thesis or cases of conflict.
- 5.3 The candidates can contact their mentor whenever they deem it necessary. The candidate and the mentor confer at least once a year as part of the annual report. Exchanges between candidates and their mentor should remain confidential unless both parties agree to disclose to the program Director.
- 5.4 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 regulation shall take effect on June 17<sup>th</sup>, 2022 and replaces any prior EDMI program regulation.

For the EDMI doctoral program Committee: Prof. Herbert Shea Director of the program École polytechnique fédérale de Lausanne



For the Doctoral School: Prof. Luisa Lambertini Associate Vice President for Postgraduate Education École polytechnique fédérale de Lausanne